



Summary of Public Comments and Responses for:

National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers:

Reconsideration of final rule

December 2012

**Response to Public Comments on the Proposed Rule and
Reconsideration of the final rule for National Emission
Standards for Hazardous Air Pollutants for Area Sources:
Industrial, Commercial, and Institutional Boilers**

**U. S. Environmental Protection Agency
Office of Air Quality Planning and Standards**

FOREWORD

This document provides the EPA's responses to public comments on the EPA's *National Emission Standards for Hazardous Air Pollutants for Area Source Industrial/Commercial/Institutional Boilers*. The EPA published a Notice of Proposed Reconsideration of final rule in the Federal Register on December 23, 2011 at 76 FR 80532. The EPA received comments on this proposed reconsideration via mail, e-mail, and facsimile. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments letters are also available electronically through <http://www.regulations.gov> by searching Docket ID *EPA-HQ-OAR-2006-0790*.

This document contains the comments provided by each commenter extracted from the original letter. For each comment, the name and affiliation of the commenter, the document control number (DCN) assigned to the comment letter, and the number of the comment excerpt is provided. In some instances the comment excerpts may not be verbatim in that we have endeavored to be consistent within this document with regard to terminology (e.g., rule names, technical terms and their acronyms). The text of the comment excerpt should not be seen as indicating the EPA's agreement with the factual accuracy of the comment, policy opinions expressed by the commenter, or the legal conclusions or analysis of the comment except where the agency explicitly notes it is adopting some or all of the comment as part of its rationale. A response thanking a commenter for support for EPA's position does not indicate we are adopting its rationale as a basis for the rule. The EPA requested comment on specific reconsideration issues and accepted public comment only on those issues. All comments on topics other than those being considered are shown as out-of-scope.

Many of the EPA's responses to comments are provided immediately following each comment excerpt. However, in instances where multiple commenters raised similar or related issues, the EPA provided a single response addressing the topic. The response to all other comment excerpts on the topic references the response that addresses the topic. Out-of-scope comments were given a response reminding commenters that only the reconsideration issues are being addressed in this document.

Parallel with this rulemaking effort are three separate, but related rulemakings that may be of interest to the stakeholders. These three rules are: *National Emission Standards for Hazardous Air Pollutants for Major Source Industrial/Commercial/Institutional Boilers and Process Heaters* (Docket ID: EPA-HQ-OAR-2002-0058); *Identification of Non-Hazardous Secondary Materials That Are Solid Waste* (Docket ID: EPA-HQ-RCRA-2008-0329); and *Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units* (Docket ID: EPA-HQ-OAR-2003-0119). Given the related nature of these rules, many commenters submitted comments to this rulemaking docket that were specific to one of these related rulemakings. Some commenters submitted a single DCN with comments on all four rules while others submitted a separate DCN specific to each rule. Many commenters submitted identical comments to all of these dockets. In order to reduce duplicative comments, this document flags comments associated with any of the above three related rulemakings and out-of-scope comments for this response to comment document and grouped them into specific out-of-scope headings at the beginning. To the extent that the commenter submitted these comments to the appropriate rulemaking document, responses have been developed in the response to comment documents for each of these related

rulemakings. For this reason, the EPA encourages the public to read the other response to comment documents prepared for these three other rulemakings as they may contain topics relevant to these other rulemakings.

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Out of Scope: NHSM Rule

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners (NAFO)

Document Control Number: EPA-HQ-OAR-2006-0790-2440-A1

Comment Excerpt Number: 1

Comment: Proposed Amendments to the Non-Hazardous Secondary Materials (NHSM) Rule

The NHSM Rule is of critical importance to NAFO's members because it determines whether the co-products associated with biomass production processes are considered fuels subject to the Major Source Boiler Rule or solid waste subject to the more stringent Commercial and Industrial Solid Waste Incinerator (CISWI) Rule when combusted for energy. The combustion of biomass residuals for energy is an important component of the production processes for many of NAFO members' customers. Other customers rely on these materials as valuable co-products which can be sold for energy production by third parties. Yet experience has shown that classifying these materials as "solid waste" ensures that they will not be combusted for energy due to the high costs of compliance with CISWI standards. Rather than attempting to meet the more stringent limits, facilities will simply switch to other fuels that are subject to the less stringent Major Source Boiler Rule standards.

The NHSM Rule promulgated by the Environmental Protection Agency (EPA) in March 2011 suffers from a number of flaws that will harm NAFO members and prevent the use of many clean, renewable secondary materials for biomass energy production. First, the definition of clean cellulosic biomass lacked sufficient clarity, creating uncertainty whether certain types of biomass were considered clean cellulosic biomass and could be combusted for energy without triggering CISWI requirements. Second, the rule improperly classified many traditional biomass fuels as solid waste despite their long history of use as valuable fuel products. Third, the limited access to complicated petitioning processes failed to provide adequate redress for regulated entities (and their suppliers) when the default rules classified their biomass fuel supplies as solid waste.

The proposed rule includes a number of revisions that will have a positive impact on NAFO's members and appropriately encourage the use of biomass secondary materials as valid traditional fuels. As described below, NAFO generally supports the EPA's proposed changes, but believes that additional changes are needed to accurately reflect the historic role of biomass secondary materials as traditional fuels.

A. EPA Must Not Exceed Its RCRA Authority by Seeking to Regulate Biomass

Energy Feedstocks That Have Not Been Discarded

The EPA's authority over secondary materials is limited to material that has been discarded. Under the Resource Conservation and Recovery Act (RCRA), only material that has been "discarded" meets the definition of "solid waste." (See *Ass'n of Battery Recyclers v. EPA*, 208 F.3d 1047, 1051 (D.C. Cir. 2000) ("Congress unambiguously expressed its intent that 'solid waste' (and therefore the EPA's regulatory authority) be limited to materials that are 'discarded'")

by virtue of being disposed of, abandoned, or thrown away.”.) The D.C. Circuit has also established the transfer of a co-product from a generator to a third party does not create a presumption that the material has been discarded because firms may prefer to transfer biomass co-products to third parties who can use them more efficiently. (See *Safe Food and Fertilizer v. EPA*, 350 F.3d 1263, 1268 (D.C. Cir. 2003) (“As firms have ample reasons to avoid complete vertical integration, . . . firm to firm transfers are hardly a good indicia of a ‘discard’ as the term is ordinarily understood.” (citation omitted)). As such, if a material is a valuable product or industrial input, and handled as such, the EPA cannot regulate it under RCRA.)

As described above, biomass provides a clean, renewable alternative to fossil fuels and represents an important part of the Administration’s clean energy policy. In order to support and further that policy, the EPA must adopt regulations that support existing biomass energy facilities and encourage the development of new biomass energy facilities, whether they rely on traditional biomass fuels or, through ingenuity, develop new energy opportunities for biomass co-products. Any presumption that biomass co-products are discarded waste products is inconsistent with this objective and, as described below, we urge the EPA to avoid such presumptions in its regulations. While a policy of encouraging biomass energy would be most consistent with the Administration’s goals, the EPA must not take positions that are in conflict with that goal. At a minimum, the EPA must adopt a neutral policy that does not presume biomass materials are discarded solid waste.

Accordingly, we urge the EPA to interpret its RCRA authority narrowly to ensure that the materials it seeks to regulate have actually been discarded. Any material that is treated by generators or their customers as a valuable fuel feedstock and is actually combusted for energy production has not been discarded and thus is outside of the EPA’s authority under the NHSM Rule. It is irrelevant whether the material is a traditional or newly developed fuel or whether the fuel is combusted by the generator or by a third party. In any case, biomass materials with value as energy feedstocks are not discarded and should not be subject to the EPA’s authority under RCRA or the more stringent CISWI Rule emissions limitations.

B. Definition of “Clean Cellulosic Biomass,” 40 CFR §241.2

NAFO believes that all trees and all other materials taken from the forest are “clean” cellulosic biomass and supports the EPA’s conclusion that clean cellulosic biomass materials are traditional fuels and thus are not solid waste when burned for energy. NAFO supports the EPA’s decision to clarify the definition of clean cellulosic biomass by including more comprehensive examples of secondary materials that qualify as clean cellulosic biomass. However, we believe that additional steps can be taken to provide greater clarity to the rule and greater assurance to regulated entities that additional forest products qualify as clean cellulosic biomass and will not be considered solid waste.

NAFO agrees with the EPA’s conclusion that the list of materials included in the clean cellulosic biomass definition should not be considered exhaustive and supports the EPA’s addition of the phrase “including, but not limited to” in the definition. (76 FR 80470.) This change will provide regulated entities with the assurance that unlisted materials will not be categorically considered to be solid waste and provide them with the flexibility to alter fuel mixes and incorporate traditional fuels that are not explicitly listed in the definition of clean cellulosic biomass without fear of becoming subject to the more stringent CISWI Rule emissions standards.

In NAFO's comments on the June 4, 2010 Proposed NHSM Rule, we suggested adding clarity to the forest derived biomass portion of cellulosic biomass definition. We appreciate the EPA's explanation on page 173 in its "Responses to Comments Document for the Identification of Non-Hazardous Secondary Materials That Are Solid Waste Rulemaking (February 2011)," posted at EPA-HQ-RCRA-2008-0329 on March 21, 2011: "Under the final rule, forest-derived biomass, including green wood, forest thinnings, clean and unadulterated bark and tree harvestings residuals, is considered an alternative traditional fuel. The categories would encompass dead trees and wood residues." NAFO also supports the EPA's decision to include "hogged fuel, wood pellets, untreated wood pallets[, and] urban wood (e.g. tree trimmings, stumps, and related forest-derived biomass from urban settings)" and "byproducts of ethanol natural fermentation processes" within the definition clean cellulosic biomass. This expanded definition, along with the EPA's response to NAFO's comments, will provide assurance to the entities that produce and combust these traditional biomass energy fuels and appropriately encourages their use clean, renewable fuels. However, we urge the EPA to provide greater clarity by removing from the final rule the caveat that "Clean biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials." (76 FR 80529.) Despite the EPA's efforts to provide an expansive definition of clean cellulosic biomass that accurately reflects the wide range of biomass feedstocks that have traditionally been used as fuels – and thus have not been discarded – this final requirement suggests that these traditional fuels must still satisfy the legitimacy criteria discussed in section II.E in order to avoid being classified as solid waste. It also perpetuates the EPA's erroneous interpretation of its authority under RCRA, which is expressly limited to discarded material and does not encompass traditional fuels. This definition of clean cellulosic biomass will be of little value to regulated entities if they are required to complete the NHSM regulatory process and demonstrate compliance with the legitimacy criteria even if the biomass fuels they combust are explicitly included in the definition of clean cellulosic biomass. Thus in addition to removing this confusing sentence, we urge the EPA in the preamble to the final rule to clarify that the feedstocks explicitly listed in the definition of clean cellulosic biomass are traditional fuels that are not subject to the EPA's RCRA authority over discarded materials, whether combusted by generators or by third parties.

C. Administrative Petition Process for Non-waste Determinations for Non-Generators, 40 CFR §241.3(c)

Despite the additional clarity provided by the revised definition of clean cellulosic biomass, many biomass materials used as fuels are not listed and must instead be considered on a case-by-case basis. For borderline cases, the administrative petition process – which currently presumes that all biomass co-products combusted by entities other than generators are solid waste – offers a means to obtain assurance that the EPA will consider the material to be a fuel and not solid waste. NAFO supports the EPA's efforts to streamline and add flexibility to the petition process, but believes that additional steps can be made to make the process consistent with the law and more workable in practice.

The proposed rule clarifies a number of features that streamline and add flexibility to the administrative petition process. NAFO agrees with the EPA that any interested person – including forest owners – should be able to initiate the petition process. It also agrees that petitions should be allowed for entire classes of combustors rather than requiring a case-by-case analysis. These clarifications will encourage all members in the biomass supply chain to promote

their products and co-products as clean, renewable fuels and promote the development of new markets for biomass materials. However, NAFO believes that these benefits could be achieved more efficiently by allowing for nation-wide petitions for classes of combustion units rather than requiring separate petitions for each EPA region. NAFO also believes that the administrative petition process could be further streamlined by not seeking public comment on every individual petition. By filing an administrative petition, a petitioner is not seeking to change the EPA's regulatory program or create new legal rights or obligations. Instead, the administrative petition process provides an opportunity for a petitioner to obtain in advance agency concurrence, based on sound science, with respect to the classification of a particular feedstock under existing regulations. In this respect, the administrative petition process differs from the categorical non-waste determination discussed below, where the EPA makes changes the regulatory status of certain secondary materials that are reflected in the Code of Federal Regulations (CFR). Because the public – through this rulemaking process – has an opportunity to provide input on the EPA's regulations, there is no need to provide a second opportunity for public comment when those regulations are applied by the EPA in specific contexts through the administrative petition process. While the EPA's proposed changes are beneficial, NAFO believes that additional changes could further streamline and provide greater flexibility to the administrative petition process. First, the EPA should adopt a more flexible approach to evaluating petitions, recognizing – as it does in the categorical non-waste determination process – that fuels should not be considered solid waste, even if they do not meet each of the legitimacy criteria. Second, the EPA should not distinguish between secondary materials combusted by generators and third parties. The current default rule presuming that secondary materials combusted by third parties are solid waste ignores the fact that third parties have traditionally combusted biomass material for energy and discourages the development of new markets for clean, renewable biomass co-products and is not consistent with Congressional intent in RCRA that the EPA only has authority over material that has been discarded. Instead, the EPA should permit non-generators to make the same self-determination as generators that their secondary material fuels are not solid waste. Under this approach, the administrative process would still play a valuable role in providing assurance to all regulated entities in borderline cases.

D. Categorical Non-Waste Determinations for Specific NHSM, Proposed 40 CFR §241.4

NAFO supports the EPA's adoption of its recommendation to categorically classify resinated wood as non-waste.

As described more fully in our previous comments, resinated wood residuals have been used as a traditional fuel source since the 1950s and we applaud the EPA's recognition of this traditional fuel source. NAFO also urges the EPA to make full use of the proposed categorical non-waste determination process and aggressively consider categorical determinations for other traditional fuels. As explained in our previous comments, there are a number of traditional biomass fuels that may not qualify as clean cellulosic biomass under the strict criteria included in the current NHSM Rule. Nevertheless, these secondary materials have a long history of use as energy feedstocks and should not be classified as solid waste. Among these traditional fuels are construction and demolition (C&D) debris; pulp and paper wastewater residues, which consist largely of biomass (wood fiber); paper recycling residuals; and certain treated woods, such as creosote-treated railroad ties. We concur with the analyses submitted by the American Forest & Paper Association in support of a categorical non-waste determination for pulp and paper

wastewater residues (pulp and paper sludge) and for construction debris. NAFO supports the EPA's proposed Categorical Non-Waste Determination Process as a means to exclude these traditional fuel products from the definition of solid waste and to provide regulated entities with the necessary assurances that their combustion will not trigger more stringent CISWI Rule emissions limits. To determine whether a non-hazardous secondary material should be granted a categorical non-waste determination, the EPA must focus primarily on whether the secondary material has been discarded or whether it is treated as a co-product with value as an energy feedstock because, as described above, the EPA's regulatory authority over secondary material is limited to material that is discarded. (See Ass'n of Battery Recyclers, 208 F.3d at 1051.) While consideration of other factors such as the legitimacy criteria may aid the EPA in making that determination, the EPA should make clear in the final rule that secondary material will qualify as non-waste if the petitioner can demonstrate that it has not been discarded, but is used instead as a fuel source by the generator or third parties. To this end, NAFO supports the EPA's proposal to add flexibility to the petition and review process for making categorical determinations. First, NAFO supports the EPA's proposal to apply the categorical determinations to all combustors and not merely to generators of secondary materials. This approach appropriately recognizes the many circumstances in which generators have treated their secondary materials as valuable co-products and developed markets for their combustion for energy by third parties. Second, NAFO supports the EPA's proposal to allow any person to file a categorical determination petition with the EPA. In doing so, the EPA appropriately recognizes that other entities besides the generator and combustor have an interest in properly categorizing traditional fuels as non-waste and in developing new opportunities to utilize biomass secondary materials as raw materials in other industrial processes. Third, NAFO supports the EPA's decision to balance the legitimacy criteria with other factors. Many traditional fuels have a long history of use for energy combustion, but may not meet each of the legitimacy criteria. By balancing the legitimacy criteria with other factors, the EPA can take a more flexible approach that can emphasize historic uses of biomass secondary material and respond to new markets as they develop.

E. Legitimacy Criteria, 40 CFR §241.3(d)

NAFO also supports the EPA's proposals to incorporate additional flexibility to the legitimacy criteria applied to NHSM. As explained in our earlier comments, the legitimacy criteria are unnecessarily stringent and will inappropriately exclude some NHSM that are validly reused as energy feedstocks.

First, NAFO agrees with the EPA's proposal to provide regulated entities with the flexibility to apply the legitimacy criteria to individual contaminants or entire classes of contaminants as appropriate. This change will provide greater flexibility to accurately compare the environmental and health impacts of NHSM and traditional fuels. Second, NAFO supports the EPA's proposal to permit comparisons to any traditional fuel that could be combusted in the unit. Again, this added flexibility offers a better opportunity to compare the environmental and public health impacts of NHSM and the traditional fuel alternatives that could be combusted in their place.

While the proposed rule makes a several improvements, the legitimacy criteria remain unnecessarily stringent. However, NAFO continues to disagree with the EPA's decision to place more stringent requirements on legitimacy criteria for NHSM than it does for hazardous materials. First, the EPA should recognize that some traditional fuels do not meet each of the legitimacy criteria and permit balancing of the legitimacy criteria – as it proposes to do under the

Categorical Non-Waste Determination Process – instead of requiring strict compliance with each criterion. Second, rather than limiting NHSM to those with “contaminants at levels comparable to or lower than those in traditional fuels” (40 CFR §241.3(d)(1)(iii)), the EPA should adopt the standard traditionally applied to hazardous materials where contaminants cannot be present “at levels that are significantly elevated from those found in analogous products.” (40 CFR §260.43(c)(2)(ii).) There is simply no justification for applying more stringent standards for secondary materials that are non-hazardous than for those that are hazardous.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA–HQ–RCRA 2008–0329), the response to this comment will be provided there.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 2

Comment: The Pennsylvania Chamber supports a holistic approach to the fuel versus waste determination that considers historical purposes and uses of the combustion material, rather than narrow application of one or a few legitimacy criteria.

In the proposed revised definition of solid waste materials, the EPA has proposed listing certain (biomass) materials that will be simply designated as non-waste in the definition, regardless of their status under the legitimacy criteria. In addition, the EPA proposed more flexibility in the application of the legitimacy criteria, insofar as the EPA applies the criteria, after the rules are finalized, when making a categorical determination for a particular fuel that would apply to all sources burning that fuel. The Pennsylvania Chamber supports this proposed approach to the fuel vs. waste determination, which will reduce the instances where the rule that applies to an individual boiler hinges on a specific consideration under the legitimacy criteria, (e.g., whether the material is generated on or off site). The Pennsylvania Chamber urges the EPA to clarify in the final rules that this holistic approach will also be applied when making unit-specific fuel versus waste determinations. Such an approach will more accurately distinguish between those materials which have been discarded and are truly being burned as waste from materials which have the characteristics of a legitimate fuel, but may not satisfy all of the legitimacy criteria, which of necessity are designed to cover a broad range of circumstances.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA–HQ–RCRA 2008–0329), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 12

Comment: Comments on use of NHSM as Fuel

EPA bases its rules on incorrect assumptions about contamination levels in waste wood

The EPA paints a rosy picture of how it is possible to render a “clean” fuel stream from C&D. The EPA’s March 2011 document “Identification of non-hazardous secondary materials that are solid waste” states that when C&D is sorted, painted wood is removed. This is not the case. Painted and contaminated wood is routinely burned.

For instance, the picture below is from the Palmer Renewable Energy (MA) facility’s application to the Massachusetts Department of Environmental Protection (MassDEP).¹ The facility actively lobbied against any requirement to sort material to remove painted wood, stating “a specific sorting step for painted wood would result in losses of wood with no lead, losing the opportunity for safe beneficial use of this material”.² When we interviewed the plant manager at New England Recycling, the main facility where Palmer would get its wood, he informed us that the “positive pick” process did not remove painted wood from the line. The majority of the wood they sort there is sent to Maine for burning. The picture below clearly shows painted wood in the debris pile from a Maine facility.

The wood in the picture above is described as “clean.” The description of the picture is as follows: “*The second facility is Commercial Paving & Recycling Company (CPRC), which operates "wood recycling" operations at the City of Portland Riverside Facility and at CPRC's Scarborough Facility. At these sites, C&D wood is primarily received in a pre-sorted condition. CPRC only accepts pre-sorted, "clean" C&D wood and prohibits plastics, treated woods, noncombustibles, fines (dirt, wallboard, sawdust, roofing materials), asbestos, and metals from the wood storage piles (see Figure 2-7).*”

¹ Palmer Renewable Energy Project: Major comprehensive air plan approval application, revised June 29, 2009. Submitted to MassDEP, Springfield, MA.

² Palmer Renewable Energy Project. Beneficial use determination application. Revised June, 2009. Submitted to MassDEP, Springfield, MA.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA–HQ–RCRA 2008–0329), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 13

Comment: The “Evergreen Community Power” facility in Reading, PA is a synthetic minor source for Best Available Control Technology (BACT) (we could not ascertain its status with regard to hazardous air pollutant (HAP) emissions). A Department of Energy (U.S. DOE) report on the facility³ states that its fuel consists of “*forest industry waste, shredded construction wood waste, and demolition debris. The ‘mulch’ is mostly wood product, but there are significant amounts of paper, plastic and foreign debris.*” The typical fuel composition is shown below.³ (Department of Energy, Mid-Atlantic Clean Energy Application Center, Evergreen Community Power Plant Case Study, November 16, 2011.)

Comparison with traditional fuels for C&D should be restricted to virgin biomass. The EPA states that in determining whether a NHSM meets the legitimacy criteria, its contamination level must be compared to that of a traditional fuel. The EPA explicitly states that a facility can compare the contamination level of C&D debris and other wood waste to contamination levels in coal, even if the facility is not permitted to burn coal.

Page 80471:

*2. Contaminant Legitimacy Criterion for NHSM Used as Fuels. The 2011 NHSM final rule codified three self-implementing legitimacy criteria that NHSM must meet in order to be considered a non-waste fuel when burned in a combustion unit (40 CFR 241.3(d)(1)(i)–(iii)). One of these criteria focused on comparing levels of contaminants contained in the NHSM to levels of those constituents found in traditional fuels. Specifically, the contaminant legitimacy criterion for fuels was finalized as follows: “**The non-hazardous secondary material must contain contaminants at levels comparable in concentration to or lower than those in traditional fuels which the combustion unit is designed to burn. Such comparison is to be based on a direct comparison of the contaminant levels in the non-hazardous secondary material to the traditional fuel itself.**” 40 CFR 241.3(d)(1)(iii). The existing language provides flexibility for persons to make comparisons on a contaminant- by-contaminant basis or on a group of contaminants-by-group of contaminants basis in determining what constituents to Fuel composition at the Evergreen Community Power facility compare. The phrase “traditional fuels which the combustion unit is designed to burn” also provides the flexibility to choose among multiple fuel options.*

This old language did not catch our attention in the previous version of the rule because it never occurred to us, when talking about C&D, that the “traditional fuel” used for comparison could be anything other than biomass.

*Industry groups have expressed concern that the regulatory language does not clearly reflect the EPA’s intent.⁹ The EPA agrees that the regulatory language can be revised to better reflect the EPA’s intent in implementing the contaminant legitimacy criterion. Therefore, the Agency is proposing to revise this criterion to read, “**The non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) which the combustion unit is designed to burn. In determining which traditional fuel(s) a unit is designed to burn, persons can choose a traditional fuel that can be or is burned in the particular type of boiler, whether or not the combustion unit is permitted to burn that***

*traditional fuel. In comparing contaminants between traditional fuel(s) and a nonhazardous secondary material, persons can use **ranges of traditional fuel contaminant levels** compiled from national surveys, as well as contaminant level data from the specific traditional fuel being replaced. Such comparisons are to be based on a direct comparison of the contaminant levels in both the non-hazardous secondary material and traditional fuel(s) prior to combustion.’’ **We are taking comment on how this revised contaminant legitimacy criterion would apply to specific fuels.***

This is a disaster for new biomass electric plants that are area sources and also overwhelmingly synthetic minor sources for BACT. Under this rule, they would be permitted to use wood with contamination levels far above clean biomass, particularly since the EPA specifies it is acceptable to use “**ranges of traditional fuel contaminant levels**” for purposes of comparison (not averages or medians). This opens the door to comparing biomass/C&D contaminant levels with the *highest* contaminant levels found in coal. In the face of such a collapse of protection at the federal level, states wishing to protect themselves against C&D burning will be forced to enact new regulations, such as Massachusetts is already doing, in response to the Palmer Renewable Energy proposal to burn C&D which was shown to be so fatally flawed.

This should not be permitted. Clean untreated wood is the obvious “traditional” fuel to which C&D should be compared. C&D wood should not contain contaminants at levels higher than found on average in virgin biomass. This is particularly important for pellet manufacture, since pellets are burned not only in commercial and institutional boilers, such as those found in schools, but also in domestic pellet burners.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA-HQ-RCRA 2008-0329), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 14

Comment: The EPA must require testing of contaminant levels in fuels.

On page 80477, the EPA states the following:

Two other issues have arisen during implementation of the 2011 NHSM final rule that, while not leading to specific regulatory changes in today’s proposal, still merit discussion. The first issue is that contaminant legitimacy criterion determinations do not require testing contaminant levels, in either the NHSM or an appropriate traditional fuel. Persons can use expert or process knowledge to justify decisions to rule out certain constituents.

The EPA must require testing for contamination. C&D as a waste fuel is extremely variable. "Slugs" of contaminated wood move through sorting facilities at various times. Particularly given the large amount of material that is going to be generated as abandoned and foreclosed housing is torn down, the potential for liberating vast amounts of lead and other urban toxics, to say nothing of arsenic and chromium from pressure-treated wood, has never been higher. Facilities burning this contaminated material tend to be located in urban areas that already have high levels of air toxics. The Evergreen facility in Reading PA is a good example – it was built (with \$39 million in Stimulus funds) in a county (Berks) that is not only out of attainment with the ozone National Ambient Air Quality Standards (NAAQS), but also with the lead NAAQS (hard to do, considering it is an order of magnitude lower than it used to be). The region where the plant was built is also an environmental justice area. The facility is burning whatever comes through its door, with waste imported from all over the region, including New Jersey.

The potential for C&D fuel to emit toxics used to be taken seriously by the EPA; for instance, in 2010 an ethanol company in Minnesota was fined \$120,000 for burning wood contaminated with lead-based paint and arsenic preservatives in its biomass gasification unit.⁴ With the proposed rule, the EPA is removing any hope of regulating contaminants from the biomass power industry. Fuel won't be tested, and emissions won't be regulated, especially given the number of large biomass facilities that claim to be "area" sources.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA-HQ-RCRA 2008-0329), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 15

Comment: Definition of "clean" cellulosic biomass has become too expansive.

The EPA is proposing to modify the definition of "clean" cellulosic biomass. Page 80470:

Clean Cellulosic Biomass - The EPA is proposing to revise the definition of "clean cellulosic biomass" to list additional examples of biomass materials that are appropriately included within this definition....

Thus, the EPA is proposing to revise the definition of "clean cellulosic biomass" as follows:

*"Clean cellulosic biomass means those residuals that are akin to traditional cellulosic biomass, including, but not limited to: agricultural and forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, tree harvesting residuals from logging and sawmill materials, **hogged fuel, wood pellets, untreated wood pallets**); urban wood (e.g., tree trimmings, stumps, and related forest-*

*derived biomass from urban settings); corn stover and other biomass crops used specifically for the production of cellulosic biofuels (e.g., energy cane, other fast growing grasses, **byproducts of ethanol natural fermentation processes**); bagasse and other crop residues (e.g., peanut shells, vines, orchard trees, hulls, seeds, spent grains, cotton byproducts, corn and peanut production residues, rice milling and grain elevator operation residues); wood collected from forest fire clearance activities, trees and **clean wood found in disaster debris**, clean biomass from land clearing operations, and **clean construction and demolition wood**. These fuels are not secondary materials or solid wastes unless discarded. Clean biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.’’*

Comments on bolded terms:

1. **Hogged fuel.** “Hogging” refers to the process of shredding material. Just because material has been shredded, does not make it clean. This description of a process does not belong in this list, which otherwise consists of material fuel sources.
2. **Wood pellets.** Like hogging, pelletizing can be done to almost any material. Wood pellets can be made from any kind of wood. The definition should specify “wood pellets made from virgin biomass materials.”
3. **Byproducts of ethanol natural fermentation processes.** This is a discarded waste product and does not deserve the appellation “clean.” What is the standard of “virgin biomass” to which is being compared?
4. **Clean wood found in disaster debris.** This again refers indirectly to a process (the process by which standing wood is knocked down in a disaster such as a tornado). This adds nothing to the list that is not already there (i.e., all the “clean” kinds of materials that could be found in disaster debris are already listed).
5. **Clean construction and demolition wood.** This should not be in here, because operationally, this material is discarded by definition. Further, the majority of this material can in no way be considered “clean.”

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA-HQ-RCRA 2008-0329), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 16

Comment: Asbestos should be included as a regulated contaminant.

The EPA states on page 80475:

Also, we are proposing to exclude from the definition of contaminants those pollutants in the CAA sections 112(b) and 129(a)(4) lists that we do not expect to find in any NHSM.... Fine mineral fibers are excluded because they are releases from the manufacturing and processing (not combustion) of non-combustible rock, glass, or slag into mineral fibers.

Asbestos is commonly found in C&D debris. Asbestos particles in smoke are deadly. Sorting procedures at C&D sorting facilities commonly attempt to remove material that looks like it contains asbestos, but by nature this material can end up in the "fines". The description⁵ of the sorting procedure at a C&D sorting facility in Massachusetts demonstrates why asbestos contamination (and contamination by lead, mercury (Hg), and other toxics) is common:

New England Recycling (NER) accepts mixed C&D waste and separates out ferrous and non-ferrous metals, aggregate (asphalt, brick, concrete (ABC)), old corrugated cardboard (OCC), plastics (Nos. 1 and 2), gypsum, wood and fines. The mixed C&D is dumped onto the tipping floor where it is inspected for presence of unacceptable materials (hazardous materials, municipal solid waste, and **suspect asbestos containing materials**). A grapple sorts out large bulky items (large aggregate, bulky insulation or plastics, and large gypsum/wallboard), roughly crushes remaining items and feeds a conveyor to a trommel screen where approximately 1/2 inch fines are removed. The remaining materials move via conveyor onto the sorting line, where some 20 pickers manually remove ABC, OCC, metals, and wood. The wood is thus picked off the line by a positive sort.

Excluding mineral fibers from regulation explicitly ignores the possibility of such contamination in C&D. Asbestos should be a regulated contaminant.

Response: This comment pertains to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the Non-Hazardous Secondary Materials That Are Solid Waste rulemaking docket (EPA-HQ-RCRA 2008-0329), the response to this comment will be provided there.

Out of Scope: CISWI Rule

Commenter Name: Carl R. Rutz

Commenter Affiliation: Alyeska Pipeline Service Company

Document Control Number: EPA-HQ-OAR-2006-0790-2447-A2

Comment Excerpt Number: 3

Comment: 1. Definition of Contained Gaseous Material

At pg 80463 the reconsideration proposal states that the EPA is "*not changing its historical interpretation of what gases could be considered to be solid waste (i.e., a 'contained gas').*" In that same discussion the EPA states that it has added back into CISWI the definition of "contained gaseous material." When we looked we could not find the definition in the regulatory text. Unless we missed it, it appears that the EPA missed adding the definition back into regulatory text of the reconsideration proposal.

2. Contained Gas Policy for Regulated Gas Streams Combusted in a Boiler

With respect to the EPA's historical interpretation of contained gas, Alyeska reviewed the RCRA documents that it is aware of that embody that interpretation and the CISWI response to comments. We are still concerned that a narrow reading of the contained gas interpretations and the response to comments may limit its application to fume incinerators (i.e., air pollution control devices). We also are still concerned that the EPA has not assured industry that gas that arises from an air pollution control device, or that is captured through a control device such as a vapor recovery system, that is then routed to and combusted in a boiler will not be considered a non-hazardous secondary material, unless it passes the burden some legitimacy criteria. In the proposed Major Source Boiler Rule on page 80652 there is a definition of "gaseous fuel" that includes process gases, which under that rule a facility should be able to rely upon to describe their combusted gas a fuel. However, in the CISWI Rule there is no such definition or similar discussion. We refer you to the following response to comments for the earlier final CISWI Rule, specifically the bolded text:

Comment [3b-13-4):

Contained Gas--A limited number of commenters indicated that the final rule should contain a definition of "contained gaseous material." The statutory definition of solid waste includes "solid, liquid, semisolid or *contained gaseous material.*" 42 U.S.C. §6903(27) (emphasis added). EPA has interpreted the term "contained gaseous material" to include gases in containers, but not gases flowing through pipes to combustion units. Under the June 4, 2010 Response to Comments Document -NHSM Rule Proposed Revisions to the CISWI Rule, the existing definition of solid waste will be removed, and the rule will rely upon the proposed definition of solid waste here (proposed 40 CFR Part 241).

The commenters state that the preamble language in the proposed rule could be read to suggest that gaseous fuels are to be included in the Part 241 definition of solid waste. In discussing which

traditional fuels are to be used for comparison purposes in applying the legitimacy criterion concerning contaminants, the proposed rule says:

"For example, if the boiler burns fuel oil, the level of contaminants to be compared would be the level of contaminants in fuel oil or other liquid traditional fuels that is or can be burned in such unit, while for gas-fired boilers, the level of contaminants in the non-hazardous secondary material fuels would be compared to natural gas."

The commenter assumes that the EPA does not intend to regulate gaseous fuels through this rule or otherwise under the Clean Air Act (CAA) §129. Consistent with the statutory definition of solid waste and with the EPA's approach in the 2000 CISWI Rule, the EPA should make clear that "contained gaseous material" is only meant to cover gas in a container when that container and its contents are combusted.

EPA's Response:

As a preliminary matter, EPA wishes to correct certain misconceptions in these comments. First, we wish to make it clear that the statement regarding secondary material fuels replacing natural gas in gas-fired boilers only refers to fuels that are secondary materials. It does not refer to a situation in which a gas-fired boiler can use, for example, refined fuel oil. EPA is aware that fuel oil and gas may be used interchangeably in some boilers. The preamble statement, however, only applies to a secondary material, not a product fuel. Since on specification used oil is considered an alternative "traditional fuel," it would not be considered a secondary material.

Next, the EPA also acknowledges that this rule does not apply to vented gas that is in no way contained and simply goes into the atmosphere.

We are not dealing with whether such vented gases are subject to the definition of solid waste. Vented gas simply will not be used as a secondary material in any gas-fired boiler and thus, is not part of this rulemaking; nor is EPA reopening any rules regarding such vented gases. Further, EPA is not considering viewpoints regarding how it regulates gases under the hazardous waste regulations-specifically, whether gases in pipelines are contained. The Agency needs to evaluate whether the non-hazardous secondary gaseous material that will be used as substitutes in gas-fired boilers are solid wastes, or not, under the statutory definition. EPA's determination in this rule is based on the plain language of the statute. This leads EPA to the situation covered in this rule. In the first place, we are unable to find any Agency reasoning supporting previous EPA interpretations that only gases in containers may be considered "contained." Based on the facts of this case, EPA cannot see how gaseous secondary material that is generated in any particular system and is somehow sent to a gas-fired boiler, even through a pipeline, can be considered an "uncontained gas." This even assumes that "uncontained gas" is not covered under the definition of solid waste, which EPA does not concede in this rulemaking. This would mean that a clean gas-fired boiler could still burn under CAA 112 secondary material that is handled through a seriously leaking pipeline, has little to no real fuel value, and is full of dirty contamination, simply because the material is not a "contained gas" under the definition of solid waste. EPA rejects any such formulation.

The EPA appears to provide greater assurances later in the preamble when it refers to the letter to American Forest & Paper Association, 80473. Here the EPA states that the burning of gaseous material in a combustion unit, not limited to air pollution control devices is not an a form of treatment or other management of solid waste. This certainly is helpful. Nonetheless this is a very important issue and one we would like as much certainty as possible about. The boilers at the Valdez Marine Terminal (VMT) burn vapors (gases) generated from storage tanks and the loading of tankers. These vapors consist predominately of hydrocarbon vapors and a limited amount of stack gas from the tankers and the boilers that is used as an inert gas for these vapor collection systems. We wish to utilize the control device exemption in the Boiler standards, but are concerned that the EPA may in time classify the vapors as solid waste or at least require that we must demonstrate the vapors are non-traditional fuels through the legitimacy criteria.

Logically, it makes sense that a boiler that acts as a control device under some other part, in our case, Marine Loading and Organic Liquid Distribution MACTs, should be exempt from CISWI. Indeed as we discussed above Boiler MACT provides an exemption for boilers used as control devices provided the gases contribute more than 50% of the boiler's heat input. To eliminate this confusion and future compliance and Title V permitting risks it would be ideal if the EPA simply created an exemption from CISWI for air pollution control devices and boilers and process heaters that are used as control devices under Parts 63, 61 and 60. Alternatively, the EPA could as a matter of interpretation make such a statement in the preamble or response to comments.

3. Exclusion of Cyclonic Burn Barrels, Soil Treatment Units, Laboratory Analysis Units and Space Heaters from CISWI

Alyeska strongly supports the retention of the exemptions for cyclonic burn barrels, soil treatment units, laboratory analysis units, and space heaters. Since the function and operation of these types of units is fundamentally different than incinerators contemplated under the CAA, Alyeska supports the EPA's decision to exclude them from CISWI.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket (EPA-HQ-OAR-2003-0119), the response to this comment will be provided there.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 6

Comment: Integrys supports the EPA's proposed clarification of the definition of biomass in the proposed reconsideration of the new source performance standards (NSPS) and emission guidelines for commercial and industrial solid waste incineration units¹, which would establish how bio-based fuels are treated under the Area Source Boiler Rule. The clarification will remove a barrier to expanding the use of several promising biomass fuel sources.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket (EPA-HQ-OAR-2003-0119), the response to this comment will be provided there.

Commenter Name: Stuart A. Clark

Commenter Affiliation: State of Washington Department of Ecology

Document Control Number: EPA-HQ-OAR-2006-0790-2481-A2

Comment Excerpt Number: 2

Comment: We are pleased that the preamble to the proposed CISWI Rule indicates the rule is being modified to clarify which biomass fuels (i.e. waste wood from forest harvesting) are not solid waste. However, the rule amendment could make this more explicit by specifically listing these materials as fuels.

A key consideration when assessing whether a material meets the legitimacy criteria is determining whether the material has been "discarded". The regulated community would benefit by either adding a definition of "discarded" that is not ambiguous or by issuing a Clarification Letter explaining how this determination will be made by the Agency. This is especially important when considering the status of materials collected through programs designed to divert useful materials from landfill disposal that can otherwise be processed into legitimate fuels or feedstock.

While acknowledging efforts to ensure expeditious review of petitions to the regional director for a non-waste determination, we believe the value of the opportunity for public comment outweighs the burden of a 30-day delay in completing the petition process.

We are pleased that the EPA proposed to segregate coal fired energy recovery units from other non-hazardous waste, biomass based energy recovery units under the CISWI Rule. This segregation will provide much more appropriate alignment of HAP emission limits with the type of fuel.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket (EPA-HQ-OAR-2003-0119), the response to this comment will be provided there.

Commenter Name: Stuart A. Clark

Commenter Affiliation: State of Washington Department of Ecology

Document Control Number: EPA-HQ-OAR-2006-0790-2481-A2

Comment Excerpt Number: 3

Comment: We are pleased that the preamble to the proposed CISWI Rule indicates the rule is being modified to clarify which biomass fuels (i.e. waste wood from forest harvesting) are not

solid waste. However, the rule amendment could make this more explicit by specifically listing these materials as fuels.

A key consideration when assessing whether a material meets the legitimacy criteria is determining whether the material has been "discarded". The regulated community would benefit by either adding a definition of "discarded" that is not ambiguous or by issuing a clarification letter explaining how this determination will be made by the Agency. This is especially important when considering the status of materials collected through programs designed to divert useful materials from landfill disposal that can otherwise be processed into legitimate fuels or feedstock.

While acknowledging efforts to ensure expeditious review of petitions to the regional director for a non-waste determination, we believe the value of the opportunity for public comment outweighs the burden of a 30-day delay in completing the petition process.

We are pleased that the EPA proposed to segregate coal-fired energy recovery units from other non-hazardous waste, biomass based energy recovery units under the CISWI Rule. This segregation will provide much more appropriate alignment of HAP emission limits with the type of fuel.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for the Area Source Boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket (EPA-HQ-OAR-2003-0119), the response to this comment will be provided there.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 5

Comment: The NAM agrees with the EPA's decision not to apply the proposed incinerator MACT standards to small "burn-off ovens." (76 FR 80460.) In addition to the reasons identified by the EPA, it is not appropriate to categorize burn-off ovens as incinerators, as most burn-off ovens are not actually combusting material. Instead they use lower temperature processes such as melting or pyrolysis and are specifically designed to avoid flaming conditions, which would damage the parts being cleaned.

Response: The EPA thanks the commenter for their support and additional justification.

Out of Scope: Major Source Boiler Rule

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 8

Comment: Work practice standards, including operating the boiler according to the manufacturer's recommendations to ensure good combustion, along with periodic tune-ups, is the most effective way to regulate boilers operating in standby mode. One solution would be for the EPA to expand the definition of "limited-use boiler" to include standby units that consistently operate at low capacity.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 9

Comment: ACA generally supports the following proposed changes in the Boiler MACT Rule:

1. Revision that sources have the option of either meeting a total selected metals (TSM) limit for each category or alternative particulate matter (PM) limits;
2. Revision that dioxin/furan emissions will now be regulated using a work practice standard in lieu of numeric emission limits;
3. Change to the boiler efficiency analysis allowing for the use of output-based limits as a compliance option to achieve emissions reductions in addition to the input-based limits;
4. Proposed separate subcategories for heavy liquid-fired and light liquid-fired units for PM and carbon monoxide (CO), dependent on combustor design;
5. Proposed fuel specification based only on the mercury (Hg) level in the gaseous fuel, and not hydrogen sulfide;
6. Establishment of a subcategory and separate standards for limited-use units that operate for shorter periods of time;
7. Change to the use of a 30-day rolling average for parameter monitoring and demonstration of continuous compliance with operating limits;
8. EPA's proposed alternative compliance option for facilities that wish to use CO continuous emissions monitoring system (CEMS) instead of CO stack testing and oxygen (O₂) monitoring, so long as EPA clarifies that a source is not subject to the stack test-based CO standard if it chooses to comply with alternative CEMS-based limits;
9. Proposal that tune-ups for units (equal to or less than 5 million British thermal units per hour (MMBtu/hr)) will now only be required by the compliance date and every 5 years thereafter;

10. Exemption for any boiler or process heater that is used as a control device to comply with standards issued under Part 60, Part 61, or Part 63 of the CAA (provided that at least 50% of the heat input to the boiler is provided by a gas stream that is subject to the standards under those parts);

11. Exclusion of waste heat boilers and process heaters;

12. Exemption of residential boilers from the rule;

13. Extending the compliance date for existing sources to 3 years after the date of publication of the final reconsideration of the rule; although ACA urges the EPA to be flexible and allow affected sources more than three years to comply with the rules, if needed;

14. Revised definition of natural gas curtailment to clarify that a curtailment does not include normal market fluctuations in the price of gas that are not associated with periods of supplier delivery restrictions; however, the term "halted" may be interpreted to interfere with existing contractual obligations and therefore is too restrictive. ACA recommends that the EPA incorporate the language changes suggested by the American Chemistry Council;

15. Incorporation of an emissions averaging provision into the emissions standard.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 10

Comment: ACA generally supports the following proposed changes to the MACT and Area Source Boiler Rules:

MACT – The EPA clarification that the scope of the energy assessments is to be limited to those facilities and equipment associated with the energy output from the regulated boilers and process heaters. ACA suggests that the EPA should eliminate the definitions of "boiler system" and "energy use system" and further limit the scope of energy assessments to "boiler(s)" and "process heater(s)" as currently defined;

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners (NAFO)

Document Control Number: EPA-HQ-OAR-2006-0790-2440-A1

Comment Excerpt Number: 2

Comment: III. Proposed Emissions Limits for Major Sources

Even if the EPA properly finalizes the regulations in a way that classifies biomass energy feedstocks as non-waste, this clean, renewable, and climate-beneficial energy supply will not be developed without significant changes to the current emissions limits imposed on biomass boilers under the Major Source Boiler Rule. Despite the fact that biomass energy is a clean, renewable alternative to fossil fuel combustion, the current regulations impose stringent emissions limits on biomass boilers that will require installation of expensive control technology while providing minimal (and sometimes undetectable) environmental and health benefits. Unless changes are made to the existing emissions limits, the high costs of compliance for biomass boilers will inevitably cause energy producers to turn to fossil fuel alternatives with lower compliance costs.

The proposed changes to the Major Source Boiler Rule offer a number of improvements that will reduce compliance costs without sacrificing environmental and health benefits, particularly with respect to dioxin/furan emissions limits and the standards for new biomass boilers. However, these changes will not be sufficient to properly encourage and incentivize biomass energy development. NAFO urges the EPA to consider additional changes with respect to emissions limits for other HAPs – including PM standards for existing boilers. Without additional changes, future growth in the biomass energy sector will be discouraged and the potential climate benefits of biomass energy will not be fully realized.

A. Work Practice Standards for Dioxin/Furan and Mercury, 40 CFR Part 63, Subpart DDDDD, Table 3

In its Major Source Boiler Rule comments, NAFO urged the EPA to adopt work practice standards for dioxin/furan. For the same reasons, the EPA should adopt work practice standards in lieu of emissions limits for Hg emissions from biomass boilers. As explained in our Major Source Boiler Rule comments, the EPA's proposed Hg emissions limits were also below detection limits and would require expensive control technology while providing little if any health benefit.

As the EPA recognizes, baseline dioxin/furan emissions from biomass are already extremely low and, in many cases, are below detection limits. As a result, stringent emissions limits, such as those currently in effect, will require the installation of extremely expensive control technology while providing little if any health benefit. Further given the current detection limits, it will be impossible to distinguish between compliant and non-compliant facilities. For these reasons, we support the EPA's proposal invoking its authority under §112(h)(2)(B) of the CAA to issue work practice standards in lieu of emissions limits for dioxin/furan emission. Thus, the EPA should also adopt work practice standards in lieu of emissions limits for Hg emissions from biomass boilers.

B. Emissions Limits for Particulate Matter, 40 CFR Part 63, Subpart DDDDD, Tables 1-2

While the EPA's proposed revisions to the PM emissions limits demonstrate an attempt at increasing flexibility and reducing regulatory burdens, it fails to produce this effect for many

existing biomass boilers. The EPA's decision to create PM subcategories for coal- and biomass-fired boilers resulted in uneven results and in several cases we are concerned that the emissions limits included in the proposed rule remain too stringent. As explained in our prior comments, the current PM emissions limits will require biomass facilities to install costly new control technology and incur higher operating costs, creating a risk that facilities will avoid biomass fuels and turn instead to fossil fuel alternatives. But, rather than relieving this burden, the proposed PM emissions limits for existing "stokers/sloped grate/others designed to burn wet biomass fuel" – the most common type of biomass boiler currently in use – are actually more stringent than those under the current rule. Further reductions in PM emissions limits for the majority of existing biomass boilers will have a significant and detrimental effect on the viability of these boilers as alternatives to fossil fuel boilers. The wood products industry, which employs the majority of the wet stoker boilers, was significantly impacted by the recession and is still struggling to recover. The EPA must reassess the emissions limits for existing wet biomass stoker boilers and adopt more reasonable standards that can be achieved in practice and will satisfy legal requirements, without prohibitive costs that will further threaten the health and viability of this important industry.

C. Emissions Limits for other HAP, 40 CFR Part 63, Subpart DDDDD, Tables 1-2

Finally, with respect to the remaining emissions limits included in the proposed Major Source Boiler (and CISWI) Rules, NAFO urges the EPA to consider both the necessity of imposing stringent emissions limits on biomass boilers from a public health perspective as well as the impact that expensive control technology will have in discouraging the use of this clean, renewable, and climate-beneficial energy source. While the EPA's proposed emissions limits represent, in some cases, an improvement over current standards, they do not go far enough in correcting the flaws in the current rule.

NAFO supports the EPA's proposal to impose less stringent emissions standards on new biomass boilers. This proposal remains consistent with the EPA's legal obligations under §112 of the CAA, while removing compliance-based barriers to bioenergy development. With the exception of Hg, which is discussed above, the proposed emissions limits for new boilers represent a marked improvement over current standards and, at a minimum, we urge the EPA to adopt these standards. Nevertheless, in order to properly reflect the health and climate benefits of biomass and provide proper incentives for the continued development of this important source of energy, the EPA must make additional modifications beyond its current proposals. Therefore, we reiterate and incorporate herein our previous comments urging alternative and less stringent emissions limitations for biomass boilers and incinerator units.

- First, we urge the EPA to adopt health-based compliance alternatives for hydrogen chloride (HCl) and manganese under §112(d)(4) of the CAA in order to provide environmental health benefits while avoiding extreme costs to the industry. Biomass contains very small amounts of HCl and the proposed numerical standards will require expensive technological adjustments that provide very little benefit to public health or the environment. In addition, the EPA has long recognized that manganese is emitted from many facilities in amounts that do not expose anyone in surrounding population to concentrations above the established health thresholds and therefore the emissions do not pose a significant risk to the surrounding population.

- Second, we urge the EPA to adopt more reasonable emissions limits for CO and PM that are less stringent and less costly, but still achieve statutory requirements. Again, the costs required to meet the proposed emissions limits are unreasonably high in comparison to the public health and environmental benefits that will accrue. The EPA can encourage, rather than discourage, the use of clean, renewable biomass fuels by imposing less stringent standards that will still comply with the EPA's statutory mandates under the CAA. Providing an alternative health-based approach will ensure that high compliance costs are not imposed on the industry unless commensurate health benefits are provided.

- Third, we urge the EPA to focus on emissions standards that can actually be achieved in practice by considering all relevant pollutant emissions together rather than adopting a pollutant-by-pollutant approach that ignores trade-offs between emission control technologies and produces standards that cannot currently be met by any biomass boilers. The EPA establishes the maximum achievable control technology (MACT) floor for each source category by calculating the numerical average of the emissions from the best performing (lowest emitting) 12% of sources. By adopting a pollutant-by-pollutant approach, the EPA selects different sources as the best performing 12% for each pollutant and ignores the trade-offs that inevitably occur when some emissions are minimized at the expense of others. When all of the MACT standards are evaluated together, they do not reflect the actual emissions of the best performing sources.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 20

Comment: EPA Should Not Include a 10% Discount Factor in the Final Major Source Boiler Rule

The EPA includes a restriction on emissions averaging that requires facilities using that option to meet a standard that is 10% stricter than the otherwise applicable limits. (76 FR 15670.) The EPA should not include this 10% penalty for using emissions averaging because it is arbitrary, unnecessary for environmental protection and reduces the flexibility that averaging provides. Given the accuracy of heat input weighted emission calculations, there is no uncertainty that the average emission rates will be any less stringent than when not using averaging. Because the EPA has already determined that the standards in the rule achieve the maximum emission reduction achievable for health and environmental protection, to require an additional 10% reduction of emissions has no basis in the environmental underpinnings of the rule. Because emissions averaging is a compliance alternative, the 10% discount factor would constitute a beyond-the floor requirement. Although the 10% discount may be perceived as a fair trade-off for the flexibility of emissions averaging, it still lacks a legal basis and creates a disincentive for sources to use this compliance method. Where, as here, proposed emission limits are very tight, sources will not be able to ensure an additional 10% reduction in emissions below the limits and

imposing this penalty effectively would deprive many sources of the availability of the emissions averaging compliance alternative.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 54

Comment: CIBO opposes the EPA's decision to retain the 10% discount imposed on sources that decide to average their emissions data to comply with standards. (76 FR 80,633.)

The restriction is arbitrary and capricious. Given the accuracy of heat input weighted emission calculations, there is no uncertainty that the average emission rates will be any less stringent than when not using averaging. Because the EPA has already determined that the standards in the rule achieve the maximum emission reduction achievable for health and environmental protection, to require an additional 10% reduction of emissions has no basis in the environmental underpinnings of the rule. Because emissions averaging is a compliance alternative, the 10% discount factor would constitute a beyond-the floor requirement.

Although the 10% discount may be perceived as a trade-off for the flexibility of emissions averaging, it still lacks a legal basis and creates a disincentive for sources to use this compliance method. Where, as here, proposed emission limits are very tight, some sources will not be able to ensure an additional 10% reduction in emissions below the limits and imposing this penalty effectively would deprive them of the availability of the emissions averaging compliance alternative.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 32

Comment: A. EPA Should Clarify Subpart DDDDD, Table 7 - Demonstrating Continuous Compliance

Subpart DDDDD, Table 7, Item 1.c. includes the word "block" in stating the following requirement: "Maintaining opacity to less than or equal to 10% (daily block average)." (76 FR 15605.) It appears that other similar requirements do not include the word "block" in the compliance requirement statement. Considering this, the EPA should revise the following items

in Table 7 as noted below for clarity and to reduce potential confusion: 3.c. “Maintaining the 12-hour block average pressure drop...” 4.c. “Maintaining the 12-hour block average sorbent or carbon injection rate...” 5.c. “Maintaining the 12-hour block average secondary amperage and voltage, or total power input...” 7.b. “Maintaining the 12-hour block average oxygen content...”

B. EPA Should Clarify the Requirements of Section 63. 11220

It appears that there are conflicting requirements in §63.11220. (76 FR 15594.) Specifically, paragraph (a) requires triennial performance tests; however, paragraphs (b) and (c) incorporate the wording from Subpart DDDDD relative to 3 consecutive years’ results $\leq 75\%$ of emission the limit in order to go to triennial testing. Considering this, the EPA should delete §§63.11220(b) and 63.11220(c) to eliminate incorrect and conflicting statements.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 2

Comment: Some standards in the proposed rules are more stringent than prior iterations of the rules, the total costs of compliance has increased several hundred of million dollars for manufacturers, and some limits may not be achievable, especially within the current 3-year compliance timeframe. For example, the particulate standards are more stringent for the predominant boilers in the forest products industry (wet biomass stoker boilers). In addition, the EPA has made the standards for coal and coal-biomass boilers significantly more costly. As a result, these proposed rules jeopardize more than 200,000 critically needed jobs.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 4

Comment: I. The NAM supports the EPA’s decision to establish work practice standards in lieu of emission limits for certain gas-fired boilers, for dioxin/furan and for periods of startup and shutdown

The EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers (units that combust only natural gas, refinery gas, or equivalent fuel (other gas that qualifies as Gas 1 fuel)). (76 FR 80601.) The EPA is also

proposing a work practice standard for dioxin/furan emissions from all subcategories. *Id.* at 80602. In addition, the EPA is proposing revised work practice standards for periods of startup and shutdown. *Id.* at 80602. By taking these steps, the EPA will help to make sure that these rules do not unduly harm segments of the nation's critical manufacturing base.

The EPA has ample legal authority to set the standard in terms of a work practice. First, CAA §112(d)(1) authorizes – if not requires – the EPA to set "emission standards" for each category or subcategory, and CAA §302(k) defines "emission standard" to include work practice standards. Thus, if the EPA determines that the best performing sources achieved their emissions performance through work practices rather than control equipment, those work practices should be identified as the "floor." Second, CAA §112(h)(2)(b) independently authorizes the EPA to use a work practice standard where, as here, the application of a system for measuring the effect of the control measure for enforcement purposes is not practicable.

The EPA has independent authority to promulgate work practices as emission standards under CAA §302(k) as long as the work practices provide a continuous limit on emissions or are part of a set of regulations that provide a continuous limit on emissions. As required by CAA §112(d), the EPA must promulgate "emission standards" for the control of HAP at major sources. Originally, these "emission standards" were found to be limited to only numeric emission limits. (*See, e.g., Adamo Wrecking Co. v. U.S.*, 434 U.S. 275 (1978).) However, in the 1990 Amendments, Congress expanded the definition of "emission standards" in §302(k) to expressly include work practices. As a result, the plain language of the CAA now authorizes the promulgation of work practices: (1) as direct emission standards under §302(k), and (2) in lieu of emission standards under CAA §112(h).

That statutory authority greatly simplifies the development of work practice standards for boiler units. Instead of turning to the alternate stop-gap provisions in CAA §112(h) that apply when continuous emissions standards are not feasible, the EPA can focus on the direct establishment of work practices that existing sources use to ensure continuous compliance under CAA §§112(d) and 302(k). For example, if the top 12% of existing natural gas-fired boilers are using tune-ups to achieve their "best performing" status, then the EPA has the authority to establish that protocol as a work practice-based emission standard. Tune-ups are an appropriate emission standard for these units because, if conducted with adequate frequency, they provide continuous reduction of the quantity and rate of HAP emissions from boilers by ensuring that they operate properly.

The NAM agrees with the EPA's conclusions regarding the basis for relying on work practices for units that combust only natural gas, refinery gas, or equivalent fuels. As the EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. (*See* 75 FR 32025, 32029.) Further, the EPA correctly concluded that imposing emission limitations on gas-fired boilers would create a disincentive for switching to gas from oil, coal or biomass as a control technique. *Id.* In fact, it could create an incentive for facilities to switch away from gas to other fuels. Both outcomes should be avoided. Finally, the EPA recognized that "[t]he inability to accurately measure emission from Gas 1 units and the related economic impracticability associated with measuring levels that are so low that even carefully conducted tests do not accurately measure emissions warrant setting a work practice standard under CAA section 112(h)." (76 FR 15638.)

In addition, the EPA is correct that work practices are appropriate for dioxin/furan, as the large majority of the dioxin/furan measurements are below the level that can be accurately measured. (76 FR 80606.) This is consistent with the approach that the EPA correctly took in the recently finalized Mercury and Air Toxics Standard (MATS).

Finally, the NAM agrees with the EPA's rationale for justifying work practice standards for periods of startup and shutdown, as described in the preamble to the final rule. (76 FR 15642.) The EPA's rationale, along with the concerns raised in prior comments by the NAM and others, justify reliance on work practices.

II. The NAM supports the EPA's creation of additional subcategories

The CAA unequivocally authorizes the EPA to establish appropriate subcategories of sources. CAA §112(c)(1) instructs the EPA to establish "categories and subcategories" of sources for regulation under §112. CAA §112(d)(1) then further provides that the EPA "may distinguish among classes, types and sizes of sources within a category or subcategory" when establishing MACT standards. These provisions vest the EPA with the clear authority to group like units for purposes of establishing emissions limitations. Further, the EPA's ability to subcategorize is a key tool in ensuring that MACT floors are achievable. *See Sierra Club v. EPA*, 479 F.3d 875, 884-85 (D.C. Cir. 2007) (Judge Williams' concurrence noting the need to use subcategorization to avoid imposing unreasonable or unachievable MACT floors).

Thus, the NAM supports the EPA's conclusion that certain additional subcategories are warranted. For example, the EPA's division of the liquid subcategory into light and heavy liquid subcategories for PM and CO is warranted because of the differences in equipment design, operations and emissions between the subcategories. In addition, the EPA's establishment of a limited-use subcategory subject to work practices is warranted for a variety of reasons previously highlighted by the NAM, including the fact that these units spend a far greater percentage of their time starting up and shutting down than other units, leading to different emission profiles and control options.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 18

Comment: The NAM supports the EPA's proposal to allow a co-fired unit to opt out of the CISWI Rule and into the Boiler MACT Rule, or visa versa. This will provide a beneficial measure of flexibility to operators. However, the EPA should eliminate the arbitrary restriction in the proposal that would limit a facility from moving from being regulated under CISWI to being regulated under Boiler MACT for a six-month period after it had stopped burning solid

waste. As a policy matter, forcing operators to remain regulated under the one standard when there are reasons to switch would needlessly penalize them with little to no benefit gained.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Carl R. Rutz

Commenter Affiliation: Alyeska Pipeline Service Company

Document Control Number: EPA-HQ-OAR-2006-0790-2447-A2

Comment Excerpt Number: 1

Comment: II. COMMENTS ON MAJOR SOURCE BOILER MACT

1. Time Allowed to Comply with Boiler MACT Should be 5 Years not 3 Years

Alyeska strongly supports the American Petroleum Institute (API) comments on this topic. Our organization has been evaluating the time frame necessary to comply with Boiler MACT, assuming the final rule is similar to the present vacated final rule and this proposed rule. The 3-year timeline will be extraordinarily difficult to meet because the modifications required of the boiler facility to provide for controls are very challenging. After those changes, the addition of emission controls will be equally difficult and time consuming. We are not optimistic we can meet a 3-year timeframe to perform this project. We are without other options for power for the VMT so any project is particularly challenging because it directly impacts the ability of the facility to perform its primary function of storing oil and loading it on to marine tankers.

2. Control Device Exemption, 40 CFR 63.7491(i)

Along with API and its members Alyeska thanks the EPA for modifying the exemption to cover regulated gas streams under Parts 60 and 61. We also support API's additional requests for changes to help clarify the exemption.

Like all facilities that have regulated gas streams that are combusted as fuel in boilers subject to this standard it is very important that we clearly understand the application of this exemption. API's comments and requests for clarifying changes will do that. In addition, Alyeska asks the EPA to provide some discussion in the preamble to the final rule or in the response to comments to provide further certainty about this exemption. Our concern is that the current record on this exemption is sparse as to how it might actually apply at specific facilities. Currently the only example, and it is a complex one, is the Norbord Industries comment and the EPA's response:

Norbord stated:

"Many facilities exhaust process gases from other sources through the combustion chamber of a boiler or process heater. Does the standard apply to all or a portion of the exhaust? At one Norbord facility a portion of the process gases passing through the combustion unit is PCWP MACT regulated, and another portion of the gases passing

through is from a kiln. Additionally, greater than 50% of the heat input to the boiler/process heater is from the kiln and dryers. At the very least wouldn't the boiler/process heater be considered a waste heat boiler?"

The EPA responded as follows:

"EPA has modified the exemption to remove the phrase 'specifically listed' and replaced with 'part of the affected source' in order to address the concerns of the commenter. Further we added another exemption to allow for situations where the boiler serves as the control device for another MACT-regulated process where at least 50% of the heat input comes from the regulated process."

We realize there are statements by the EPA in the preamble to the proposed rule reinforcing the benefit of the exemption. (76 FR 80615, 80616.) However, what is less certain is how the exemption will effectively apply. For example, at the VMT vapors are collected and controlled as described above under 40 CFR 63 Subparts Y and EEEE. Our understanding is that these collected vapors are a regulated gas stream for purposes of the exemption. Further, the collected vapors are used as fuel in the boilers, and meet the definition of a "gaseous fuel" under §63.7575. The exemption also requires that the boiler perform as a control device to comply with another subpart. Subpart Y's emissions standard requires that a vapor collection system connect to an air pollution control device. Air pollution control device for purposes of Subpart Y expressly includes boilers. Boilers are used at the VMT as control devices. Under Subpart Y, large boilers above a certain size are not required to satisfy emissions testing, monitoring and performance criteria that the thermal oxidizers must meet. The EPA made that decision in the Subpart Y rulemaking because of the inherent combustion efficiency of boilers and the pollution prevention benefits of burning vapors for fuel in lieu of diesel or other fuels in the boilers. That is well documented in the rulemaking history. As you know, the EPA established this practice with the Hazardous Organic National Emission Standards for Hazardous Air Pollutants (NESHAP) (HON) and it has properly been added to many MACT standards. It is our understanding that the VMT boilers when used in this manner are used as a control device to comply with another subpart and therefore satisfy this requirement of the control device exemption.

We believe the same is true for Organic Liquids Distribution MACT (Subpart EEEE) at the VMT. Subpart EEEE, requires regulated vapors to be collected and routed to either to 1) a dedicated air pollution control device, or 2) a fuel gas system followed by a combustion device. At the VMT, the dedicated control devices are thermal oxidizers; the combustion devices receiving regulated vapors via the fuel gas system are boilers (serving as control devices).

We would appreciate some discussion by the EPA to confirm our understanding of the scope of this exemption to circumstances like ours where boilers receiving regulated gases via a vapor collection system and/or fuel gas system serve as control devices.

3. Transitioning from the Control Device Exemption to Complying with Boiler MACT

We are uncertain about how the exemption may practicably terminate for a boiler that is utilizing this exemption. If a boiler has been operating under the exemption at §63.7491(i) by burning over

50% gaseous fuel on a heat input basis from regulated gas streams and the regulated gas stream drops below 50% on an annual average (see comment below) how soon would the boiler have to meet the emission standards of the rule? Depending upon circumstances, a drop in the regulated gas stream heat input usage may not be foreseeable or avoidable. Gas streams that arise from processes may appear to be forecastable, but unforeseeable economic conditions or other events may change the supply of the underlying commodity that generates the gas stream. This in turn may result in a rapid unforeseeable diminishment in the gas stream volume and corresponding heat input to the boiler. If a facility has to retrofit boilers with emission controls sufficient time must be allowed to reasonably allow for the changes to be made. Therefore, Alyeska proposes that the EPA clarify this obligation and provide a reasonable time for installation of controls to the boilers. Based upon our review of the timeframe to make such a change at least three years will be needed after a boiler no longer qualifies for the exemption criteria to put in place the controls, monitoring and other requirements necessary to meet the rule's compliance obligations.

4. Alyeska Supports API's Request to Base "Heat Input" on an Annual Average

Alyeska supports determining the heat input on an annual average basis that is a further described as a rolling 12-consecutive month period. First, this approach is consistent with how annual averages are used in most EPA and state programs. For example, the Terminal's existing permit requirements to meet state SIP permit limits are based on this approach. Second, this approach seems logical because it provides for seasonal variability or other short term circumstances when regulated gas streams may be limited or the heat content of the gas changes. However, on an annual average the gas streams do contribute more than 50% of the heat input to the boilers. Since Alyeska believes it is the EPA's intent to promote the usage of on-site gas over other off-site fuels, such as liquid or solid fuels, which result in additional emissions, an annual basis would be beneficial and would not penalize a facility during the short periods the 50% criteria couldn't be met.

5. Startup and Shutdown Operating Regimes

Alyeska supports the EPA's recognition that the startup and shutdown of boilers are different from normal operation. Alyeska agrees with the API/National Petrochemical and Refiners Association (NPRO) comments that a work standard is the proper standard. For example, the VMT boilers must be run at their intermediate and upper ranges during part of startup to ensure proper tuning over the full operating range before being returned to normal service. For this reason startup will include periods when the boilers are operated at that or above 25%. Only a reasonable work practice approach ensures that boilers are started up safely and efficiently to ensure effective routine operations after startup.

Finally, there is no alternative fuel for these boilers. They can only operate on gaseous fuel as described above and on liquid distillate fuel, also described above. Prescribing a startup alternative fuel is not remotely feasible.

6. Malfunction Affirmative Defense

Alyeska strongly agrees with the API/INPRA comments regarding the heavy handed treatment of malfunctions in the proposed rule. The proposed text implies a presumption of guilt and imposes an unreasonable burden on the facility for each incident that may occur. The simple fact is that malfunctions will occur and no amount of planning or expense can completely eliminate them. Alyeska agrees that if a malfunction occurs and an emission limit is exceeded that the agency (either the EPA or the Title V delegated agency) should be provided notification of the event including a description of the event and the corrective actions taken at the time. However, Alyeska believes that the level of information necessary to "assert the affirmative defense" should only be necessary 1) if a facility has a history of having repetitive "similar type" exceedences, and 2) the information is specifically requested by the agency. The EPA and delegated state agencies should take an enforcement discretion approach instead of treating every incident as an enforcement case.

7. Clarification of Emission Monitoring and Emission Limit Compliance During Startup and Shutdown

We are concerned that there are interpretations of §§63.7535 through 63.7541 that could require that compliance requirements be met during periods of startup or shutdown. Specifically: §63.7500(e) states that the standards, except the work practice standards in Table 3, do not apply during periods of startup and shutdown, however, under the continuous compliance requirements §§63.7535 through 63.7541, there is no mention that data taken during episodes of startup or shutdown should not be considered or used in evaluating on-going emission or monitoring requirements. Several of the provisions, such as §63.7535(c) acknowledge that monitoring data taken during monitoring system malfunctions, out-of-control periods, or during repairs on the monitoring systems should not be used, but it is silent for periods when the boiler is in startup or shutdown. Another example includes §63.7540(a)(8) for CO CEMS which states under §63.7540(8)(ii) to "maintain a CO emission limit below or at your applicable alternative CO CEMS based standard in Tables 1 and Table 2 of this subpart at all times" (emphasis added). Perhaps the means to address this concern would be to add to §§63.7535(d) and 63.7540(a)(ii): "except during periods of startup and shutdown as described by §63.7500(e)".

Another clarification which would be beneficial in the rule is to acknowledge the acceptability of using a single CO CEMS system to monitor multiple affected boilers simultaneously as long as the measurement criteria of at least one reading every 15 minutes per affected unit is met.

At the VMT, the three power boilers route to a common stack and since the rule does not provide a single CO limit for combined stack configurations, like it does for PM/HCl and Hg, it is implied that individual boiler CO exhaust measurements are required. In order to simplify the monitoring, reduce redundancy, and optimize limited space, Alyeska believes there would be benefit in this rule if the EPA acknowledged this option.

We supported 5 years for the initial compliance period for Boiler MACT, but recognize that later in the life of a boiler that a 3-year timeframe may be achievable if transitioning from the control device exemption to full Boiler MACT compliance, including the addition of controls. There will be considerable national experience developed by contractors to install controls and companies

that utilize the exemption will have some anticipation and understanding of what Boiler MACT compliance looks like at these later dates.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 5

Comment: The USBSA also requests that boilers located at major agricultural sources, which run only during the sugarbeet processing season, should receive treatment similar to that suggested above for area sources. These major sources are virtually identical (*i.e.* the same agricultural locations and production schedules) to the area sources except that process HAP emissions are only slightly over the major source threshold.

. . . be included in the seasonal subcategory or in the alternative may be found to constitute a separate subcategory, and be permitted to comply with the final Boiler Rules using a management practices standard during normal operations as well as during startup, shutdown, and periods of malfunction. . .

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 12

Comment: In the reconsideration of the Major Source Boiler Rule, the EPA has reconsidered several of the MACT floor limits.¹⁴ However, the EPA retained the HAP-by-HAP approach of regulating each HAP separately, without regard to the interplay between pollutants and pollution-control equipment that can lower efficiencies and make it more difficult to meet the prescribed standards. A HAP-by-HAP approach— using a pollutant-by-pollutant analysis that looks at the best performing sources for each HAP and sets the floor based on those sources— creates challenges for regulated entities looking at the overall pollutant levels of their facilities.

Because a HAP-by-HAP approach looks at the pollutants piecemeal, it does not represent what an actual source can achieve over time. Setting the standard this way makes it exceedingly difficult for regulated entities working in good faith to improve efficiencies enough to meet the standards and doing so comes only at enormous cost. In addition, such an approach does not conform to §112 of the CAA because this section of the CAA speaks to regulating pollutants

reflecting the performance of “sources,” not individual pollutants seen in the abstract. As the D.C. Circuit has found, “EPA may not deviate from section 7412(d)(3)’s requirement that floors reflect what the best performers actually achieve.”¹⁵ Therefore, when setting the MACT floor, the EPA should use a rubric of the best controlled sources, not a HAP-by-HAP approach.

The use of a HAP-by-HAP approach and the resulting stringent standards will cause significant hardship for sugarbeet processing facilities that are major sources because it is extremely difficult to meet all the prescribed standards at the same boiler. The USBSA urges the EPA to reconsider such an approach given its adverse economic impact on seasonal, agricultural industries such as sugarbeet processors.

¹⁴ 76 FR 80614.

¹⁵ *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855, 861 (D.C. Cir. 2001).

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 13

Comment: The USBSA commends the EPA for altering the proposed Boiler MACT Rules in the reconsideration to allow for work practices standards during startup and shutdown,¹⁶ as well as for the control of dioxins and furans. Work practices standards, as allowed under §112(h) of the CAA, maintain strong environmental protection while also including needed flexibility. Work practices can be utilized by the Agency “if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants.”¹⁷

In the case of dioxins and furans, work practices are appropriate because of difficulties in assessing compliance with a numerical limit. In the reconsideration of the Major Source Boiler Rule, the EPA acknowledged that a “large majority of all emissions measurements for all the subcategories are below the level that can be accurately measured using EPA method 23.”¹⁸ Therefore, work practices are appropriate in place of numeric limits for dioxins and furans, and USBSA is supportive of the EPA’s adoption of work practices for these pollutants.

¹⁶ Work practices for startup and shutdown for the Major Source Boiler Rule, 76 FR 80615.

¹⁷ Clean Air Act, § 112(h); 42 U.S.C. § 7412(h).

¹⁸ 76 FR 80606.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 14

Comment: In the reconsideration of the Major Source Boiler Rule, the EPA proposed to reset the compliance date for existing sources such that it would reflect a timeline three years after the date of publication of the eventual final rule.¹⁹ USBSA supports the EPA's approach for adjusting this compliance deadline. CAA §112(i)(3) allows for 3 years for compliance from the effective date of a final rule, and thus a revision to the compliance deadline in the rule is appropriate. There is currently a large amount of uncertainty in the regulated community surrounding the eventual shape of the Boiler Rules, and the EPA's approach seeks to provide affected sources with at least the full 3 years intended by §112(i)(3). Even with the adjustment to reflect the intent of §112(i)(3), however, USBSA members will have difficulty meeting the rule's very tight timeframe for compliance.

¹⁹ 76 FR at 80605.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 6

Comment: In the final rule the EPA declined to correct the errors identified by NACAA and provided no explanation for its decision to persist in those errors. The EPA did, however, revise its calculation procedure, in response to comments from industry, and "pooled" the statistical variation shown by individual units. The public was not provided an opportunity to comment on this change, even though it led to a significant upward revision of a number of proposed limits. On reconsideration of the final rule, the EPA now proposes to retain the procedure used in the final rule and create additional subcategories for PM emissions, which would cause very large increases in PM limits for a number of subcategories of sources.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 7

Comment: The magnitude of these errors is demonstrated by two key facts. First, the EPA's methodology results in a situation where, in a majority of the EPA's proposed subcategories, the calculated new source MACT floor (based on the best performing unit) is higher (less stringent) than that for existing sources (based on the average of the top 12% of units in the subcategory). Common sense and basic arithmetic provide that the rate of emissions of the "best" unit (i.e., the lowest emitter in the group) must be less than the average of that unit and the emission rates of a group whose emissions are higher. At a minimum, the procedure adopted by the EPA must achieve this result.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 8

Comment: The EPA's methodology leads to emission limitations that are currently being met by almost all units subject to the regulation. This is inconsistent with the statutory requirement that the existing source MACT floor be set at the performance that reflects the 94th percentile (average of the top 12%) of the best performing units. A determination of the variability of each of the sources in the top 12% is a worthwhile goal. However, the cost of conducting sufficient testing to do so reliably for each of the sources in the top 12% of each of the large number of subcategories that the EPA proposes is too high for the benefit that would be achieved and would further delay issuance of final rules for several years.

The EPA did not design its test program with the subcategories it now proposes in mind and therefore did not require testing of a sufficient number of sources within each of the subcategories it is proposing. Thus, not only does the EPA not have sufficient data to determine the variability in the performance of each of the individual units in the group, in many instances it does not have sufficient data to reasonably apply statistics to the subgroup as a whole. In the most extreme instance the EPA acknowledges that it does not have any data for mercury for one of its proposed subcategories. The EPA also acknowledges that it does not have meaningful data for two of the regulated metals that should be included in its alternate TSM limit in any of its proposed subcategories.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 9

Comment: The EPA has proposed to retain its "work practice" standards for CO emissions for certain subcategories and for emissions of dioxins and furans for all subcategories on the basis that measuring emissions of these pollutants is impracticable. However, the EPA has not identified the specific work practices that the regulated community must employ. Given the complex nature of dioxins and furans formation, the development, implementation and enforcement of a meaningful dioxins and furans work practice requirement is itself impracticable. The fact that many sources have shown a "below the detection limit" (BDL) test result does not make such testing impracticable nor will such results be a violation. The EPA should address the issue of an unnecessary testing burden for "clean units" head on and not suggest that an unspecified work practice obligation will achieve the emission reductions. Where the EPA believes that emissions from some sources are truly insignificant, it should say so and use the authorities available to it for de minimis emissions.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 12

Comment: Replicate compliance method testing of the best performing units over a period of years and varying operating conditions would likely be the best method for determining which units are among the best performing units and for assessing the variability of the performance of such units. However, the EPA does not have such information and development of this information is infeasible at this time. Moreover, the EPA does not have sufficient data of any sort to make an accurate assessment of the variability of either individual units or subcategories with relatively limited data. As discussed earlier, the problem is readily apparent for new sources, where the EPA's attempts to determine the variability in the performance of the "best" unit based on a single reference test clearly produce an incorrect result. This problem also exists in a large number of existing source subcategories where the EPA has insufficient test data to apply its method. The EPA has acknowledged this problem and attempted to partially respond to it by using its "beyond the floor" MACT authority to raise the new source MACT limit to the level of the existing source MACT floor in 24 subcategories. While directionally correct, we believe it is unlikely that this will be found to be sufficient, since common sense and basic arithmetic demonstrate that the result is still wrong – the performance of the "best" individual unit cannot be the same as the average of the larger group. Moreover, the EPA does not make a similar adjustment to existing source MACT floors that are also based on limited data.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 13

Comment: In most, but not all instances, the EPA selects the test that leads to the least stringent MACT floor determination. Moreover, the basis for several key decisions respecting data management (discussed below) is not well supported. The lack of a consistent, reasoned basis for the EPA's choices creates a risk that the rule will be overturned and in some instances, the resulting floor calculation will be substantially different if other, equally reasonable, factors are used in developing the final determination. We discuss a number of these issues in detail below, but the impact of the EPA's new statistical approach in categories with relatively small numbers of tests is clearly illustrated by the Hg limit The EPA calculated for liquid-fired boilers. While these factors affect all of the EPA's MACT floor calculations, they are most apparent in the calculations for new sources, which, under the EPA's methodology, always involve single units with limited testing.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 18

Comment: Pooled variance is a method for estimating variance given several different samples taken in different circumstances where the mean may vary between samples but the true variance (or precision) is assumed to remain the same. Under the EPA's revised upper prediction limit (UPL) procedure, fuel analyses results are disaggregated from emission test results and further disaggregated by the number of unique sources. As a result, the method is highly sensitive to the number of tests and the number of units that are tested. However, in some subcategories the majority of the test and fuel analysis results were BDL and the detection limits for the emission test results are several times lower than those for the fuel analyses. The EPA's pooled variance process generates high levels of variability, based largely on differences in the degree of precision of the measuring process and the EPA's treatment of BDL data (where the results are known to be less than the BDL). This leads to unreasonable results where the sample size is relatively small. In addition to generating unrealistic results for a broad array of new source subcategories, the EPA's proposed new statistical approach also appears to lead to results for PM and CO that are not consistent with the in-use performance of units in a number of other subcategories with limited data.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 19

Comment: NACAA supports the development of subcategories in MACT rule development, where such subcategories are based on meaningful differences in anticipated fuels and unit designs. The EPA has received a significant number of comments from sources making general assertions and theoretical arguments in support of additional subcategories; accordingly, the Agency has proposed to greatly expand the number of subcategories for several pollutants. NACAA agrees that the EPA's proposal to establish four broad categories based on fuel type – coal, biomass, liquid and gas – is reasonable.

The EPA proposes, however, to subdivide these broad categories into 38 subcategories for existing and new units. In support of the explosion in the number of subcategories, the EPA explains the differences in design between, for example, a coal-fired stoker boiler and a coal-fired pulverized coal (“PC”) boiler. However, large boilers do not come off an assembly line¹² and can last for up to 50 years. Almost every large boiler will have differences in design from every other large boiler. Even smaller boilers will have differences in design from small boilers produced by other manufacturers. As a result, it is insufficient to simply identify design differences. Where the EPA seeks to establish additional subcategories it must explain why those differences matter and point to information in the record that supports its conclusion.

For example, within the Boiler MACT “coal-fired” category, the EPA proposes separate subcategories for stoker, fluidized bed and pulverized coal designs. However, we know of no reason why well-controlled units of these designs should differ significantly in levels of HAP emissions. Similarly, the EPA proposes to establish seven subcategories of wood-fired boilers¹³ – wet stoker, dry stoker, fluidized bed, suspension, dutch oven, fuel cell and hybrid suspension – based on differences in the design of the combustion chamber of these units. However, most boilers and, in particular, the best-performing units, are equipped with PM control devices ranging in effectiveness from cyclones and multi-cyclones to electrostatic precipitators (ESPs) and fabric filters. The performance of the installed PM control device governs the level of PM and TSM emissions to a far greater extent than differences in design of the combustion unit itself. Indeed, in the stoker/sloped/other dry biomass subcategory we note that each of the units in the subcategory is only served by cyclone or multiclone PM control devices, while in other subcategories most of the units are equipped with more effective fabric filter or ESP control devices. We do not believe that the EPA is authorized to create a class of “poorly controlled units” and recommend that no separate subcategories be authorized for PM or TSM.

Under the EPA's current and proposed procedures, creating larger numbers of subcategories usually leads to higher MACT floors in two ways. First, if a small number of the best performers (e.g., fuel cells) can be culled from a larger group into its own subcategory, the MACT floor for

the larger group (the wood-fired boilers) will rise. Second, because the small group will have a small number of tests, the statistical variability of the small group will also increase, leading to MACT floor increases for both the larger group and the smaller group. The EPA's decision to create separate subcategories for PM emissions based on the design of the combustion chamber creates a situation where a unit with highly variable emissions is classified as a top performer, based on the EPA's inappropriate definition of best performing unit. Since that unit has many more test results than others in the group, the EPA's pooled UPL process causes that unit to dominate and results in a limit that is technically invalid. The resulting proposed limits are often substantially higher than the highest emitting unit. See Chart 1.

¹² Even mass-produced automobiles will exhibit design differences within and between models and manufacturers.

¹³ NACAA has raised a concern that differences in the combustion properties of "wet" wood and "dry" wood might warrant development of a separate subcategory.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 25

Comment: The EPA takes the result of its 99th percentile UPL calculation and applies a second variability factor, what it styles as a "fuel variability factor," to determine the overall variability to apply to a "best performing unit." This constitutes double counting and should not be permitted. This double counting occurs because fuel variability is part of, and in many instances the major part of, the test-to-test variability that forms the basis of the 99th percentile UPL calculation. In the case of the liquid-fired Hg limit, the EPA applied a "Fuel Variability Factor" to the 99th percentile UPL to further increase its proposed MACT floor to 2.6 x 10⁻⁵ pounds per MMBtu (lb/MMBtu). The EPA applies this factor, not because the data respecting the Hg fuel variability of the best units showed that the variability was too large, but because it was, in the EPA's view, too small. The EPA acknowledged that, for solid-fuel units, the variability in the amount of a pollutant in the fuel would be reflected in the emissions performance of the units but decided that "[f]or existing and new liquid fuel units, the fuels making up the best performing units demonstrated less variability in their composition and type, and there were a smaller pool of available test runs. The EPA determined that an additional fuel variability factor was necessary in these cases." The EPA's added emission factor makes only a slight (5%) difference in that case, but, if applied to solid fuel-fired units, would increase the standard by an order of magnitude.²²

²² Memorandum, Eastern Research Group to Shrager, B, USEPA, *Revised MACT Floor Analysis (November 2011) for the Industrial, Commercial, and Institutional Boilers and Process Heaters*

National Emission Standards for Hazardous Air Pollutants – Major Source, November, 2011 (“MACT Floor Memo”) Appendix C-4-(a)(i). p. 7.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 26

Comment: The EPA’s proposed limits for Hg emissions from liquid-fired boilers reveal the magnitude of the EPA’s decisions respecting (1) the level of precision to be employed in conducting emission testing and fuel analysis, (2) determining variability of “best” sources with insufficient data, (3) “pooling” variance among different sources where there is no reason to believe that each of those sources has the same amount of variability, and (4) determining the UPL based on emission data where the source is not “in compliance.”

Distillate oil (#2 oil) is commonly understood to contain far less Hg than coal or biomass; while residual oil (#6 oil) contains somewhat less Hg than solid fuels. The EPA’s existing source MACT floor is based on a series of test results from ten sources combusting four different types of oil.²³ Six sources submitted the results of a single compliance test and four sources submitted 41 fuel analyses. The arithmetic average of these results is 3.70×10^{-7} lb/MMBtu and the standard deviation is 3.07×10^{-7} pounds per trillion Btu (lb/TBtu), suggesting that a reasonable MACT floor would be in the range of $1.0 - 1.5 \times 10^{-6}$ lb/MMBtu (a variability factor of 300 to 500%).²⁴ The EPA’s earlier UPL calculation led to the final rule MACT standard of 3.4×10^{-6} lb/MMBtu – a variability factor of over 900%. The EPA’s newly proposed statistical procedure results in a proposed UPL of 2.49×10^{-5} , using the same data. This number is more than 100 times the arithmetic average of the data and more than 100 times the standard deviation of the data set²⁵. As a consequence, of the 71 sources for which the EPA has data, only four sources will have to reduce emissions.

As Table 1 demonstrates, many of the characteristics of the data for the liquid fuel-fired subcategory are similar to those in the solid fuel-fired subcategory and yet the EPA’s proposed MACT floor for liquid fuel-fired boilers is nearly ten times higher than the proposed limit for solid fuel-fired units. Charts 2 and 3 demonstrate the impact of the EPA’s determination of variability on the effectiveness of the rule. The average of the top 12% (lowest test value) in each case is well below 1.0×10^{-6} lb/MMBtu. If the EPA had set the limit for coal-fired units at that level, approximately 25% of the subcategory would meet the limit and the balance would be required to take some steps to reduce emissions. At the proposed level of 3.1×10^{-6} lb/MMBtu, while the gross emitters would have to take steps to comply, approximately two-thirds of the units in the subcategory would not need to reduce emissions. For the oil-fired subcategory, only four of 71 units would have to reduce emissions at all; the proposed limit is five times higher than the emission rate of the fifth highest emitting unit in the subcategory. These results do not appear to be consistent with the EPA’s obligation to set MACT floors at levels that represent the

average of the performance of the top 12%. NACAA attempted to discern why the EPA's procedure generated such different results when the overall distribution of the Hg emissions data for coal and oil-fired units was so similar. The largest single reason for this vast difference appears to be a simple error in importing the data – the EPA incorporates the emissions data for HCl instead of Hg into its UPL calculation.²⁶ With the correct data, the EPA's 99th percentile UPL calculation yields a MACT floor of 4.58 x 10⁻⁷ lb/MMBtu.

²³ MACT Floor Memo, Appendix C-4-(a)(i).

²⁴ A somewhat higher limit may be appropriate as many of the reported results were below detection limits, thereby constraining the variability that would have been demonstrated by more precise analyses. This effect is offset by the fact that the arithmetic average would be lower with more precise analyses, but the degree to which these factors offset is not known.

²⁵ Sources routinely maintain, and the EPA agrees, that fuel variability is so small that sources only have to conduct new fuel analyses when they change suppliers.

²⁶ The error can be found in MACT Floor Memo, Appendix C, Worksheet "C-4(a)(iv)&C-4b(iv)" which is then carried over into Worksheet "C-4(a)(ii)."

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 28

Comment: In 2004, the EPA candidly admitted that it could not develop CO work practice standards for industrial, commercial, institutional (ICI) boilers: Consequently, any uniform requirements or set of work practices that would meaningfully reflect the use of good combustion practices or that could be meaningfully implemented across any subcategory of boilers and process heaters could not be identified.²⁹

The EPA has nonetheless asserted that measuring CO levels is impracticable³⁰ and has set out what it describes as a work-practice standard. What the EPA has adopted and continues to propose is not a set of good combustion practices that could be meaningfully implemented across a subcategory, but a requirement to follow the manufacturer's recommendation for good combustion practices. This assumes that manufacturers can do what the EPA could not – identify a set of good combustion practices applicable to boilers designed and built over the past 50 years. It also assumes that the manufacturers of these units are still in business and will invest the resources needed to do so voluntarily. These assumptions are patently incorrect. There is no obligation on the part of manufacturers to develop any meaningful set of broadly applicable good combustion practices or to determine the set of work practices employed by the best performers in the sector or to determine whether any particular set of work practices approximates the

emission performance of the best performers in a subcategory. Conceivably, an organization like The National Board of Boiler & Pressure Vessel Inspectors might be able to provide a certification/best practices review of any legacy boiler, even if the original manufacturer is no longer in business and individual sources can retain consulting firms to study the operation of individual boilers and recommend a set of best practices for that boiler. We submit that such a program, that imposes obligations on relatively clean boilers as well as high emitters, if conducted in a technically sound manner, may prove to be more costly overall and provide far less environmental benefit than a defined numerical limit that requires significant emission reductions from gross emitters. CO CEMs are available, relatively inexpensive and used by industry for process control. These devices should be required for all combustion units covered by the Major Source Boiler and CISWI Rules. Further, the EPA's assertion that CO monitoring is infeasible is inconsistent with its proposed reliance on CO optimization for dioxins and furans control.

The EPA now proposes to adopt a similar "work practice" standard for dioxin and furan emissions, again asserting that enforcing a numerical limit is impracticable, notwithstanding the hundreds of dioxins and furans emission tests in the rulemaking record. The EPA argues that this is demonstrated by the large number of results that are "non-detect" ("ND"), detection level limited ("DLL") or BDL. First, we note that this problem is of the EPA's creation. The EPA knew, before testing was to be conducted, that many results would be at or below detection limits if it only required sample periods of one hour per run. Indeed, industry sources specifically raised this issue and inquired whether they should extend sample periods to ensure more precise results. The EPA's response was that sources need not do so and that the EPA would "address" the issue in its rulemaking. Testing for dioxins/furans and other pollutants often included detection and quantification limits that are quite high— one source reported a detection limit for Hg that equates to 6.57 lb of Hg emissions per year,³¹ while several sources reported dioxins and furans detection limits several orders of magnitude larger than the levels of regulatory interest. Further, if the standard is set at the most common detection limit, plus an appropriate variability factor, no harm is done, since a subsequent emission test that is BDL would not constitute a violation. Retaining such a limit would not require any change in performance for relatively clean units, but would at least require gross emitters to reduce emissions.

Developing a meaningful work-practice standard for controlling dioxins and furans emissions is far more difficult and resource intensive than merely reducing CO levels. According to the Industrial Combustion Coordinated Rulemaking ("ICCR") study³², control of CO levels is not sufficient; one must also examine the interaction of several factors in a complex combustion environment. The ICCR study concludes that CO monitoring can help confirm that current operating conditions are the same as during a dioxins and furans emissions test, but are not a direct indicator of low dioxins and furans emissions; equivalent dioxin levels can be found at 1 part per million (ppm) as are found at 4,000 ppm CO levels. Other factors were found to be more important and, based on the ICCR workgroup results, meaningful work-practice standards would have to include good combustion practices (including total hydrocarbon and CO concentrations, soot formation and particle entrainment), quench rate, air pollution control device temperature and fuel and waste parameters.³³ Large ICI boilers will have far higher flow rates than medical waste incinerators and so may actually emit a substantial amount of dioxin on an hourly (or certainly annual) basis. As discussed above, such a task would require significant resources.

Indeed, such an effort would likely be more expensive than testing. There is no reason to suspect that manufacturers would voluntarily do so (even if it could be done) and no authority to require that they invest in such an effort.³⁴ Some manufacturers may, as a courtesy to their clients, publish "nominal" good combustion practices. However, there is no way for federal, state or local enforcement authorities to require that such practices have any practical impact. The end result would be additional paperwork demands on sources and permitting authorities and no environmental benefit.

The EPA's real argument appears to be that setting dioxins and furans limits for these sources is "not worth it" because emission levels are "small." If this is the case, the EPA should make this argument clearly and support it with objective facts. It should, at least, compare daily/annual dioxins and furans emissions from medical waste incinerators (and other source categories) with dioxins and furans limits with anticipated dioxins and furans emissions from high emitters to see if those emissions are de minimis. Additionally, the EPA should explore options to reduce testing burdens for the sector. Potential areas for reduced testing costs are pooled testing for units of similar designs and reduced testing frequencies for sources whose emissions are below a certain threshold. Additionally, the EPA could attempt to review operating conditions for better performing units to determine whether there are readily discernible operating conditions (such as maximum boiler temperature, O₂ levels or chlorine content of fuel and designed residence time) where parametric monitoring can be employed in lieu of reference testing. The EPA might also consider a threshold where, if sources demonstrate very low dioxins and furans emission rates, a one-time test, combined with parametric monitoring might suffice.

²⁹ Memorandum, Eddinger, J., USEPA to Docket No. OAR-2002-0058, February, 2004, "Revised MACT Floor Analysis for the Industrial, Commercial, and Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants Based on Public Comments" p.18.

³⁰ NACAA has commented that this representation is incorrect. CO emissions' testing has been conducted for several decades on thousands of different sources.

³¹: This is roughly equivalent to a quantification limit of more than 60 lb/yr. EPA refers to the quantification limit as the level at which emissions can be measured accurately.

³²: See, Gullet, B., USEPA, and Seeker, Randy, EER Corp "Chlorinated Dioxin and Furan Formation, Control and Monitoring" 1997.

³³ Id, slide 79.

³⁴ It is also likely that the manufacturers of a large number of boilers are no longer in business.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 29

Comment: The EPA's proposed rules do not properly address units burning mixtures of fuels.

When a source combusts only one type of fuel at all times, determining which emission limit to apply is straightforward. However, many sources combust different types of fuels at different times and a substantial number of sources combust different mixtures of these fuels at different times. In developing its Model Permit Guidance,³⁵ NACAA attempted to address this issue by examining test results where only one type of fuel is employed to set the recommended range of suggested limits. It was anticipated that state and local permitting authorities would then determine the appropriate procedure for establishing permit limits on a case-by-case basis, either by applying the limit that was the most stringent at all times, by determining the weighted average of relevant limits or by requiring a compliance demonstration based on full utilization of one fuel.

The EPA has taken a different approach. It has adopted a "designed to combust" test and a hierarchical scheme for determining the fuel category of a source.

1. If a source generates more than 10% of its heat from biomass, it is in the biomass category.
2. If it uses less than 10% biomass and more than 10% coal it is in the coal category.
3. If it burns oil, but less than 10% coal and less than 10% biomass it is in the liquid-fired category.
4. If it burns any amount of gas other than natural gas (Gas 1) it is in the Gas 2 category.

The EPA has not explained the rationale for this approach, which places many sources in fuel categories other than those that dominate emissions. This approach also appears to invite "category shopping" and does not seem to address all possible combinations. For example, if a fluidized bed boiler burns 91% coal and 9% biomass, the proposed CO limits are 56 ppm. If that same boiler combusts 90% coal and 10% biomass, the proposed CO limits are 370 ppm. This change is far larger than what one would expect based on such a small difference in the fuel combusted.

In its most recent proposals, the EPA has employed a different approach to the determination of the emission limit to be applied. Whereas, in the 2011 rulemaking any test result where the source was combusting more than 10% coal was used in determining the MACT floor for the coal subcategories, in its most recent calculation of MACT floors the EPA only used data from tests where the source was burning 90% or more coal during the test for existing sources and 100% coal for new sources. We believe that a 90% threshold is appropriate for the definition of this subcategory and appropriate for establishing a limit for "coal-fired" units, but see no reason

to have a higher threshold for new units. Having done so, however, the EPA needs to revise its definition of the subcategory to be consistent with its approach in setting standards. The EPA may not exclude results from testing of clean sources within the subcategory. We recommend that fuel-based subcategory limits and subcategory definitions each be based on a minimum (e.g., 85-95%) usage of the fuel type and that the EPA devise an approach for establishing emission limits for units that burn mixed fuels in lesser amounts.

³⁵ See <http://www.4cleanair.org/Documents/RHAP.pdf>.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 31

Comment: In the proposed calculations of MACT floors for CO for biomass sources the EPA significantly alters the reported data to account for what it styles as "measurement span errors." This appears to be double counting of variability, since any random errors in the measurement system will be reflected in the variability of the resulting data. Moreover, the method relies on the highest reported values of computed errors rather than an average of those errors.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 32

Comment: The EPA has provided no rationale for selecting the maximum emission factor in a group of tests in developing its fuel variability factors. Other examples of an upward bias can be found in the EPA's calculation process³⁷ including: (1) exclusion of test results where the result provided is "zero" or "non-detect," but the detection limit is not provided, and (2) failure to include homogeneous waste material combusted by some biomass boilers in the fuel variability analysis (EPA argued that such data should be excluded because it is not a representative material for other boilers in the biomass subcategory).

The EPA's proposed standards are also highly sensitive to the decisions to exclude clean sources without sufficient basis and to retain highly variable results that are more properly treated as outliers. This is especially true in the EPA's new source MACT floor calculations. By way of example, for one new source subcategory³⁸, the source had been tested twice, for a total of six

runs. Results from five of the six runs were low and consistent; but the results of the sixth run were 100 times greater than any of the other five runs. Since this result is outside the 99% confidence level of the rest of the data set, under the EPA's methodology it should have been excluded. The EPA retained this value and the result is an extremely high new source MACT floor calculation.

³⁷ The rounding process employed by the EPA can increase MACT floor results significantly. The other biases we mention are unlikely to have a large impact on the MACT floor. The use of log-normal statistical procedures may or may not result in lower MACT limits than would otherwise be the case, but is technically justified where non-normal distributions are observed.

³⁸ Biomass Dutch Oven Filterable PM.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 38

Comment: NACAA agrees with the industry suggestion and the EPA proposal that sources be allowed 30 days to make the adjustments in order to allow for multiple adjustments to optimize CO emissions.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 39

Comment: NACAA agrees with the suggestion that, where burner inspection is impossible without destroying the unit, it should not occur. In such instances, however, the source should conduct CO monitoring to determine whether the burner has deteriorated to the point that it should be replaced. We do not believe that burner inspections should be waived where they are merely "difficult" as this term is unenforceable. We suggest that such sources be allowed to determine CO baseline emissions after a tune up and thereafter substitute CO testing in lieu of inspection if they prefer.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 40

Comment: NACAA notes that the EPA's rationale for the establishment of a non-continental liquid subcategory (without emission data for each pollutant) is undercut by the use of continental liquid data for missing pollutant data.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 41

Comment: The EPA has proposed reduced testing frequency for sources whose emission tests are at or below 75% of the emission limit. This suggestion is inconsistent with the EPA's determination that emissions from well-controlled sources routinely vary by more than an order of magnitude.

Response: This provision was removed from the Area Source Boiler Rule in the proposal published December 23, 2011. Thus, this comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 43

Comment: The EPA has solicited comment on an industry proposal to allow units that switch to natural gas as a compliance option to average emissions with similar units that do not switch to natural gas. NACAA does not see how this concept could be authorized under the CAA.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 44

Comment: The EPA has requested comment on a stakeholder proposal that the EPA consider creating a subcategory for units that are installed and used in place of flares that are currently used to combust process gases. The stakeholders also suggested that it would be appropriate to assume that the emissions from process gases diverted from flares to boilers have “zero emissions” for the purposes of classifying the boiler in which they are combusted. Since the process gases must be combusted in either event, they requested that the EPA develop an approach where it uses a concept similar to the emissions averaging provisions, for example, to simply assume that combustion of such process gases in a boiler rather than a flare should not be counted as emissions from the boiler because there is no net increase in emissions. NACAA supports the use of well-controlled closed combustion devices in lieu of open. However, it appears that such devices would be governed by Gas 2 limits. The EPA provides an exemption for combustion devices used as pollution control devices where 50% of the heat value of the device is provided by the exhaust stream that is being controlled. The stakeholder proposal would effectively remove the 50% limit. NACAA believes this is excessive and would substantially eliminate HAP emission reductions in the Gas 2 category.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 46

Comment: The EPA has proposed to delete the requirement that compliance monitors for PM limits conduct annual relative accuracy test audit (RATA) testing to demonstrate the accuracy of the results. NACAA opposes this proposal as it will diminish the protectiveness of the standards and potentially render the standard unenforceable.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 47

Comment: The EPA has solicited comment on the use of continuous Hg monitors rather than fuel testing. NACAA supports this proposal; as discussed herein fuel sampling is insufficiently precise to monitor compliance at appropriate emission levels.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 48

Comment: NACAA is supportive of the EPA efforts to afford maximum flexibility to affected sources in demonstrating compliance, in order to allow lowest cost emission reductions and the best use of limited state and local resources. We agree that properly functioning sulfur dioxide (SO₂) controls will also reduce HCl emissions and so chlorine levels can be correlated with HCl emissions in such units and in such instances. Sources with existing SO₂ monitors should not have to install separate HCl monitors. However, low sulfur concentration in fuels does not guarantee low chlorine levels in those fuels, especially in biomass fuels. NACAA does not support the use of continuous SO₂ monitors as a surrogate for HCl monitoring in units that do not have active SO₂ controls.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 49

Comment: The EPA has proposed MACT floors for CO emissions from three subcategories that are either at, or very close to, the sole test result for the subcategory, effectively providing no allowance for in-use variation in performance. No reason is offered for the EPA's decision and we assume that some correction will be made.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 50

Comment: The EPA has not proposed a TSM alternative “because of the limited emission test data for TSM and the large variability in the TSM data for these subcategories. Using the EPA’s MACT floor methodology, the alternative TSM limits resulted in MACT floor values which do not appear to represent the actual performance of the best performing units.” NACAA agrees with the EPA’s recommendation and the rationale for not proposing such limits. While the EPA has sent follow-on inquiries to some sources for additional data, there is insufficient opportunity to meaningfully review and comment on any data that may be provided at this time.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 8

Comment: Comments on the Major Source Boiler MACT

Limited-use Subcategory

Maine DEP supports the EPA's proposed limited-use subcategory for units that operate less than 10% of the year and the reduced requirements that have been proposed for these units.

Additional Subcategories for Biomass Units

Maine DEP supports the addition of subcategories for biomass units based on the type of unit and the type of biomass combusted. We are concerned, however, that some of the emission standards are not appropriate, particularly for units in Maine that burn multiple fuels at the same time. Did the emissions data that was relied on to develop the proposed emission standards for these subcategories include testing or CEMS data from units that were combusting multiple fuels (e.g., coal, biomass, tire derived fuel, fuel oil, etc.) at the same time? If not, Maine DEP recommends that the EPA establish appropriate limits for these types of multi-fuel fired units.

Replacement of Dioxin/Furan emission standards with Work Practice Standards

Maine DEP supports the replacement of dioxin/furan emission standards with work practice standards. Maine DEP does not believe that dioxin/furan testing would be an effective regulatory approach to reduce dioxin/furan emissions from these units.

Startup/Shutdown Provisions and Definitions

While Maine DEP supports the incorporation of work practice standards in place of emission standards during startup and shutdown periods, Maine DEP disagrees with a 25% of load trigger for normal operating conditions. Startup conditions, particularly with biomass and multi-fuel units, can occur well beyond 25% of load up to more than 50% load. Maine DEP suggests that

the EPA reconsider the 25% of load trigger taking into account how biomass units start up differently than liquid or gas fired units.

10-Day Rolling Average Time Period for Emission Standards

Existing units operating in Maine that currently utilize continuous emission monitoring systems to demonstrate compliance with licensed CO emission limits do so over 30-day rolling average time periods. Maine DEP recommends the EPA apply a 30-day averaging period consistent with averaging periods for nitrogen oxides (NO_x) and SO₂ in other EPA boiler rules.

Extended Deadline for Compliance and Performance of Initial Compliance Testing

Maine DEP supports the EPA's extension of the deadline for achieving compliance with the rule and for performing initial compliance testing to give affected sources an adequate amount of time to make any necessary changes.

110% Steam Load Operating Limit

Maine DEP strongly objects to the inclusion of a steam load limit of 110% of the average steam load attained during the last performance test. The rule requires testing using a worst case mix of fuels. However, a worst case fuel mix will not allow biomass and multi-fuel boilers to operate at high steam loads. The rule would effectively prohibit many boilers from operating at even normal steam loads.

Percent O₂ Correction Factor

The proposed rule uses a 3% O₂ correction factor for CO emission standards. This correction factor is appropriate for liquid fuel and gaseous fired units, but biomass and multi-fuel fired boilers typically operate with flue gas O₂ levels at 6% to 8%. Maine DEP recommends applying an O₂ correction factor of 7% for the CO emission standards associated with all solid fuel units as the EPA had established in the original Major Source Boiler MACT published on September 13, 2004 (69 FR 55228):

"The final rule provides revisions to the CO work practice emission levels. For new sources in the solid fuel subcategory, the work practice standard has been written to be corrected to 7 percent oxygen rather than 3 percent. Units in the gaseous and liquid fuel subcategories still have to correct to 3 percent oxygen."

Units burning only coal may be able to operate at 3% O₂, but any biomass unit will not operate close to 3% O₂ even when firing auxiliary fossil fuel.

Hot Water Heater/Residential Boiler Exemptions

While Maine DEP supports exempting small units from the Major Source Boiler MACT, we recommend combining and simplifying the definitions of hot water heater and residential boiler to further clarify which units will be exempt from the rule. The EPA should apply a heat input

capacity threshold and remove the ambiguous language in the definition. Maine DEP also recommends that the exemption apply to all units under a certain size regardless of the type of fuel that is fired in the unit (i.e., gaseous, liquid, and solid fuel fired under a certain capacity should be exempt).

Health Based Compliance Alternative and TSM Alternative to PM Emission Limit

Maine DEP supports the proposed alternative of a TSM emission standard to the PM emission standard, and we believe this alternative should be provided to both liquid fuels and solid fuels. However, we believe that the EPA's proposed standards for HCl exceed the levels necessary to protect public health and will create an unnecessary compliance burden for affected units. We recommend that the EPA apply the provisions of CAA §112(d)(4) to the extent possible to establish a more appropriate scheme for HCl emission reductions.

5-Year Tune-up Requirement for Units <5 MMBtu/hr

Maine DEP supports the extended time allowed between tune-ups for gas and light liquid-fired units that are <5 MMBtu/hr.

30-Day Allowance for Required CO Adjustments

Maine DEP supports the EPA's proposed 30-day allowance for completing any required CO adjustments to a unit following completion of a tune-up in order to allow sufficient time for multiple adjustments and optimization of CO emissions to occur.

Removal of PM CPMS Requirement for Biomass Units

Maine DEP supports the EPA's removal of the requirement to install a PM continuous parameter monitoring system (CPMS) on biomass fired units.

Monitoring Location for CO and Other CEMS

The proposed rule specifies in 40 CFR 63.7525(a)(1) that if a CO CEMS is used, the CO level shall be monitored at the outlet of the boiler or process heater. CO CEMS operating in Maine do not collect flue gas samples at the outlet of a boiler, but either in the ductwork connecting the last piece of control equipment to the exhaust stack or in the exhaust stack, itself. The location where the flue gas sample is taken should not matter so long as the flue gas sample monitored by the diluent monitoring system (O₂ or CO) is taken from the same place. Maine DEP recommends that the EPA revise any language in the proposed rule regarding the location where the monitoring takes place to allow for any location that meets the performance specification for the particular monitoring system.

Effects of Minimizing CO Emissions on NO_x Emissions

Maine DEP is concerned that efforts to minimize CO emissions to comply with the rule will have the effect of causing increases in NO_x emissions. Maine DEP has focused much attention on

reducing NO_x emissions from these same units, through the use of good combustion practices or add-on control technology to reduce ground level ozone levels. We do not want to see these efforts undermined due to the inverse relationship between CO and NO_x emissions, particularly where no add-on control equipment is utilized to control NO_x emissions from these units.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Paul J. Allen

Commenter Affiliation: Constellation Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2477-A2

Comment Excerpt Number: 1

Comment: Constellation supports the proposed PM numeric emission limits for Fluidized Bed Units designed to burn biomass/bio based solids.

Constellation appreciates that the EPA has decided not to require PM CEMS for biomass boiler units due to their lack of reliability and due to the high potential for variation in recorded values. Performance stack testing for PM is appropriate for demonstration of compliance. Furthermore, we support the EPA's alternate numerical PM limits in case a facility prefers to demonstrate compliance by conducting analyses for TSM in biomass fuels.

Constellation concurs with the CO numeric emission limits for Fluidized Bed Units designed to burn biomass/bio based solids.

A choice of either CO CEMS or stack testing for biomass boiler units to demonstrate compliance provides necessary flexibility for plants to assure compliance in the most cost-effective manner.

Constellation agrees with the EPA's decision not to impose numerical limits on HCl and Hg emissions from Fluidized Bed Units designed to burn biomass/bio based solids.

This decision allows for reasonable, practical and economical compliance for biomass fluidized bed boiler facilities. It strikes an excellent balance for industry that is protective of the environment.

Constellation supports using "Work Practice Standards" for controlling dioxin/furan emissions in lieu of numerical emission limits for Fluidized Bed Units designed to burn biomass/bio-based solids.

Constellation Energy supports the use of work practice standards in lieu of numerical emission limits. Incorporating the specific requirements stipulated in the rule as part of annual boiler outage maintenance / tune-up programs will yield positive environmental benefits.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 1

Comment: Compliance timetables and non-enforcement of violations of the March 2011 rules should be clarified in light of the vacated stay.

The recently vacated stay of the effective date for the initial final Major Source ICI Boiler Rule and CISWI Rule has introduced much uncertainty for businesses that are now faced with compliance deadlines, some already past, which cannot be met. In the revised final rule, the EPA should clarify that compliance timetables will be based on the effective date established by the re-promulgated final rules, rather than the initial March 2011 promulgation date, meaning compliance deadlines will fall in 2015 (assuming a 2012 re-promulgation effective date) instead of 2014. Furthermore, as already indicated in the February 7, 2012 "no action" memo from Gina McCarthy at the EPA, the revised final rule should reaffirm that technical violations of the March 2011 regulations will not be subject to enforcement.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: William O'Sullivan

Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2479-A2

Comment Excerpt Number: 1

Comment: We support separate categories for heavy fuel oil and light fuel oil for boilers and process heaters.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: William O'Sullivan

Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2479-A2

Comment Excerpt Number: 3

Comment: The proposed rules for oil-fired boilers require annual stack tests to determine compliance with the PM, CO, HCl, and Hg emission limits. This testing schedule is appropriate

for heavy oil. We recommend less frequent testing for boilers combusting light fuel oil. Where the sulfur requirement is 15 ppm, light oil can be treated the same as natural gas, which has about the same sulfur content. NJ does not require particulate stack testing for boilers less than 50 MMBtu/hr firing distillate fuel oil. For larger gas and light oil boilers, testing is required every 5 years.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 8

Comment: The 10% rule for classification as biomass is arbitrary.

The EPA has decided to designate any major source that burns at least 10% biomass as a biomass burner (pages 80601 and 80655 of the Major Source Boiler Rule). This means that a facility burning 90% coal and 10% biomass would be held to the less rigorous PM emission standard for biomass than for coal. This is arbitrary. At a minimum, the rule should make basic sense. This does not pass that test. [See submittal for a table comparing EPA's emission tests for coal, wet and dry biomass.]

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 9

Comment: Sub-classifications do not correspond to the population of burners now being permitted. The EPA has designated still more sub-classifications of biomass boiler type than it had before. Our permit database indicates that new boilers now being permitted around the country do not fall under the categories of biomass boiler that the EPA designates. Almost all are either stokers or fluidized bed boilers. We have never seen a permit for a new "dutch oven" or "biomass fuel cell". The EPA's ever-growing number of categories corresponds to a shrinking population of burners in each category, rendering the MACT floors meaningless. The floors set in sub-classifications do not reflect generally achievable rates, as illustrated above.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 10

Comment: Classifying boilers by fuel is arbitrary and does not correspond to real-world permitting.

In our review of biomass facility permits from around the country, we have never seen fuel moisture taken into consideration when setting emission limits at facilities. The EPA states that one reason for subcategorization is its decision to treat PM as a "combustion-based pollutant". Page 80607 states:

Differences in PM particle size, applicability of air- pollution controls to units combusting various fuels, and the lack of demonstration of certain control technologies on certain designs of boilers (e.g., fabric filters are not used on any hybrid suspension grate boilers) suggest that PM is more appropriately classified as a combustion-based pollutant. Therefore, the EPA is now proposing separate PM limits for each "combustion-based" subcategory.

However, this does not correspond to real-world permitting. It should make no difference if a baghouse is demonstrated, an ESP can do about as well as a baghouse. The EPA's proposed PM limit for suspension based boilers is 0.05 lb/MMBtu, much higher than is achievable with an ESP. The limit should be lower.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 8

Comment: The EPA should afford companies the option of using the results of a representative fuel analysis from another similar affected facility to demonstrate that the fuel qualifies as "other gas 1" fuel in accordance with §63.7521, and other applicable subparts. Similar to relying on the fuel provider to demonstrate fuel quality, if a company can demonstrate that the fuel used at a second facility is comparable to that of previously analyzed fuel at a first affected facility, then the company should not have to test the fuel at the second facility. Implementing this practice could reduce testing requirements, while maintaining the regulatory intent for companies to address fuel quality.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Stuart A. Clark
Commenter Affiliation: State of Washington Department of Ecology
Document Control Number: EPA-HQ-OAR-2006-0790-2481-A2
Comment Excerpt Number: 1

Comment: We are pleased that the EPA segregated biomass boilers by design type under the Major Source Boiler Rule. This segregation better reflects the capabilities of the various boiler designs. The clear separation of biomass from coal units has provided particulate emission limits that better reflect the capabilities of units burning coal and biomass.

We support the EPA's decision to not establish numerical emission limits for dioxin/furan emissions from major source biomass boilers, since all emissions reports are at or below the detection limit for the test method. We also support the EPA's recognition that good combustion practices and boiler design are a reasonable way to control for PM, CO, and dioxin.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Stuart A. Clark
Commenter Affiliation: State of Washington Department of Ecology
Document Control Number: EPA-HQ-OAR-2006-0790-2481-A2
Comment Excerpt Number: 4

Comment: We are disappointed that the EPA did not harmonize the CISWI and Major Source Boiler MACT requirements as they apply to units that may operate periodically as part of its final rule.

Washington State appreciates the complexity involved in establishing NESHAP standards over the varied range of source types and sizes addressed by these proposed rules. The EPA's efforts to gather additional data, carefully consider that data and public comments is apparent. These efforts have resulted in a set of rules that reduce the burden on industry, clarify and streamline the rules to facilitate smoother implementation and still maintain public health protection.

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: Janice Nolen
Commenter Affiliation: American Lung Association
Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2
Comment Excerpt Number: 5

Comment: The removal of emissions limits for dioxins and furans is especially troubling. Contrary to the EPA's claim, dioxin emissions can be measured and are being measured. But

even if dioxins could not be accurately measured using the required test measurement, the EPA should set design or equipment requirements to accomplish the task, as is authorized in the same list as work practice standards in CAA §112(h). The EPA should not simply default to "an annual tune up" (EPA, 2011d).

Response: This comment pertains to the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment will be provided there.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 3

Comment: It is stated in §63.7515(g) that performance tests shall be submitted within 90 days.

The State requests clarification on whether that submission should follow the general provision requirements for a "notification of compliance status" or whether it is considered a "report".

Response: The rule section referenced by the commenter (i.e., §63.7515(g)) regards the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment with regard to that rulemaking will be provided there. With regard to the Area Source Boiler rulemaking, §63.11225(a)(4) specifies the timing for submittal of the Notification of Compliance Status (NOCS), the information and certifications required as part of the NOCS, and the NOCS submission requirements.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 4

Comment: Also, §63.7530(h) requires a statement that good combustion practices were used and O₂ concentrations were maintained for each startup and shutdown event, as part of the NOCS. Clarification is needed regarding whether or not this is a one-time report required under the initial NOCS, or whether the report should be submitted on a regularly scheduled basis.

Response: The rule section referenced by the commenter (i.e., §63.7530(h)) regards the Major Source Boiler rulemaking. Provided the commenter has submitted this comment to the Major Source Boiler rulemaking docket (EPA-HQ-OAR-2002-0058), the response to this comment with regard to that rulemaking will be provided there. With regard to the Area Source Boiler rulemaking, §63.11225(b) specifies the timing for submittal of the annual compliance certification report and the information and certifications required as part of the report. As part of the annual compliance certification report for boilers subject to emission limits, the Area Source Boiler Rule requires certification that the facility complies with the requirement to minimize the

boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. The Area Source Boiler Rule does not require certification that good combustion practices were used and O₂ concentrations were maintained for each startup and shutdown event, as part of the NOCS or the annual compliance certification report.

Legal/Applicability Issues: Exemption for temporary boilers

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 33

Comment: The CAA provisions regarding definition of source categories provides the EPA ample legal authority to exempt temporary boilers from coverage under Subpart JJJJJJ. (76 FR 80535.) For the reasons stated below, which the EPA acknowledges, it is a reasonable exercise of discretion. Because temporary boilers do not meet the CAA §112(c)(3) threshold area source listing criteria, the EPA lacks authority to regulate these sources under this rule. The EPA is otherwise justified in exempting temporary boilers because as the EPA notes, they are insignificant sources of emissions and were not included in the EPA's analysis of the source category. Given that these units are not permanent fixed units and are typically not fully integrated with site control systems, it would be impractical to require compliance under the Area Source Boiler Rule. Furthermore, temporary boilers are generally owned and operated by rental companies, not facilities regulated under the CAA, and boilers that are small tend to have lower hourly emissions rates.

Response: The EPA thanks the commenter for their support and additional justification. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 1

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

1. Proposal to exempt temporary boilers

Response: The EPA thanks the commenter for their support. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from

coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 12

Comment: We agree that an exemption is warranted for temporary boilers, as the EPA does not need these units to satisfy the requirement to regulate emissions from at least 90% of the area source emissions of Hg and polycyclic organic matter (POM). Our members periodically use portable/transportable boilers to supply/supplement other site steam supplies. These boilers, which are typically rented and used on a temporary basis, are portable shop-fabricated package design units. They are typically used when an existing onsite boiler is out of service for a period of time for maintenance. Because temporary boilers are used on a limited time basis, portable units are typically not fully integrated with site control systems.

Response: The EPA thanks the commenter for their support. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 2

Comment: ACC supports the EPA's decision to exempt temporary boilers from the requirements of this Area Source Boiler Rule. The EPA properly exempted these units from the requirements of the final Major Source Boiler Rule.⁴ The EPA defines a temporary boiler as follows:

...any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location for more than 12 consecutive months. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition. (76 Fed. Reg. 80548)

ACC member companies periodically use portable/transportable boilers to supply and/or supplement existing site steam supplies. These boilers, which are typically rented and used on a temporary basis, are portable shop-fabricated package design units. They are typically used when an existing onsite boiler is out of service for a period of time for maintenance, or if needed during emergencies. Because temporary boilers are used on a limited time basis, portable units are typically not fully integrated with site control systems.

Most portable/transportable boilers are owned by a rental company, not the stationary source. Rented boilers may or may not be operated by the facility owner/operator. These temporary boilers will typically only fire gas or liquid fossil fuels (natural gas or distillate oil) and may have hourly emission rates lower than that for the boiler(s) they are temporarily replacing, based on either the boiler size or fuel fired. In addition, these units often do not have exhaust stacks that meet EPA Method 1 requirements for application of test methods.

From a technical standpoint, since portable/transportable boilers are used temporarily, ACC believes that it is not necessary or practical to apply the area source rule requirements for permanent fixed boilers to these boilers. In addition, the EPA did not consider HAP emissions data from these units in establishing the area source standards and therefore should not make the requirements applicable to these units. ACC therefore supports the EPA's proposal to exclude temporary boilers from the industrial boiler area source category.

⁴ See Section 63.7491(j), 76 FR 15665, March 21, 2011.

Response: The EPA thanks the commenter for their support and additional justification. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 1

Comment: FGCO supports the EPA's proposed exemption for temporary boilers. We agree with the EPA that the emissions from these small units are insignificant and do not warrant regulation. There is no need to further burden the permitting process by including these small sources.

Response: The EPA thanks the commenter for their support. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 3

Comment: PA DEP agrees that an exemption should be provided for "temporary boilers" and concurs with the EPA's proposed definition of the term.

Response: The EPA thanks the commenter for their support. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 1

Comment: Merck supports the EPA's proposal to exempt temporary boilers from 40 CFR 63 Subpart JJJJJ.

These boilers are generally owned by a third party and therefore the facility owner has limited ability to impact the design of the boiler; only the on-site operation of the boiler is under the control of the facility owner. In addition, these boilers are generally on-site for short periods of time and therefore any work practice requirements would be difficult, if not impossible to manage.

In addition to the reasons put forth by the EPA, subjecting these boilers to Subpart JJJJJ could be a potential impediment to their use by facilities. This impediment could in turn lead to postponement of maintenance work that would otherwise result in improved operation of the facility's permanent boilers and therefore lower environmental impact. Therefore, we support the EPA's proposal to exempt temporary boilers from Subpart JJJJJ.

Response: The EPA thanks the commenter for their support and additional justification. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Kate Williams
Commenter Affiliation: Alaska Oil and Gas Association (AOGA)
Document Control Number: EPA-HQ-OAR-2006-0790-2466-A1
Comment Excerpt Number: 1

Comment: AOGA supports the exemption for temporary boilers added under §63.11195(h) for the reasons stated in Section IV. B. of the proposed rule preamble: temporary boilers are small (i.e. less than 10 MMBtu/hr heat input); units are generally owned and operated by contractors, rather than the facility, and as a result are not included in the facility's operating permits; and compliance with the work practice requirements would be impracticable because the units are typically located on site for less than one year. Importantly, temporary boilers have historically been considered insignificant sources and are not included in the EPA's analysis of the source category.

Response: The EPA thanks the commenter for their support and additional justification. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Pamela Lacey
Commenter Affiliation: American Gas Association (AGA)
Document Control Number: EPA-HQ-OAR-2006-0790-2468-A2
Comment Excerpt Number: 3

Comment: On reconsideration, the EPA is proposing to add "temporary boilers" to the list of excluded boilers in §63.11195. We have no objection to this addition.

Response: The EPA thanks the commenter for their support.

Commenter Name: Russell A. Wozniak
Commenter Affiliation: Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1
Comment Excerpt Number: 1

Comment: Dow supports the EPA's decision to add an exemption for temporary boilers in the Area Source Boiler Rule as most portable/transportable boilers are owned by a rental company, not the stationary source and certain work practice requirements likely would be complicated to execute.

Response: The EPA thanks the commenter for their support and additional justification. However, we wish to clarify that temporary boilers are not boilers that are part of the source category and exempted from coverage. Rather, the exclusion promulgated today simply clarifies that the scope of the category did not include temporary boilers and therefore such boilers should never have been considered as subject to this rule.

Commenter Name: Barry Christensen
Commenter Affiliation: Occidental Chemical Corporation (OCC)
Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1
Comment Excerpt Number: 11

Comment: OCC supports the proposed exemption for temporary boilers.

If one of the primary boilers at a site becomes non-operational, it is important to be able to operate the facility while replacement equipment is ordered and permitted. Given the time required to secure some air permits, an allowance should be added to extend the 12-month period by additional 6 month increments, as needed.

Response: The EPA agrees with the commenter that there may be circumstances that would necessitate a period longer than 12 months for a temporary boiler. The revised definition of temporary boiler includes the flexibility of an extension of the 12-month period provided the regulatory agency approves the extension.

Commenter Name: Arthur Marin
Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)
Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1
Comment Excerpt Number: 11

Comment: NESCAUM agrees that temporary boilers should be exempted from both the Major and Area Source Boiler Rules. Subjecting these units to strict requirements beyond management practices is impractical. NESCAUM supports the establishment of a 12-month threshold, above which a unit may no longer be considered temporary. Many commercial buildings that use temporary boilers during construction, however, require more than 12 months to complete construction, and as such, NESCAUM recommends that the EPA amend the definition of temporary boilers to allow owners or operators of a facility to petition for an extension. NESCAUM believes this process is needed to allow proper flexibility within the rule so as not to require stringent controls on units that are temporary. NESCAUM specifically recommends that the second condition in the definition of a temporary boiler be changed as follows:

(2) The boiler or a replacement remains at a location for more than 12 consecutive months, unless the regulating agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

Response: See the response to EPA-HQ-OAR-2006-0790-2435-A1, excerpt 11.

Commenter Name: Renee Lesjak Bashel
Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 4

Comment: We believe the definition of a *temporary boiler* should be changed. The current definition arbitrarily prevents boilers at many construction sites that would otherwise qualify for the exemption from utilizing it. These temporary boilers would still be considered insignificant sources and would still emit the same amount annually if the definition allowed 24 months instead of 12.

Response: See the response to EPA-HQ-OAR-2006-0790-2435-A1, excerpt 11.

Commenter Name: Kate Williams

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A1

Comment Excerpt Number: 2

Comment: The final Major Source Rule for boilers excludes temporary boilers from the source category so including the exemption in the area source rule helps ensure consistent regulation.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 6

Comment: Section 63.7491(j) of the Major Source Boiler Rule excludes "temporary boilers" as defined in §63.7575. AOGA believes this exemption is appropriate for both the Major Source and Area Source Boiler Rules.

Response: The EPA thanks the commenter for their support.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 7

Comment: The EPA proposes to create a category of "temporary boilers" exempt from standards. Regardless of whether the EPA could lawfully set separate standards for temporary boilers, the Agency lacks authority to exempt them from emission standards. Further, the temporary boilers subcategory is unlawful. Although the EPA may distinguish between different classes, types, and sizes of source in setting standards under CAA §112(d), 42 U.S.C. §7412(d)(1), the Agency may not distinguish on other bases. Further, when the Agency does set separate standards for different sources in a category, the Agency must offer a reasoned justification for the subcategories it has chosen. *See, e.g., Northeast Maryland Waste Disposal*

Authority v. EPA, 358 F.3d 936, 947-950 (D.C. Cir. 2004) (remanding a decision to subcategorize in setting MACT standards because the Agency had not properly justified its subcategorization scheme). “Temporary boilers” differ from other boilers only in that they are moved from location to location. The EPA has not explained why this is a distinction that justifies differential treatment, let alone an exemption. Even if applying controls to these boilers would be somewhat more burdensome or costly—which the EPA has not shown—a small additional burden on source owners and operators cannot justify an exemption from standards. The EPA says only that mobile sources have “been considered insignificant” in the past and have not been analyzed. Neither consideration is relevant to whether the EPA has an obligation—in this rule—to set standards for these boilers. In addition, this exemption would violate CAA §112(c)(6), because the EPA has not adhered to the procedures of CAA §112(c)(9) in removing these boilers from the list.

Response: The EPA has not created a category or subcategory of “temporary boilers” and then exempted them from standards. Similar to residential boilers, we did not intend to regulate temporary boilers under the area source standards because they are not part of either the area source industrial boiler source category or the area source commercial/institutional boiler source category. By their nature of being temporary, these boilers operate in place of another non-temporary boiler while that boiler is being constructed, replaced or repaired, in which case we counted the non-temporary boiler as one being regulated. Accordingly, we amended 40 CFR 63.11195 by adding temporary boilers to the list of boilers not subject to Subpart JJJJJ.

While the term “exemption” is used in the section heading of the proposal (76 FR at 80535), neither the preamble discussion which follows, nor the proposed regulatory text, says that boilers that are otherwise subject to the rule (or in the source category) are exempt by this provision. In the proposed rule, temporary boilers are consistently described as being excluded from the category and as not being part of the EPA’s analysis of the source category when we contemplated regulating area source boilers. We reviewed the CAA sections 112(c)(6) and 112(k) inventories and note that neither inventory included temporary boilers as part of the source category.¹ As such, temporary boilers were never part of the listed area source category. The delisting provisions of section 112(c)(9) therefore do not apply to this situation.

The EPA is simply clarifying the scope of the listed source category to make it clearer that those types of boilers the agency had never intended to include in the category in fact have not been included. Given the number of affected boilers in the source category and variety of sources using combustion devices to generate steam or heat, such scope clarifications that originally non-included types of boilers remain non-included are reasonable and do not constitute delistings, as these boilers were never part of the listed source category.

Both the subcategory case law and the delisting case law cited by the commenter are inapposite for temporary boilers that were not part of the listed source category. Specifically, as to subcategorization, the commenter asserts that EPA’s discretion to establish categories or subcategories is limited. The commenter misses the mark, however, because our

¹ See Memorandum from Nathan E. Topham to the Docket [EPA-HQ-OAR-2006-0790], “*Temporary Boilers in the CAA 112(c)(6) Listing Notice and Emissions Inventory and 112(c)(3) Inventory.*”

subcategorization decisions focus on sources that are part of the listed source category, and temporary boilers are not a part of that category. Similarly, the Agency is not delisting a source category as the comments suggest. Rather, temporary boilers are not part of the listed source category and for that reason, the Agency has not set standards for those boilers, but rather has clarified that the units are not subject to this rule.

Finally, the Agency has determined that it has met the requirements of section 112(c)(6) and 112(c)(3). (See memoranda “Emission Standards for Meeting the Ninety Percent Requirement Under Section 112(c)(6) of the Clean Air Act,” EPA-HQ-OAR-2006-0790-2312, and “Emission Standards for Meeting the 90 Percent Requirement Under Section 112(c)(3) and Section 112(k)(3)(B) of the Clean Air Act,” EPA-HQ-OAR-2006-0790-2315.) The commenter has not presented any information to suggest that adding temporary boilers to the area source boilers source category is needed to meet the requirements of CAA section 112(c)(6).

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 4

Comment: The EPA proposes to exempt temporary boilers, as was done in the final rule for major sources. We agree that temporary boilers should be exempted from both rules if they are to be exempted from any. However, we believe that the definition of temporary boilers should include emergency use boilers or safety related boilers. Such consideration has been provided for other MACT source categories as Internal Combustion (IC) engines.

Response: In the definition of “temporary boiler” in this final rule, the EPA is not including emergency use boilers or safety related boilers. We do not believe that emergency use boilers or safety related boilers in many instances would meet our intent with regard to excluding temporary boilers from Subpart JJJJJ (e.g., must be a gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another; must not remain at a location and perform the same or similar function for more than 12 consecutive months). The final rule, however, prescribes work/management practice standards for new small (less than 10 MMBtu/hr heat input) boilers and most existing boilers. Specifically, new small coal-fired, oil-fired, and biomass-fired boilers are subject to only tune-up requirements. Existing small coal-fired boilers and all existing oil-fired and biomass-fired boilers also are subject to only tune-up requirements. We believe that these tune-up requirements would apply to most emergency use boilers or safety related boilers.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 5

Comment: The EPA should clarify whether "temporary" boilers means use for start-up as well as back-up purposes.

Response: The definition of temporary boiler does not specify the intended or actual purpose of the temporary use. The exclusion for temporary boilers is included in this standard because they are typically small (less than 10 MMBtu/hr heat input), and have been historically classified as insignificant sources. Because they are typically located on site for less than a year, compliance with the work practice requirements would not be feasible.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 1

Comment: Paragraph (2) of the “temporary boiler” definition excludes a boiler or a replacement that "remains at a location for more than 12 consecutive months." And further specifies that "Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period."

The second sentence language creates a problem because there is no time period associated with the replacement. It is not unusual for a temporary boiler to be used for short periods during turnarounds or other maintenance activities that recur several years apart. Under the proposal, these boilers would not be considered temporary, because each boiler replaces the previous one and performs the same function, even though there is a multi-year gap between the occurrences. We believe that replacements that occur after a gap of at least one year should not be considered consecutive for the purposes of this definition and the language of paragraph (2) should be revised to reflect that situation.

Response: We agree with the commenter and are amending numbered paragraph (2) in the definition of “temporary boiler” such that it specifies that “Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.”

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 7

Comment: Compounding the problem, small boilers (typically temporary/portable units) are not currently included in stationary source Title V operating permits because such units have historically been classified as insignificant under Part 70/71. However, in the Area Source Boiler Rule, the EPA has not included a de minimis threshold for the applicability of work practice standards (or an exemption for temporary/portable units), and these small boilers, regardless of size, must now be included in operating permits because Title V rules do not allow emission units that are subject to a federal requirement but that are otherwise insignificant to be omitted from permits.

The work practice standards and monitoring, recordkeeping and reporting (MRR) timelines required by Subpart JJJJJ simply do not contemplate the possibility that the affected source is temporary, raising several issues that we do not believe the EPA adequately considered during the development of the rule. How will stationary source owner/operators certify compliance with Subpart JJJJJ requirements that apply on a unit-by-unit basis, to each individual temporary/portable boiler that is brought to, operated at, and subsequently removed from the stationary source? How will stationary source owners conduct biannual work practice requirements on portable/temporary boilers that may have been located at the source when the operating permit was issued (or the permit application filed), are therefore listed in the permit, but were subsequently removed, or replaced? How will the required records be maintained on each individual subpart JJJJJ affected source when it is permitted at multiple stationary sources?

Based upon these complexities, AOGA does not believe that Title V operating permits are an appropriate way to address Subpart JJJJJ compliance for small temporary/portable boilers that are not permanently located at a stationary source. We envision a very high risk of noncompliance and a burdensome paperwork exercise that provides no environmental benefit.

An exemption for such units would largely eliminate these concerns.

Response: In our final action on the reconsideration petitions, we adopt the temporary boiler exclusion called for by the commenter and maintain the exemption from Title V permitting as promulgated in the final rule.

Legal/Applicability Rationale: Standards for biomass-fired boilers

Commenter Name: Philip E. Lewis

Commenter Affiliation: Grayling Generating Station

Document Control Number: EPA-HQ-OAR-2006-0790-2484-A1

Comment Excerpt Number: 1

Comment: We strongly support the EPA's approach in using Generally Available Control Technology (GACT) for PM and CO from biomass-fired boilers in the National Emission Standards for Hazardous Air Pollutants for Area Sources: Commercial, Industrial and Institutional Boilers. This is consistent with our comments submitted previously on this rule. The rule as written will assure reduced emissions of HAP from biomass-fired boilers in a cost-efficient and enforceable manner by the use of work practice standards which ensure good combustion conditions.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Gary Melow, Director

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-2429-A1

Comment Excerpt Number: 1

Comment: We strongly support the EPA's approach in using GACT for PM and CO from biomass-fired boilers in the National Emission Standards for Hazardous Air Pollutants for Area Sources: Commercial, Industrial and Institutional Boilers. This is consistent with our comments submitted previously on this rule. The rule as written will assure reduced emissions of HAP from biomass fired boilers in a cost-efficient and enforceable manner by the use of work practice standards which ensure good combustion conditions.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 34

Comment: ACC supports the EPA's rationale to regulate biomass and oil-fired boilers based on GACT. CAA §112(d)(5) expressly states that the EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)]." We believe that this is an appropriate use of its authority.

The CAA provides only two ways for the EPA to list an area source category for purposes of regulating HAP emissions from that category. First, CAA §112(c)(3), entitled "Area Sources", states that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section." Second, CAA §112(c)(6) requires the EPA to "list categories and subcategories of sources", which arguably would include area sources, as needed to meet the specified not less than 90% aggregate control requirement for the seven listed HAPs.

Since all area source categories, including those listed under §112(c)(6), are listed "pursuant to §112(c)," the EPA has authority under the express terms of §112(d)(5) to use GACT in regulating area source categories listed and regulated under §112(c)(6).

Section 112(d)(5) authorizes the EPA to use the GACT method "in lieu of" the §112(d)(2) MACT procedure. The EPA itself has observed that the phrase "in lieu of" is commonly understood to mean "in place of" and, thus, has correctly concluded that, "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA §112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)." (73 FR 1920-1921.) In short, the statute plainly states that the requirement to set a standard under §112(d)(2) can be satisfied by using the alternative GACT procedure specified in §112(d)(5). As a result, setting GACT under §112(d)(5) meets the §112(c)(6) requirement to regulate under §112(d)(2).

In addition to the above arguments, the EPA has acknowledged that only coal-fired area source boilers are needed to account for the 90% requirement set forth in §112(c)(6) for POM and Hg (76 FR 80537), therefore, it is not necessary to regulate biomass or oil-fired boilers based on MACT.

Response: The EPA thanks the commenter for their support of our decision to regulate biomass- and oil-fired boilers under GACT. As noted in the 2011 final rule, we disagree with the analysis and the conclusion on the ability of the Agency to regulate that portion of the category needed to meet our CAA §112(c)(6) obligations (i.e., coal-fired boilers) under GACT. The commenter has repeated comments to which we replied in the final rule.

Commenter Name: Allison Watkins, Baker Botts
Commenter Affiliation: Class of '85 Regulatory Response Group
Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1
Comment Excerpt Number: 4

Comment: The Class of '85 agrees that the EPA should base the final standards for biomass- and oil-fired boilers on GACT standards. The requirements of CAA §112(c)(6) will be met through other applicable regulatory programs, making it appropriate for the EPA to regulate biomass- and oil-fired boilers under GACT standards established pursuant to CAA §112(c)(3).

Response: The EPA thanks the commenter for their support.

Commenter Name: Joseph Seymour
Commenter Affiliation: Biomass Thermal Energy Council (BTEC)
Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2
Comment Excerpt Number: 2

Comment: States may proactively implement competing—and varied—emissions limits that could impede national boiler sales. Many boiler manufacturers and end users have already invested in highly efficient combustion and advanced emissions control technologies for biomass boilers, developing cutting-edge products and advancing the industry. National PM and CO controls will serve to drive the collective industry to meet achievable standards and continue progress towards ever cleaner equipment. Ultimately, these standards will accelerate installation of best performing equipment, reducing emissions and further establish biomass thermal as an affordable, reliable, and renewable energy pathway.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Paul Noe
Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.
Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1
Comment Excerpt Number: 1

Comment: We support the EPA's rationale to regulate biomass and oil-fired boilers based on GACT. The CAA §112(d)(5) authorizes the EPA, in most cases, to set standards for area sources using GACT, "generally available control technologies or management practices" (i.e., GACT) rather than "MACT." The use of GACT is authorized in this case; therefore, §112(d)(5) authorizes the EPA to establish "standards or requirements which provide for the use of generally available control technologies or management practices." When setting a GACT based

standard, the EPA is expressly authorized to establish work practices instead of emissions limitations. In addition, the EPA has acknowledged that only coal-fired area source boilers are needed to account for the 90% requirement set forth in §112(c)(6) for POM and Hg (76 FR 80537), therefore, it is not reasonable or necessary to regulate biomass- or oil-fired boilers based on MACT. Our comments on the proposed rule (see for example AF&PA's comments at EPA-HQ-OAR-2006-0790-1939 through EPA-HQ-OAR-2006-0790-1944) provided detailed justification for setting area source standards for biomass- and oil-fired boilers based on GACT.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 10

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provision:

Maintain the GACT standards (including the management practice of tune-ups) for biomass- and oil-fired boilers

Response: The EPA thanks the commenter for their support and comment.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 4

Comment: Integrys agrees that the EPA should base the final standards for biomass- and oil-fired boilers on GACT standards. The requirements of CAA §112(c)(6) will be met through other applicable regulatory programs, making it appropriate for the EPA to regulate biomass- and oil-fired boilers under GACT standards established pursuant to §112(c)(3).

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 16

Comment: In the 2010 proposed Area Source Boiler Rule, the EPA based the standards for biomass and oil-fired sources on MACT. (75 FR 31,896 (2010 Proposed Rule).) The EPA revised the standards for these sources in the final Area Source Boiler Rule and instead imposed GACT because "MACT-based regulations" were "unnecessary to meet the requirements of CAA §112(c)(6). (76 FR 15574, 15566 (2011 Final Rule).) In the 2012 reconsidered Area Source

Boiler Rule, the EPA made no changes to these standards, but is soliciting comments on whether the final standards for biomass and oil-fired boilers should be based on GACT instead of MACT standards. (76 FR 80537 (2012 Reconsidered Area Source Rule).)

As CIBO stated in its comments on the proposed rule, §112(d)(5) of the CAA provides the EPA with the authority to set standards for area sources using GACT rather than MACT.

Response: The EPA thanks the commenter for their support. Our response to the commenter's analysis of when we may use CAA §112(c)(5) is contained in the comment responses for the March 2011 final rule.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 19

Comment: CIBO supports the EPA's decision to use work practice standards for biomass- and oil-fired boilers.

Numerical emission limits for PM and Hg are not necessary for existing biomass- and oil-fired area sources. Their emissions are not significant and the emission controls required for biomass- and oil-fired boilers would not be cost effective. While CIBO agrees with the EPA's approach with regard to these units, the EPA's decision to require numerical emission limits for PM for new boilers with heat input capacity greater than 10 MMBtu/hr is arbitrary. CIBO proposes that the EPA extend the work practices standard to units with a designed heat input capacity of less than 30 MMBtu/hr.

Many units with heat input capacities between 10 and 30 MMBtu/hr experience similar issues and costs that would have a "significant adverse economic impact" on facilities. The cost analysis prepared by the EPA was limited to "small units" and the EPA did not, but should have, performed a similar cost analysis for subsets of units with heat input capacities greater than 10 MMBtu/hr to determine if further application of work practice standards is justified. The EPA has imposed work practice standards for units less than 30 MMBtu/hr under the NSPS, 40 CFR Part 60, Subpart Dc. The same rationale applies equally to this subset of boilers for purposes of MACT standards, because many units less than 30 MMBtu/hr do not have the controls in place to test for emissions. Installing those controls would be prohibitively expensive and would not be justified by the benefits.

Response: The EPA thanks the commenter for their support and additional justification with regard to work practice standards for certain biomass- and oil-fired boilers. With regard to the EPA's decision to require numerical emission limits for PM for new boilers with heat input capacity greater than 10 MMBtu/hr, we point out that we previously determined that the control technologies currently used by facilities in the source category to reduce non-Hg metallic HAP and PM (multiclones, fabric filters, and ESPs) are generally available and cost effective for new area source boilers with heat input capacity greater than 10 MMBtu/hr. The standard reference method for measuring emissions of PM (as a surrogate for urban non-Hg metals) is not

applicable for sampling small diameter (less than 12 inches) stacks. Boilers that have a heat input capacity below 10 MMBtu/hr generally have stacks with diameters less than 12 inches. We disagree with the commenter that the same can be said of boilers that have heat input capacities between 10 and 30 MMBtu/hr. In addition, new facilities, as opposed to existing facilities, have the added flexibility of including compliance costs into their design and planning. This would include the design and cost to provide a performance testing facility that has sampling ports adequate for the test methods and constructing the exhaust stack such that emission rates can be accurately determined.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 12

Comment: The EPA proposes emission limits for biomass-fired boilers with heat input capacity between 10 and 30 MMBtu/hr and over 30 MMBtu/hr (76 FR 80548, Table 1 to Subpart JJJJJ of Part 63—Emission Limits). The NESCAUM states are concerned that failing to establish numeric emission limits for biomass-fired boilers between 1.6 MMBtu/hr and 10 MMBtu/hr will result in greater HAP emissions from sources in this category in the northeast region, and this may have detrimental impacts on sensitive population groups. According to a Biomass Energy Resource Center (BERC) database on small wood-fired boilers, most (95 of 150, or 63%) of the small wood boilers in the nation are installed at schools or hospitals.¹ The US Forest Service’s “Fuels for Schools” program has identified schools and hospitals as prime candidates to switch to biomass fuels. According to an analysis by BERC, in Wisconsin alone there are 200 to 300 schools using natural gas boilers that could economically and feasibly switch to biomass boilers. Also according to BERC (2008), 30% of school children in Vermont attend schools heated with wood-fired boilers, yet only a handful of those boilers are required to meet an emission limit or undergo a single performance test. With the potential large increase in the use of small biomass boilers, NESCAUM anticipates significant emissions from these sources.

Response: The EPA’s rationale for establishing work practice standards pursuant to CAA §112(h) for smaller coal-fired boilers and our response to comments on the use of §112(h) were provided at 75 FR 31906-07, June 4, 2010, and 76 FR 15568, March 21, 2011, respectively. The same rationale applies to our establishing management practice standards, as allowed by CAA §112(d)(5), for smaller oil-fired and biomass-fired boilers. In summary, the standard reference methods for measuring emissions of Hg, CO (as a surrogate for POM), and PM (as a surrogate for urban non-Hg metals) are not applicable for sampling small diameter (less than 12 inches) stacks. Boilers that have a heat input capacity below 10 MMBtu/hr generally have stacks with diameters less than 12 inches. We determined that the annual costs for testing and monitoring alone, assuming the facilities could do so, would have a significant adverse economic impact on these facilities. For small institutional (schools) and commercial (farms) facilities the costs would be prohibitive.

Economic impact is a relevant factor in determining GACT. The comment does not suggest a control technology that is generally available and feasible technologically and economically for the schools and hospitals mentioned in particular.

We determined a boiler tune-up to be an appropriate work/management practice for these small boilers. Mercury as well as non-Hg metallic HAP are fuel dependent HAP. That is, the amount of Hg and non-Hg metallic HAP emitted from the boiler depends on the amount of Hg and non-Hg HAP contained in the fuel. Thus, fuel usage can be reduced by improving the combustion efficiency of the boiler. On the other hand, POM is formed from incomplete combustion of the fuel. Thus, good combustion practices are expected to minimize organic HAP emissions.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 13

Comment: NESCAUM requests that the EPA create a new subcategory and establish emission limits for smaller biomass units. Small institutions like schools and hospitals are increasingly installing new, smaller biomass that are cleaner (e.g., those with multistage combustion) that do not need additional control technologies to avoid major source classification. A study by the New York State Energy Research and Development Authority (NYSERDA) found that high efficiency units can achieve an emissions performance level less than 0.1 lb/MMBtu without the use of any control device. Another study looking at biomass boilers installed under the Fuels for Schools program found that the range of performance varied significantly from 0.15 lb/MMBtu to 0.9 lb/MMBtu for a variety of biomass boilers. The EPA has not performed an adequate analysis to determine if a baseline performance standard should be required for all biomass boilers.

Response: We disagree with the commenter's assertion that the EPA has not performed an adequate analysis to determine if a performance standard should be required for all biomass-fired boilers. This is a GACT standard for biomass-fired boilers affecting a wide variety of sources. Given the sensitivity of cost to small sources and the likelihood that raising costs will discourage sources from adopting lower HAP emitting boilers, we have determined that it would be inappropriate to mandate these state of the art type boilers as GACT. We maintain that the determination of a tune-up as GACT for biomass-fired boilers with a heat input capacity less than 10 MMBtu/hr is appropriate.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 14

Comment: The EPA has announced its intent to develop an emission standard for residential biomass boilers. If an emission standard is feasible for residential biomass boilers, it highlights not only the feasibility of emissions standards for small industrial, commercial, and institutional boilers, but the necessity of regulation so as not to create a void for these emission sources.

Response: As an initial matter, the announced intent to develop a standard for future installations of biomass-combusting equipment says nothing about the feasibility and availability

of the technology for existing boiler installations. However, with respect to new installations, the EPA points out that a new emission standard for residential biomass boilers, as referred to by the commenter, has not yet been proposed so its specific requirements are not known. Currently, at a federal level, air emissions from wood stoves and certain pellet stoves are regulated by the EPA through NSPS aimed at manufacturers and retailers of these devices. The NSPS specify a maximum amount of air pollution that the units can generate. Testing must be performed by the manufacturers at laboratories using approved test methods for each model of stove sold in order to be certified for sale. Specifically, the EPA's certification process requires manufacturers to verify that each of their wood stove model lines meet a specific particulate emission limit by undergoing emission testing at an [EPA accredited laboratory](#). The EPA is in the process of developing revisions to the residential wood heater NSPS. In addition to tightening the emission limits on currently regulated wood heaters to reflect improvements in best demonstrated technology, we anticipate development of new regulations for other residential devices that use solid biomass as fuel (e.g., outdoor and indoor [hydronic heaters](#) (wood "boilers") and forced air furnaces). Hydronic heaters (also called outdoor wood heaters or outdoor wood boilers) are typically located outside the buildings they heat in small sheds with short smokestacks. Typically, they burn wood to heat liquid (water or water-antifreeze) that is piped to provide heat and hot water to occupied buildings such as homes, barns and greenhouses. Hydronic heaters may also be located indoors and may use other biomass as fuel (such as corn or wood pellets).

The CAA §112 standards for area source industrial/commercial/institutional boilers being amended under this regulatory action apply directly to owners and operators of boilers versus applying to manufacturers and retailers of the boilers. The EPA's rationale for establishing management practice standards for biomass-fired boilers with heat input capacity less than 10 MMBtu/hr is presented in the response to EPA-HQ-OAR-2006-0790-2454-A1, excerpt 12, above. We maintain that the determination of a tune-up as GACT for biomass-fired boilers with a heat input capacity less than 10 MMBtu/hr is appropriate.

Commenter Name: Joseph Seymour

Commenter Affiliation: Biomass Thermal Energy Council (BTEC)

Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2

Comment Excerpt Number: 1

Comment: In order to further advance the biomass thermal industry toward cleaner and increasingly efficient technologies, BTEC recommends that the EPA consider applying PM limits on small area source boilers (<10 MMBtu/hr) and CO limits towards all area source biomass combustion equipment rather than a broad application of work practice standards. Without established reasonable clean standards, there will be no incentive for owners to select higher efficiency and cleaner boiler technologies that protect our environment and health.

Response: The EPA's rationale for establishing management practice standards for biomass-fired boilers with heat input capacity less than 10 MMBtu/hr is presented in the response to EPA-HQ-OAR-2006-0790-2454-A1, excerpt 12, above. We maintain that the determination of a tune-up as GACT for biomass-fired boilers with a heat input capacity less than 10 MMBtu/hr is appropriate. We do not believe that the imposition of work practice standards rather than numerical emission limits on these small biomass-fired boilers will deter owners and operators

from purchasing and operating more efficient and cleaner boiler technologies that are available. In this rulemaking, our action must determine what is generally available for existing sources. We have determined that the cost of testing and monitoring for numeric limits across the wide variety of sources using biomass-fired boilers would likely cause a significant economic impact on these sources. The commenter provides the Agency no information as to whether the new technologies would be generally available across the broad range of affected sources.

Commenter Name: Pilar Rodarte

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2476-A2

Comment Excerpt Number: 1

Comment: I am interested in the regulation of area sources of HAP because they have been known to cause hot spots in pollution when aggregated in urban environments and are often overlooked in regulation in preference for regulation of major sources. I am specifically concerned about the basis of the technology standards being changed from MACT to GACT for biomass- and oil-fired boilers. There appears to be no scientific reason for this amendment and seems to come from economic concerns about implementation of the standards. As a citizen I understand and appreciate an economic concerns and hardship, however, the EPA's duty to create regulations under the CAA should only be swayed by scientific findings, technological feasibility, and public health concerns.

Economic concerns may certainly be considered, but they should not be a determinative factor in the basis of a technology standard, as they were here. There are other methods that the EPA can use to address the economic concerns of the affected facilities. The EPA may work with the boiler manufacturer industry to give discounts and other incentives to facilities to switch or upgrade their combustion technology. From a citizen perspective, technology in every aspect of our modern lives changes: from compact florescent light bulbs to smog controls in automobiles. These technology changes resulted in increased costs on the user, however, it was better for the county's environmental quality and technological viability to change. Oil-fired and biomass boiler technology needs to change in order to reflect the higher air quality standard expected is to push the boiler manufacturer industry to meet the higher bar of MACT through consumer/facility from citizens. The best way to push for cleaner air and more efficient (cleaner burning) boiler technology demand. It is common sense that the facilities will not make the technology change unless forced to do so by the EPA with MACT based emissions limits, and the technology won't exist or be utilized unless the consumers/facilities demand it from the boiler manufacturer industry.

Response: Please refer to the original proposal (75 FR 31895, June 4, 2010) and final rule (76 FR 15554, March 21, 2011) for the legal justification for the selection of GACT-based controls for the biomass- and oil-fired boilers in this category. The authority to determine GACT allows for the consideration of cost. Congress provided the EPA the authority to establish GACT-based standards in part because of its concerns about the impacts MACT-based rules may have on area sources. The impact on sources is a relevant consideration.

Legal/Applicability Rationale: Standards for oil-fired boilers

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 4

Comment: Castle has reviewed the CAA and the Agency's interpretations of its authority regarding MACT and GACT and believes that the EPA's regulatory approach for the smaller oil-fired boilers -- the establishment of a management practice (tune-up program) -- is the appropriate means of meeting the mandates and objectives of the CAA.

Response: The EPA thanks the commenter for their support.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 1

Comment: Retention of Work Practice Standards for Oil-Fired Units

We strongly support the EPA's decision to retain work practice standards (boiler tune-ups) in lieu of emission limits for oil-fired units located at area sources of HAP.

Response: The EPA thanks the commenter for their support.

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 8

Comment: There are numerous area source facilities with boilers currently burning natural gas that are also equipped to burn fuel oil. Owners and operators of these facilities anticipate firing natural gas for many years to come or until gas supply is temporarily curtailed outside of their control, or until such a time when fuel oil would become more cost effective to burn than gas. The GACT rule exempts units burning oil outside of gas supply curtailment, gas supply emergencies, or periodic testing on liquid fuel. However, the rule considers boilers *new* affected sources if they were to switch fuel from natural gas to solid fossil fuel, biomass, or liquid fuel after June 4, 2010. This means a facility with an existing gas-fired boiler--that wants to avoid being subject to the more burdensome new oil fired boiler requirements if or when they would ever burn oil outside of the exempted periods--should submit the Initial Notification of Applicability as an existing oil fired boiler. Based on common sense and increased flexibility, these dual-fuel boilers normally burning gas could not be considered subject to any oil-fired requirements as long as they continue to fire only gas, except under the stated exemptions for

burning oil. If economic or other conditions change such that the facility chooses to fire oil outside of the exemption criteria, then dual-fuel boilers would need to file an initial notification as an existing source and comply with the requirements, as if the boiler were an existing source that had been shutdown. If that were not possible, then facilities could at least be allowed to file their initial notifications as oil-fired boilers but without having to follow the tune-up and energy assessment (if applicable) requirements *until and unless* they begin to fire oil outside the exemption criteria. Tune-ups would not need to be completed within one week after this, in keeping with the requirement for units that are not operating. Similarly, energy assessments would not need to be completed within 180 days after switching, in keeping with §63.7(a). This would essentially grandfather the boiler in as an existing source and provide the flexibility to use a fuel for which the boiler was designed to operate.

Response: As pointed out by the commenter, the March 2011 final rule includes as a new affected source a boiler that commences fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel after June 4, 2010. For example, under the March 2011 final rule, if an unaffected gas-fired boiler currently burns oil as allowed under the definition of gas-fired boiler, but after June 4, 2010 burns oil for reasons not allowed under the definition of gas-fired, these boilers would become new affected oil-fired units. The December 2011 reconsideration action did not propose any revisions to the provisions regarding boilers that fuel switch after June 4, 2010. We have been made aware through public comments that many dual-fuel fired units presently burn primarily natural gas with limited or no amounts of oil, but these units may want to burn oil in the future for reasons not allowed under Subpart JJJJJ's definition of gas-fired (e.g. cost). Under the March 2011 final rule, such an existing dual-fuel gas-fired boiler that wanted to avoid being subject to the new source requirements would notify as an existing oil-fired unit and be subject to the requirements for existing oil-fired boilers.

In addition to comments from NC DAQ, we received public comments regarding rule applicability and compliance requirements for these existing dual-fuel fired boilers. One commenter asserted that regardless of the fuel capability identified in an initial notification, the distinction between a new source and an existing source should only be made based upon a source's capability to burn a particular fuel as of the effective date of the rule. The commenter explained that many facilities have boilers that can burn either gas or liquid and, because the price of gas is currently lower than the price of most liquid fuels, they likely are currently firing gas during normal operation, with liquid being fired only during periods of curtailment. The commenter pointed out that, in the future, the price of liquid fuel may be lower than the price of gaseous fuel, and facilities may want to preferentially burn liquid fuel over gas fuel. The commenter asserted that a change in the fuel from the initial notification should not, in and of itself, reclassify a source as a new source for purposes of Subpart JJJJJ. Further, the commenter asserted that their interpretation is comparable to the fuel switching provisions in the EPA's NSPS and Prevention of Significant Deterioration (PSD) regulations. The same commenter asserted that if a source already has oil or alternate fuel capability, then that source would not be commencing construction or making a change to the source. The commenter explained that many of these facilities with boilers capable of burning fuel oil as a back-up for natural gas may not have submitted an initial notification since gaseous fuel-fired boilers that only burn liquid during periods of curtailment are not covered by the Area Source Boiler Rule. The commenter maintained the EPA's guidance, that a dual-fuel fired boiler that fails to file an initial notification

and then plans to burn oil in the future would be considered to be a new source, appears to be contrary to regulatory text stating that an affected source is a new source if construction or reconstruction of the affected source is commenced after June 4, 2010 and the applicability criteria are met at the time construction is commenced. The commenter suggested that the EPA clarify that to become a new source, the source must be altered to be capable of accommodating a new fuel, so that new sources are not created simply by failing to submit an initial notification or a notice of fuel switching for a unit that is already capable of accommodating that fuel. NC DAQ explained in the above comments that owners and operators of dual-fuel fired boilers anticipate firing natural gas for many years to come, or until gas supply is temporarily curtailed outside of their control or until such a time when fuel oil becomes more cost effective to burn than gas. The NC DAQ asserted that, based on common sense and increased flexibility, these dual-fuel fired boilers normally burning gas could not be considered subject to any oil-fired requirements as long as they continue to fire only gas, except under the regulation's stated exemptions for burning oil.

In addition to carefully considering the public comments received regarding dual-fuel fired boilers, the EPA reconsidered its overall intent with regard to dual-fuel fired boilers that fuel switch after June 4, 2010. Consequently, in this final rule, we are revising the provisions regarding existing boilers that fuel switch after June 4, 2010. In this final rule, an existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in 40 CFR 63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel. This revision maintains consistency with the rule's applicability criteria for determining new versus existing sources, eliminates the requirement that dual-fuel fired boilers notify as affected sources although, at the time, they are not subject to Subpart JJJJJ, and promotes flexibility in that these existing dual-fuel fired sources that were designed to accommodate an alternate fuel may fire the alternate fuel and move into subpart JJJJJ without being subject to the more stringent requirements for new boilers.

Legal/Applicability Issues: Miscellaneous

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 5

Comment: OCC supports the clarification that Electric Steam Generating Units are not included in the scope of this rule.

OCC operates one area source location with a cogeneration unit that qualifies as an electric generating unit (EGU) and appreciates this clarification.

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie
Commenter Affiliation: American Coatings Association (ACA)
Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1
Comment Excerpt Number: 6

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule: Proposal to exclude electric and residential boilers from the rule

Response: The EPA thanks the commenter for their support.

Commenter Name: Barbara Patton
Commenter Affiliation: AT&T Services, Inc.
Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1
Comment Excerpt Number: 7

Comment: The EPA has proposed an amendment to the definition of *hot water heater* in order to clarify that hot water boilers are included in the definition and are therefore not subject to Subpart JJJJJ. The Environmental, Health & Safety Communications Panel (EHSCP) supports this clarification and would like to raise a related issue. Since this clarification has been made after area sources covered by the rule were required to submit initial notifications (by September 2011), notifications may have been submitted for sources that will not be covered by the rule if this clarification is finalized. Therefore, the EHSCP recommends that the EPA provide guidance regarding the process to follow to rescind notifications for sources that are no longer required due to the change in definition.

Response: The EPA does not typically require owners or operators to rescind notifications that no longer apply. As far as a process for those owners or operators that want to rescind, they could send a letter to the same delegated authority that they sent the notice to, but the EPA does not require or encourage them to do that. From an enforcement standpoint, they would not be out of compliance since they have been excluded by the definition. Also, it's likely the Agency would be able to tell from the information submitted in the notice that they would be excluded by the definitional change.

Legal/Applicability Issues: Out of Scope

Commenter Name: Neil Gormley
Commenter Affiliation: Earthjustice et al.
Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2
Comment Excerpt Number: 6

Comment: The EPA has redefined boilers and process heaters to exclude process heaters from these standards, leaving them not subject to standards. In addition to violating CAA §112(c)(6), this action is unlawful and arbitrary. The EPA listed process heaters for regulation under CAA §112(c). (63 FR 17838, Table 1 & Table 2 (April 10, 1998).) Having done so, the Agency has a statutory duty to set standards for process heaters unless it removes them from that list under the

provisions of CAA §112(c)(9), which provide the only means for the EPA to de-list any listed category. Because the EPA has not delisted process heaters, the Agency's proposal to not regulate them by simply defining them out of the boilers category is flatly unlawful. Further, because the EPA has given no rational basis for excluding process heaters from the Area Source Boilers Rule and has made no attempt to square such an exclusion with the limitations on its statutory authority imposed by §112(c)(9), its proposal to do so is arbitrary and capricious.

Response: Our June 2010 proposal did not include standards for process heaters. No commenter took issue with the absence of such standards and we finalized this aspect of the rule as proposed. We did not reopen this subject for comment in our December 2011 reconsideration proposal. This comment is therefore outside the scope of the current reconsideration. See the response to EPA-HQ-OAR-2006-0790-2473-A2, excerpt 2.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 2

Comment: The EPA not only fails to propose standards for all the HAPs that area source boilers emit, but fails to propose any CAA §112(d)(2) or (d)(4) emission standards for area source boilers that combust oil and biomass. The Agency claims it can take this approach because it has recently concluded that it does not need oil- or biomass-fired units to meet the 90% requirement in CAA §112(c)(6). (76 FR 15565–67 (March 21, 2011).) The EPA may not simply decline to set standards for categories that it has listed under §112(c)(6). To the contrary, if the EPA wishes not to set standards for a listed category, it must remove that category from the list. CAA §112(c)(9) provides the exclusive procedure for removing categories from the §112(c) list, *see New Jersey v. EPA*, 517 F.3d 574, 582 (D.C. Cir. 2008), but the EPA has not availed itself of this procedure and the rules do not even mention it.

Response: At the proposed rule stage in June 2010, the EPA explained that we were not setting MACT limits for Hg from oil-fired and biomass-fired boilers at area sources. We explained that our basis for not setting section 112(d)(2) or 112(d)(4) standards was, as the comment suggests, that we did not need to set MACT standards to meet the requirements for section 112(c)(6) because we could achieve the 90% requirement simply by regulating coal-fired area source boilers from this category. In response to the June 2010 proposal, the commenter made the identical argument about the legal requirement to follow CAA §112(c)(9) and delist if the EPA does not set a MACT standard for Hg emissions from oil- and biomass-fired boilers. See exhibit 1 (2010 comments) at page 3). We responded to this specific comment and did not re-open the mercury issue in the reconsideration proposal. However, in the proposed reconsideration rule, we did solicit comment on our decision in the final 2011 rule to not set MACT for POM from oil- and biomass-fired boilers at area sources. Like Hg, we did not set MACT for POM emissions from oil- and biomass-fired boilers because we did not need the boilers to meet the 90 percent requirement in section 112(c)(6).

As we explained in the final rule, “While we are promulgating GACT² based provisions at this time for mercury and POM from biomass-fired and oil-fired area source boilers, note that we have not removed or “delisted” oil-fired and biomass-fired area source boilers by this action. We are not promulgating MACT-based regulations at this time because they are unnecessary to meet the requirements of CAA section 112(c)(6).” 76 FR at 15566. We also noted the substantial discretion EPA has in determining how it selects which sources need to be regulated to achieve the 90% thresholds of CAA 112(c)(6). *Id.* (“As we noted in the proposed rule, we reexamine the inventory associated with the original listing as we learn more about the source category in the rule development process (75 FR 31904). Based on a re-examination of the emission inventory in light of comments, we have determined that we only need to address the coal-fired portion of the area source segments of these categories under CAA section 112(c)(6) in order to meet the 90 percent threshold requirement of that provision for both mercury and POM.”). We regulated under CAA 112(d)(2) those boilers (i.e., coal-fired boilers) needed to meet the 90 percent threshold for Hg and POM. Therefore, we complied with the requirements of section 112(c)(6). Our regulation of those area source boilers needed to meet the 112(c)(6) 90 percent requirement does not constitute a delisting of a source category, and thus the procedures of CAA 112(c)(9) do not apply.

The commenter does not dispute EPA’s conclusion that MACT standards for Hg or POM from these sources are not needed to meet the 90 percent requirement under section 112(c)(6) for these two HAP. Rather, the commenter claims that if EPA does not wish to set such standards, EPA must delist oil-fired and biomass-fired area sources pursuant to section 112(c)(9). We disagree. The Agency has determined that it has satisfied the 90 percent requirement under section 112(c)(6). As such, it was not required to issue MACT standards for the oil- and biomass boilers by the February 2011 court-ordered deadline for issuing regulations to meet the 90 percent 112(c)(6) requirement.³ The Agency reasonably subjected to regulation those boilers needed to meet the 90 percent 112(c)(6) requirement, and that is all that section 112(c)(6) requires.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 1

Comment: The EPA’s failure to set MACT standards for all HAPs emitted by area source boilers is unlawful.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. See the response to EPA-HQ-OAR-2006-0790-2473-A2, excerpt 2.

² The 2011 final rule was also issued to meet the requirements of section 112(c)(3) and 112(3)(B), which are not relevant to this comment.

³ Order at 3, *Sierra Club v. Jackson*, No. 01-1537 & consolidated cases (D.D.C. Jan. 20, 2011).

We also note that, in a recent decision by the Court of Appeals for the DC Circuit, the court affirmed EPA's interpretation of the statute to require MACT only for sources that emit the HAP listed in section 112(c)(6) and that are needed to meet the 90 percent requirement of section 112(c)(6). *Desert Citizens Against Pollution v. EPA*, No. 11-1113 (DC Cir., Nov. 9, 2012), slip op. at 8. MACT is not required for other HAP emitted by a source category. *Id.* We reached the 90 percent threshold in section 112(c)(6) for mercury and POM by setting MACT for these HAP that are emitted by coal-fired area sources, and thus fulfilled our statutory and court-ordered obligation.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 3

Comment: The EPA's failure to set lawful CAA §112(d)(2) or (d)(4) standards for all area source boilers not only contravenes the CAA but also the Court order in *Sierra Club v. EPA*, No 01-1537 (D.D.C.), which provides "EPA *shall* promulgate emission standards assuring that sources accounting for not less than 90% of the aggregate emissions of each of the hazardous air pollutants enumerated in Section 112(c)(6) are subject to emission standards under section 112(d)(2) or (d)(4) no later than December 16, 2010." (emphasis added).

Response: The commenter does not claim that this issue was not possible to raise at the time of the 2010 comment period and, in fact, the commenter did raise this issue during that period (EPA-HQ-OAR- 2006-790-1982.1, at 2).

In the final rule, we explained that we reached the 90 percent threshold under CAA section 112(c)(6) for mercury and POM by setting MACT standards for coal-fired area source boilers. We also explained why we set MACT only for mercury and POM from coal-fired area source boilers and set GACT for all other pollutants we regulated. The D.C. Circuit, in *Desert Citizens Against Pollution v. EPA*, affirmed that we are not required to set MACT for other HAP emitted by the source category. Slip. op. at 8. Additionally, we note that the commenter has not provided any information to suggest that we need Hg and POM to reach the 90 percent requirement under CAA section 112(c)(6).

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 10

Comment: The CAA requires the EPA to set MACT standards for all HAP and all sources within this category. But the standards based on GACT that the EPA has set instead under CAA §112(d)(5) are also arbitrary and unlawful in themselves. As explained in the 2010 comments at 16–17, the EPA has arbitrarily failed to consider additional control technologies for oil- and biomass-fired boilers that better serve the pollution-reduction objectives of the CAA.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice. The commenter does not claim that this issue was not possible to raise at the time of the 2010 comment period. In fact, the commenter simply refers back to comments raised in that period. Therefore, the comment is outside the scope of the current reconsideration.

Commenter Name: Joseph Seymour

Commenter Affiliation: Biomass Thermal Energy Council (BTEC)

Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2

Comment Excerpt Number: 4

Comment: The EPA should continue to gather more inclusive, accurate data on biomass fuels, sizes, and technologies before moving forward on increasingly restrictive limits. BTEC recognizes that as an industry, it is a partner in improving air quality and environmental sustainability of energy, and so the organization advocates a ratcheting down of data driven emissions limits over a sensible time period. Such a path could involve biennial reduction goals beginning with the above limits, and then decreasing in a tiered approach based on the data generated from boilers tested in compliance with the new Area Source Boiler Rule. The final regulatory product would allow the marketplace to develop financially feasible emissions control options and limit potentially confusing state and regional balkanized biomass boilers regulations.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 3

Comment: Retention of Exemption for Natural Gas-Fired Units

We also support the EPA's decision to retain the exclusion for boilers and process heaters that burn natural gas from the Area Source Boiler MACT Rule. The HAP emissions from these units are so low that they are extremely difficult, if not impossible, to accurately measure. These small emissions have not been found to pose risks to public health and the cost of controlling these units will greatly exceed any benefits that may result from such controls.

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the EPA thanks the commenter for their support and additional justification.

Commenter Name: Barry Christensen
Commenter Affiliation: Occidental Chemical Corporation (OCC)
Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1
Comment Excerpt Number: 1

Comment: OCC strongly supports the continued exclusion of gas-fired units from this rule.

OCC supports the EPA's conclusion that 90% of urban HAP can be controlled as required by the CAA without the additional control of area source boilers and process heaters fired with gas. Gas-fired area source boilers do not emit significant amounts of any of the urban air toxic pollutants for which area source boilers were listed and accordingly as a source category. Consequently, such boilers should not be subject to this rule. For the same reason, the scope of the exclusion for gas-fired boilers in the final rule should continue to include all gas-fired waste heat boilers (WHBs) as provided for in the final rule.

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the EPA thanks the commenter for their support and additional justification.

Commenter Name: Stephen E. Woock
Commenter Affiliation: Weyerhaeuser
Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1
Comment Excerpt Number: 6

Comment: The EPA has assessed emissions from and the cost of controls for gas boilers, and determined to exclude gas-fired boilers from the area source boiler category. Weyerhaeuser agrees with this assessment and supports the EPA's decision.

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the EPA thanks the commenter for their support.

Commenter Name: Pamela Lacey
Commenter Affiliation: American Gas Association (AGA)
Document Control Number: EPA-HQ-OAR-2006-0790-2468-A2
Comment Excerpt Number: 1

Comment: AGA strongly supports the EPA's exclusion of natural gas boilers from the Area Source Boiler MACT work practice standards and emission limits under §63.11195 of the March 21, 2011 final rule, which is not affected by the proposed rule. This exclusion for natural gas boilers at small area source facilities is very important to our members. AGA's members could lose customers and revenue if industrial and commercial natural gas customers become subject to more burdensome requirements than the work practice standards required under the rulemaking, because the customers of AGA members would be given an incentive to switch from natural gas boilers to electrical equipment to avoid regulatory burdens. Perversely, such fuel switching away

from natural gas to electrical equipment would be detrimental to the environment by increasing emissions at power plants. As we have described in our previous comments in this docket, even if an electric generating power plant combusts clean natural gas rather than coal or oil, it has to combust far more natural gas to serve the same customer energy need than if the customer combusted natural gas directly in on-site equipment. This is due to the large amounts of energy lost when converting natural gas to electricity and when transporting the electricity through transmission lines. And if a customer is in a region with a significant amount of coal fired generation on the grid, the emissions would be even higher. Excluding natural gas boilers from the burdens of the Area Source Boiler Rule will help avoid this unintended consequence.

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the EPA thanks the commenter for their support and additional justification.

Commenter Name: Pamela Lacey

Commenter Affiliation: American Gas Association (AGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2468-A2

Comment Excerpt Number: 2

Comment: Applying the Area Source Boiler MACT Rule would not appreciably reduce HAP emissions from these smaller natural gas boilers at area sources. The Agency's data for natural gas-fired units show the overwhelming majority of emissions to be below the level that can be accurately quantified by the available test methods.

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the final reconsideration rule excludes gas-fired boilers from the source category being regulated under this action, as has been the case since the 2010 proposed rule.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 3

Comment: In context of the overall rule requirements and the issues identified for comment, it is apparent that similar boilers and processes are treated differently between the Major and Area Source Boiler Rules. For example, all boilers regardless of size are subject to at least a work practice requirement under the Major Source Boiler Rule. However, the same is not true for area sources where gas-fired boilers are totally exempt. Wisconsin DNR cannot resolve how the same boiler can be treated differently between the two rules. We believe that comments and issues under one rule are applicable to both boiler rules and request the EPA to consider all comments in this context.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing

aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The exclusion of gas-fired boilers from this source category was apparent in the 2010 proposed rule, therefore this issue does not meet the standard for reconsideration under CAA §307(d)(7)(B).

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 8

Comment: Due to the uncertainty surrounding the fuel versus waste issue and the proposed revisions to the solid waste definition rule, area sources need the additional time to determine if they are burning solid waste and if they will be covered under the Area Source Boiler Rule or the CISWI Rule. As the EPA has proposed revisions to the NHSM Rule, many sources are not yet sure how their secondary materials will be classified. For example, in some cases a material is being burned that a facility believes should qualify as a fuel but the final NHSM Reconsideration Rule to be promulgated after March 2012 could lead to an opposite determination (concluding the NHSM is a solid waste). Members tell us some of their facilities will prefer to comply under the GACT rule (Area Source Boiler Rule) rather than the CISWI Rule, and therefore the facility will need at least another 12 months after a determination is complete to utilize an alternate fuel to meet the Area Source Boiler Rule tune-up requirements. The proposed amended §63.11223(b)(5), which is applicable to both initial and continuous compliance demonstrations for work practices, requires that the tune-up be conducted “while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.” The facility also has to state in its NOCS that “No secondary materials that are solid waste were combusted in any affected unit.” (§63.11225(a)(4)(iv).) Each of these leads to a timing concern that supports the 3-year compliance timeline for the initial tune-up requirement.

Because resolving the fuel versus waste issue will effectively amend the work practice standard by revising the scope of its applicability, we believe that the EPA would have authority to set the compliance deadline at 3 years after the effective date of the final reconsideration rule. Because of the substantial number of affected units and in light of the ongoing uncertainty on the waste/fuel issue, we believe there is ample justification for setting the deadline at this point. Therefore, we request that the EPA set the compliance deadline for completing the work practice requirements on the date 3 years after the effective date of the final reconsideration rule.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the EPA disagrees that the initial compliance date for completing the work practice/management practice requirements should be re-set based on promulgation of the final reconsideration rule. We also disagree that sources have endured such uncertainty with regard to the NHSM regulatory action that there is ample justification for extending the compliance date. Relative to the total number of existing sources subject to the

Area Source Boiler Rule, only a small percentage will be impacted by the proposed and adopted changes in the NHSM Rule. All sources impacted by the adopted changes will be subject to GACT-based rather than MACT requirements. Compliance is simplified. With the exception of the initial compliance date for existing boilers subject to the tune-up requirement, the initial compliance date for regulatory requirements has been March 21, 2014 since the June 2010 proposal. The EPA is now revising the initial compliance date for existing boilers subject to the work practice or management standard of a tune-up and is allowing additional time to complete the initial tune-up by establishing a date of March 21, 2014 as the initial compliance deadline. This extension should make compliance available to the reclassified sources.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 4

Comment: Due to the uncertainty surrounding the fuel versus waste issue and the proposed revisions to the solid waste definition rule, area sources need the additional time to determine if they are burning solid waste and if they will be covered under the Area Source Boiler Rule or the CISWI Rule.¹ We note that we raised a relevant issue in our comments on the proposed rule in 2010 to which, to our knowledge, the EPA never responded. That comment concerned needed clarity around the timing of compliance with the Area Source Boiler Rule with respect to changes in fuels as a result of the new NHSM RCRA standard. That concern has borne out.

¹This is Weyerhaeuser's intention; however, it is a presumption because it will depend on achievability and economic feasibility evaluations with respect to how the EPA chooses to finalize this NESHAP as well as the concurrently re-proposed Non-hazardous Secondary Materials That Are Solid Waste rule and the Commercial and Industrial Solid Waste Incinerator (CISWI) rule (76 FR 80452).

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 8.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 6

Comment: Due to the uncertainty surrounding the fuel versus waste issue and the proposed revisions to the solid waste definition rule, area sources need the additional time to determine if they are burning solid waste and if they will be covered under the Area Source Boiler Rule or the CISWI Rule. As the EPA has proposed revisions to the NHSM Rule, many sources are not yet sure how their secondary materials will be classified. For example, in some cases a material is being burned that a facility believes should qualify as a fuel but the final NHSM Reconsideration Rule to be promulgated after March 2012 could lead to an opposite determination (concluding the NHSM is a solid waste). Some facilities will prefer to operate to comply under the GACT rule (Area Source Boiler Rule) rather than the CISWI Rule, and therefore the facility will need at

least another 12 months after a determination is complete to utilize an alternate fuel to meet the Area Source Boiler Rule tune-up requirements.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 8.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 5

Comment: In some cases, a facility combusts a material it thinks should qualify as a fuel but the final NHSM Reconsideration Rule to be promulgated after March 2012 could lead to an opposite determination (concluding the NHSM is a solid waste). If that unexpected determination occurs, facilities such as ours that prefer to operate complying under the GACT rule (Area Source Boiler Rule) rather than the CISWI Rule will need at least another 12 months after a determination is complete to utilize an alternate fuel to meet the Area Source Boiler Rule tune-up requirements. That is because the proposed amended §63.11223(b)(5), which is applicable to both initial and continuous compliance demonstrations for work practices, requires that the tune-up be conducted "while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up." The facility also has to state in its NOCS that "No secondary materials that are solid waste were combusted in any affected unit." [§63.11225(a)(4)(iv)]. Each of these leads to a timing concern that supports the 3-year compliance timeline for the initial tune-up requirement.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 8.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 1

Comment: NRA has a strong interest in ensuring that processed fats are regulated by the EPA based on the actual HAP emissions from the combustion of the fuel, not for the HAP emissions released from the combustion of other "traditional" petroleum-based liquid fuels. Processed fats are fundamentally different than the "traditional" petroleum-based liquid fuels generated from the physical and chemical refining of crude oil. The petroleum-based liquid fuels clearly comprise the bulk of the common name subcategory "oil" units or liquid fuel units subject to NESHAP Subpart JJJJJ. Processed fats do not inherently contain petroleum products. The NRA believes that the EPA should determine that processed fats are a separate non-petroleum liquid fuel and that it is both statutorily reasonable and technically appropriate for the EPA to determine that processed fats are not subject to regulation under Subpart JJJJJ. Specifically, the NRA requests a new processed fats-fired boiler unit definition in Subpart JJJJJ (much as with gas-fired boilers).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. We note the proposal for exclusion from the category is incomplete in many respects. The commenter does not provide a basis for distinguishing a boiler capable of burning processed fat-derived fuel from a boiler that otherwise burns petroleum-based liquid fuels. The contemplated subcategory would only be distinguishable based on what fuel is sold to the liquid-fueled boiler. Sources would be capable of switching between subcategories with relative ease, thereby posing compliance assurance difficulties. The EPA is not in a position to adopt the suggested subcategorization as a logical outgrowth of the proposed reconsideration.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 2

Comment: As identified in §63.11195(e), gas-fired boilers as defined in Subpart JJJJJ are not subject to the rule. NRA believes, as demonstrated through this letter, that boilers at area sources burning processed fats should be similarly defined, analogous to the gas-fired boilers, as processed fats-fired boilers.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Comparisons to gas-fired boilers could have been raised during the initial rulemaking. The EPA explained the basis for defining gas-fired boilers as not being part of the source category in the proposed rule notice at 75 FR 31900. In its comments on the proposed rule (EPA-HQ-OAR-2006-0790-0937), the commenter recognized it was covered by this rule but did not suggest it should have been treated in a way that is analogous to gas-fired boilers.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 7

Comment: The sample set indicates confidence that the metal content of the processed fats samples is insignificant and is comparable to the eight metal HAPs (required under §112(c)(3) of the CAA to be controlled for sources that comprise 90% of the urban HAPs) emitted from gas-fired boilers at area sources that are not regulated under Subpart JJJJJ (see Table 2). With a similar minimal metal HAP content to gas-fired boilers, the processed fats-fired boilers do not

result in significant metal HAP emissions required to be controlled under Subpart JJJJJ. Therefore, processed fats-fired boilers should also not be subject to Subpart JJJJJ.

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 8

Comment: Processed fats are not gaseous fuels, but the Hg content in the processed fats samples was below a 5 parts per billion by weight (ppbw) detection limit. Even if we assume that the Hg was present at this detection limit of 5 ppbw, and we apply a conservative heating value of 17,000 Btu per pound (Btu/lb), this is approximately $3.0E-07$ lb/MMBtu – an order of magnitude less than the EPA-defined threshold for natural gas-equivalency. Since gas-fired boilers are not subject to Subpart JJJJJ, the NRA has demonstrated this specific urban HAP (Hg) content identified in various types of processed fats samples analyzed is similar (or less than) in metal HAP content to gaseous fuel, and should be similarly not be subject to Subpart JJJJJ (exempt from applicability).

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 12

Comment: Processed fats contain triglyceride mono, di, and free fatty acids. Acrolein (or 2-propenal) can be formed when processed fats fuel is burned due to decomposition of the triglyceride glycerin backbone. However, this is not a cyclic compound and therefore does not meet the definition of a particulate organic carbon (POC) (or POM). As such, the pollutant generation of these organic HAP from processed fats combustion is analogous to natural gas combustion. The EPA previously found that these emissions were insignificant from natural gas combustion, and a similar argument can be made for processed fats fuel combustion. Processed fats-fired boilers are a requested separate definition under Subpart JJJJJ, and, similar to gas-fired boilers, are assumed to not emit a significant amount of POM and ethylene dioxide emissions that would require these boilers to be included in the 90% requirement for establishing emission standards under CAA §112(c)(3) for these HAP.

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 4

Comment: From the EPA's definition for similar source, a MACT Floor must be established for a source category with comparable emissions. The urban HAP emissions identified in this summary clearly show that boilers that burn petroleum-based liquid fuels are not similar sources to boilers that burn processed fats. HAP emissions from petroleum-based liquid fuels include different constituents and are higher than the HAP emissions from processed fats, which are insignificant, specifically for the 30 statutory targeted HAP emissions required to be controlled under the Boiler MACT. The NRA feels it is both reasonable and necessary for the EPA to separate processed fats-fired boilers at area sources from the list of area source categories contributing to the 90% of urban HAP emissions control requirement under CAA §112(c)(3) for the aforementioned eleven urban HAPs. Therefore, analogous to gas units, processed fats-fired boilers should not be regulated under Subpart JJJJJ.

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 6

Comment: The NRA is requesting the flexibility to burn small amounts of petroleum-based liquid fuels similar to that allowed for gas-fired boilers, as defined in §63.11237.

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 10

Comment: Because the metal HAP content (urban HAPs) are frequently non-detect and always much lower than the metal HAP content in gas fuel, processed fats-fired boilers should also be considered insignificant for urban HAP emissions and not subject to Subpart JJJJJ.

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 2.

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 5

Comment: NFIB suggests that to improve these rules further, the EPA should adopt the suggestions the small-entity representatives provided the Agency during the Small Business Advocacy Review (SBAR) panel held in 2009. These recommendations include:

- Adopting health-based compliance options in areas where there is no significant risk to nearby residents.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 10

Comment: Under basic principles of due process and administrative law, the EPA has an obligation to provide the public with a reasonable opportunity to comment on proposed rules. Specifically, Congress requires the EPA to give the public “a reasonable period . . . of at least 30 days” in which to comment on “any regulation” promulgated under the CAA.⁵ By the clear terms of the CAA, Congress indicates that 30 days is the minimum time necessary to give the public a reasonable opportunity to evaluate a proposed rule and provide adequate feedback to the Agency. Thus, a comment period meeting the statutory 30-day minimum would be reasonable for a single, ordinary proposed rule. Here, the EPA has violated the clear terms of the CAA and deprived sources of a means to adequately protect their interests and rights in the administrative and judicial processes by providing 60 days of comment for four complex interrelated rules.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The CAA does not set a requirement for longer comment periods when multiple related rules are proposed. We note that the comment period on the initial rulemaking was 80 days and on the simpler reconsideration it was 60 days.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A4

Comment Excerpt Number: 1

Comment: In response to our request on the initial rule, the EPA provided additional time for comments. Now on reconsideration, the rules are no less complex, the EPA has added data that must be reviewed for 300 additional sources, and sources face the same pressures of sorting complex data and developing thorough comments that address very technical issues. Although requesting a public hearing would have extended the comment period, we decided our time was better spent in developing comments. There is an extensive amount of data within the docket which will require many hours to sort through in order to produce thorough comments.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 10.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 11

Comment: Under reconsideration, the rules are no less complex than when they were first proposed in June 2010. A 60-day comment period is particularly inadequate given their complexity, breadth of applicability, and economic impact. The EPA has added data on reconsideration for 300 additional sources that must be reviewed and sources face the pressures of sorting complex data and developing thorough comments that address very technical issues. Although the EPA released the signed rule proposals almost one month prior to their publication in the Federal Register, it did not provide the majority of the supporting documentation for the proposed rules until publication on December 23, 2011, just two days before the holidays, effectively shortening the comment period.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 10.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 12

Comment: The four proposed rules under reconsideration make for an enormously broad and costly proposal, which would have a significant economic impact across numerous and diverse sectors of the US economy, with the Boiler MACT Rule alone imposing capital costs of more than \$5 billion and affecting nearly 200,000 sources, according to the EPA. (76 FR 80622.) This economic impact alone, which CIBO estimates to be over \$14.7 billion requires a comment period sufficient to ensure thorough consideration of the proposed rules. CIBO joined with 26 other entities and trade associations, representing tens of thousands of affected sources, to ask the EPA to extend the comment period by 30 days and explaining in detail why the extra 30 days was needed and justified. On February 14, 2011, just 7 days before the comments were due, the EPA denied the request.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 10.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A4

Comment Excerpt Number: 2

Comment: Because the EPA only allowed a few weeks, during the holidays, for review of the four proposals before the hearing would have been held, there was effectively less time to sort

data in advance of a hearing. We were doubtful that we could have produced enough specific information to have a meaningful discussion by that date.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 8

Comment: The affected boilers used to process sugarbeets are located in agricultural areas of the United States (MI, MN, ND, NE, MT, ID, CO, WY) away from large population centers (see Attachment A). Sugarbeet processing facilities are located near the agricultural fields where the sugarbeets are grown in order to minimize transportation, and thus concerns about HAP emissions from these boilers are minimal and such facilities pose a lower risk to public health. Because of the agricultural and seasonal nature of the sugarbeet processing facilities, there is significant justification for the EPA to distinguish such boilers when finalizing the Boiler Rules. The EPA has previously made distinctions between appropriate controls in areas that are heavily populated and those that are in remote areas when establishing requirements under CAA §112, such as in the Oil and Gas MACT.⁹ In making such distinctions, the Agency has acknowledged the differential impacts that can occur from area sources that are located near population centers and near many other sources of HAP. Conversely, in sparsely populated areas where there are few sources of HAP, health impacts from these HAP emissions are greatly reduced. The section of the CAA that addresses area sources, in particular, is heavily focused on population centers. CAA §112(k)(1) requires a finding that “emissions of hazardous air pollutants from area sources that may individually, or in the aggregate, present significant risks to public health in urban areas.”¹⁰ It is appropriate, therefore, and consistent with §112(k) for the EPA to regulate those sources located in agricultural areas, especially those classified as area sources, differently from sources located in more densely populated urban centers.

⁹ In the preamble to the Oil and Gas MACT, the EPA states, “We agree with commenters that it is reasonable to require a higher level of emission reductions for TEG dehydration units located in more densely populated areas. We also recognize that the oil and natural gas source category is unique because there are many area sources that are located in remote or rural areas. For these reasons and the reasons discussed above, we have subcategorized to differentiate between those sources above the cutoff levels identified above that are inside UA plus offset and UC boundaries and those located outside such boundaries. 72 FR 26, 32 (Jan. 3, 2007).

¹⁰ CAA, §112(k)(1); 42 U.S.C. §7412(k)(1)(emphasis added).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing

aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 1

Comment: We *presume* a biomass-fired boiler at one of these locations that combusts NHSM purchased from off-site generators is subject to this NESHAP (40 CFR 63 Subpart JJJJJ) as it is not designed or operated as an incinerator, and Weyerhaeuser does not intend to permit and operate the unit under incinerator regulations.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 9

Comment: Wisconsin DNR believes that the EPA does not have the information to characterize and regulate smaller biomass boilers. We believe there is considerable variability in small biomass boiler design, operation, and fuel quality and it is even questionable if these sources can be tuned according to the rule. We suggest that the EPA suspend regulating boilers smaller than 5 MMBtu/hr under this rulemaking and proceed with collecting the necessary information. This threshold is suggested simply because the EPA determined that below this size it is appropriate to reduce the tune-up frequency for oil boilers. In many cases we believe the contaminant content of biomass will be closer to oil than to coal fuels for these small sources. At a minimum, we request that the EPA incorporate rule language exempting sources from measuring CO and O₂ flue gas concentrations in cases where it is technically infeasible or it is not pertinent to the boiler tuning over time.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Small biomass boilers were proposed to be subject to tune-up requirements in 2010, therefore the comment regarding suspending regulating such boilers is not appropriate for reconsideration.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 51

Comment: NACAA has reviewed the EPA's Response to Comments submitted in the 2011 rulemaking. We recognize that responding in detail to the many thousands of comments received in that rulemaking would be an enormous undertaking. As a consequence, however, the EPA has not provided a meaningful response to most of the comments submitted by NACAA. This makes it difficult to advance the issues that carry forward from that rulemaking to the present activity.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. As appropriate, we have provided additional responses.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 4

Comment: The case for setting MACT standards for oil- and biomass-fired area source boilers is bolstered by the risk that major source boilers may be improperly classified as area sources. *See* PFPI Comments, Ex. 3, at 3. In practice, there is a great deal of overlap in the boiler capacities of facilities that are major and area for HAP. In their permit applications, facilities often do not demonstrate that they are area sources for HAP, but simply assert it. To the extent that they estimate HAP emissions, they selectively report data. And many facilities use industry generated estimates of emissions factors that are lower—sometimes by orders of magnitude— than the AP-42 factors. These facilities evade EPA review of their self-classification decisions. To account for the serious risk of misclassification, the EPA should err on the side of equalizing the emissions standards of major and area source boilers by subjecting area sources to MACT.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The appropriateness of MACT for all area sources was addressed in the proposed and final rules. Major sources improperly claiming area source status are subject to substantial penalties if discovered. This is a disincentive for the behavior mentioned in the comment. The Area Source Boiler Rule impacts more than 10 times the number of boilers as the Major Source Boiler Rule. Even if every major source were to claim area source status, it would not be rational to impose the burden of MACT on the numerous area sources.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 5

Comment: The proposed reconsidered Area Source Boilers Rule fails to set standards for several other groups of area source boilers in violation of CAA §112(c)(6). First, although the rule expands the definition of the biomass subcategory, 76 FR 80532, 80540/3, in order to reduce the number of boilers not falling under any subcategory—and thus not subject to any standard—it does not go far enough. The rule still fails to set any standards for boilers burning non-waste, non-biomass secondary materials. This oversight is unlawful and arbitrary. The EPA must either reconfigure the subcategories to encompass all area source boilers or abandon its attempt at subcategorization.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The EPA does not have information that there are a substantial number of area source boilers that burn non-waste, non-biomass secondary materials without other supplemental fuels, and that would not fall into any of the established subcategories. The commenter does not identify any such boilers, nor does the commenter provide information on whether Hg or polycyclic aromatic hydrocarbons (PAHs) are emitted from such boilers. Even if such boilers were to emit pollutants enumerated in CAA §112(c)(6), the commenter has not provided information as to why these emissions would need to be subjected to CAA section 112(d)(2) or (4) standards in order for EPA to meet its statutory obligations under CAA section 112(c)(6).

Commenter Name: Pilar Rodarte

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2476-A2

Comment Excerpt Number: 2

Comment: I think the proposed amendments could be improved by regulating combustion area sources such as industrial, commercial, and institutional boilers by creating emissions standards based on the type of energy source used rather than the type of facility. I propose that fuel source based emissions standards include not only combustion sources that are coal- and oil-fired, but also those that use propane. Propane boilers are a large source of NO_x and CO, but are disappointingly exempted from the proposed amendments to NESHAP for Area Sources. Emissions standards based on fuel sources supplements the current NESHAP rules for Area Sources and Major Sources and create more effective standards that help create energy efficiency in facilities and the boiler manufacturer industry.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is

not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 1

Comment: Background: Comments Relevant to the Area Source Boiler Rule

The purpose of this submission is to provide the EPA with some information relevant to the boiler and waste rules applicability to biomass burners, using a fairly comprehensive database of recently issued air permits to characterize current trends in the industry. We wish to demonstrate to the EPA that the boiler and waste rules as currently conceived are opening the door to far greater pollution, and more toxic pollution, from the biomass energy sector than is necessary, given the technologies available for emissions control and the reasonable presumption that the public should have that "clean" biomass fuel burned as renewable energy does not consist of toxic waste.

We compiled a database of permits for biomass facilities issued in the last 4 years. All are power producers.

There are 67 new and re-permitted facilities in the database.

Of these 21 are existing facilities that are expanding their existing biomass capacity or adding a biomass boiler; 46 are new facilities. Some of the new facilities have now been withdrawn but were included in the permit database as examples of contemporary permitting practices.

Not every permit or application specifies the type of boiler. Of the ones that are specified, 31 are fluidized bed boilers; 26 are stokers. There are no examples of some of the EPA's categories, e.g. "dutch ovens" or "biomass fuel cells".

Major/minor status of facilities in the database

For the purposes of BACT determination/criteria pollutants, regarding major/minor status:

- 1) 3 are not specified
- 2) 22 are major sources.
- 3) 42 are minor sources. Of these, 29 are synthetic minors.

For the purposes of MACT determination/HAPs,

- 1) 7 facilities do not specify whether they are major or area sources (most of these are modifications to add a biomass boiler or expand capacity at an existing facility, and

permits do not always specify whether these facilities are currently major sources for MACT).

2) 9 facilities are major sources

3) 44 facilities are "area" sources.

Synthetic area sources for HAPs – our definition

Of the 44 area source facilities, 32 are what we characterize as "synthetic" minor sources. By this we mean:

- 1) the permit either specifies little information about actual HAPs emission rates, but specifies that the facility will emit "less than" 25 tons of all HAPs and less than 10 tons of any HAP.
- 2) Or, the permit/application does add up emissions of HAPs with specific emission rates, and miraculously comes in just under 25 tons (it is common for HAPs to sum to 24.9 tons).
- 3) Or, the permit/application selectively uses a mix of AP-42 emission factors, National Council for Air and Stream Improvement (NCASI) emission factors, and other industry-provided emission factors to estimate HAPs emission rates, with a sum that comes in just under 25/10 tons. In some cases, NCASI and other industry emission rates are used that are orders of magnitude lower than AP-42 rates. Often the AP-42 rates that are supplanted with industry data are graded "A" for data reliability. Very few if any permits/applications provide justification for using something other than the AP-42 rates.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we will not respond to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. This comment provides a summary of permit information for biomass facilities compiled by the commenter.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 2

Comment: The new facilities now being permitted around the country are mostly large, standalone electricity-producing plants. While the "area" source rule would appear to be intended to govern relatively small facilities, the facilities governed by the rule are actually quite large and overlap considerably in size with facilities designated as major sources. The following graph shows the boiler capacity (MMBtu/hr) for "area" and "major" sources in our database. [See submittal for graph of area and major sources capacity.]

Response: This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. While the substance is not a matter for reconsideration, we have previously recognized that there is some potential for overlap in the size of biomass-fired boilers subject to the new source standards under the Major Source Boiler Rule and those subject to the new source standard under the Area Source Boiler Rule. Assuming the commenter has classified major and area source boilers at new units correctly, we note that the graphical information presented by the commenter tends to show that the bulk of what the commenter classifies as area sources tend to be smaller than the mid-range of the major sources. The Agency has set standards for new biomass boilers that reflect GACT for pollutants subject to our CAA §112(c)(3) listing and that reflect what is appropriate for different sized new biomass-fired sources.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2490-A2

Comment Excerpt Number: 3

Comment: There are at least 16 facilities in the database that plan to burn C&D waste. Some of these specify that only "clean" C&D can be burned. In our review of permits and applications, we found only one fuel sorting study. We analyzed this study and found it to be utterly deficient in terms of the statistical approach used to characterize contamination in the fuel stream (we have attached this analysis). Most if not all facilities with permits allowing burning of C&D do not specify a fuel testing plan; the permits generally say "no burning of treated wood" with no verification provisions.

Of the 16 facilities that plan to burn C&D, 11 are minor sources that will not go through a BACT determination; 7 are synthetic minors for BACT (by "synthetic minor", we mean facilities with a potential to emit that is greater than 250 tons of a criteria pollutant, but the permit caps emissions at 250 tons). Ten are area sources for HAPs, and thus will be regulated under the Area Source Boiler Rule. Of these, 9 are "synthetic" area sources (see above for our definition of a synthetic area source for HAPs).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we will not respond to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. This comment provides a summary of permit information for biomass facilities compiled by the commenter.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 5

Comment: Emission Control Technologies Now Commonly Used on New Biomass Boilers

PM: What is in General Use

All new and re-permitted facilities in our database use either a baghouse or ESP for PM control. These technologies are assumed capable of removing >99% of PM; baghouse removal rates of 99.9% and above are sometimes promised in air permits.

Not every permit specifies a separate emission rate for filterable PM versus total PM. For those in the database that do (there are 19 of them), values range from 0.0075 to 0.03 lb/MMBtu. In the graph below, red dots designate bubbling fluidized bed boilers or circulating fluidized bed boilers; blue dots designate stokers. Given the similarity of the emission rates, it is not clear why the EPA has designated such a large difference in the between the new unit standard for "wet" stokers (0.029 lb/MMBtu) and bubbling fluidized bed (BFB) boilers (0.0098 lb/MMBtu). These units appear to be using the same technologies and achieving the same emissions rates for PM. PM emissions at existing facilities are commonly controlled with ESPs and baghouses. Emissions test data from the McNeil biomass plant in Vermont shows that filterable PM can be controlled well.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we will not respond to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. This comment provides a summary of permit information for biomass facilities compiled by the commenter.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 6

Comment: Emission Control Technologies Now Commonly Used on New Biomass Boilers

HCl: What is in General Use

Of the 26 facilities in our database of permits for biomass facilities issued in the last 4 years that list HCl emission rates, rates range from 0.00083 to 0.02 lb/MMBtu. There are 36 facilities in the database that list some kind of acid gas control, such as trona injection, trona plus wet scrubber, pulverized limestone injection, dry scrubber, etc. Not all of these specify an actual emission rate however. Many permits that are synthetic area sources for HAPs simply specify that HCl emissions are capped at less than 10 tons per year (tpy), and they basically promise that they will keep adding sorbent until they reduce the emission rate to an acceptable level. For facilities that do list rates, the red dots in the graph below designate rates at facilities that will use of some kind of acid control.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we will not respond to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue

reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. This comment provides a summary of permit information for biomass facilities compiled by the commenter.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 7

Comment: Emission Control Technologies Now Commonly Used on New Biomass Boilers

CO: What is in General Use

The EPA presents CO limits in units of ppm, not lb/MMBtu as they are usually specified in emissions permits. We back-calculated what the EPA's CO limits were in terms of lb/MMBtu (heat input basis) by reversing the formula that the EPA provides for estimating output-based limits from input-based limits, and applying this to the EPA's output-based limits provided in the Major Source Boiler Rule. They are as follows: [See submittal for a table showing EPA's CO emission rates converted to lb/MMBtu (heat input basis)].

All the facilities in our database of points for biomass facilities issued in the past 4 years fall into one of the two highlighted categories (i.e., stokers designed to burn wet biomass fuel and fluidized bed units designed to burn biomass) above.

In our database, there are 50 facilities with permits that specify a CO emission rate, which range from 0.027 to 0.6 lb/MMBtu. CO is very hard to control in biomass burners, but nonetheless, most facilities still claim they will control it using "good combustion practices." There are 9 facilities (marked in red on the graph below) that state they will use an oxidation catalyst for CO control. Many facilities that do not propose to use an oxidation catalyst nonetheless are permitted at CO emission rates similar to those promised at facilities that do use a catalyst.

The stoker and fluidized bed categories are the types of boilers found in the permit database. There is a big difference in the new unit CO emission rates between stoker and fluidized bed boilers in the EPA's rule. The graph below suggests that the stokers with the very lowest CO rates do tend to be fluidized bed units. However, there are a number of BFB boilers that are permitted with CO emission rates considerably lower than the limit of 0.19 lb/MMBtu that the EPA has proposed. Further, while stoker units do appear to be using oxidation catalysts to achieve the lowest rates, there are some stokers that are not proposing to use oxidation catalysts that will achieve a CO rate comparable to a BFB. The bottom line: the EPA's new source performance standards for stokers and BFB's do not appear to represent anything close to the best/lowest rates.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we will not respond to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current

reconsideration. This comment provides a summary of permit information for biomass facilities compiled by the commenter.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 3

Comment: Since a residential boiler is defined as a boiler providing only comfort heat and/or hot water for up to four residential units, we believe a boiler providing comfort heat and/or hot water for an office, workroom, control room, or similar space of similar size should also be exempted. Such small boilers, whether firing gas or liquid, have miniscule emissions and there is no environmental or health basis for imposing any requirements on such small emission sources.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Boilers at residences were never listed as part of the industrial and commercial/institutional boilers source categories. The commenter does not claim the boilers discussed in the comment are not at industrial or commercial or institutional area sources. While it is possible to develop an infinite number of different subcategories of ICI boilers that could be considered insignificant by themselves relative to their contribution to the CAA §112(c)(3) inventory, we listed the ICI categories because collectively they emitted amounts needed to reach the 90% threshold of that provision.

MACT Floor Analysis Rationale: Use of UPL for setting CO emission limits

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 4

Comment: We do not agree with the justification to use a 99% confidence interval for consistency's sake. First, the EPA is not establishing CO CEMS-based emission limits in the Area Source Boiler Rule, it is only giving sources the option to comply with the stack test-based CO limits using a CO CEMS. Second, CO emissions have a much greater degree of variability than other pollutants and sources must certify compliance with the CO limit over all operating conditions except startup and shutdown; therefore, the EPA's CO MACT floor should account for variability to the maximum extent possible. The small amount of data used in the EPA's analysis are not representative of the range of expected operations and true variability that is expected from the best performers. The emissions data used to set the CO limit is based on stack testing performed during maximum load conditions, only providing a snapshot of the day-to-day

operations of each source. The reasons for using a 99.9% UPL for setting the CO MACT floor cited in the preamble to the March 2011 Major Source Boiler Rule remain valid:

“For CO, EPA considered several comments from industry and States, which provided both quantitative and qualitative comments on how CO emissions vary with load, fuel mixes and other routine operating conditions. After considering these comments EPA determined that a 99.9 percent confidence level for CO would better account for some of these fluctuations. While a good deal of CO data are available, at least for some of the subcategories, the data show highly variable emissions that can result from situations beyond the control of the operator, such as fuel moisture content after a rain event, elevated moisture in the air, and fuel feed issues or inconsistency in the fuel. The higher confidence level selected for CO is intended to reflect the high degree of variability in the emissions.” (76 FR 15628.)

Therefore, the EPA should retain the use of the 99.9% UPL for calculating CO limits.

Response: As explained in the December 23, 2011 proposal (76 FR 80537), the 99.9% confidence interval was used in the March 2011 final rule in part because the standards covered periods of startup and shutdown but the data did not reflect CO emissions during those periods. While we finalized work practice standards for startup and shutdown periods, we did not revisit the selection of the confidence interval due to time constraints. The EPA has decided to use a 99% confidence interval given that sources are not subject to the CO emission limit during periods of startup and shutdown. Use of a 99% confidence interval also maintains a consistent methodology with the development of the MACT floors for other pollutants. In addition, operation of a CO CEMS allows sources with existing CO CEMS equipment additional flexibility in meeting the requirements of the rule. The use of a 99% confidence interval is also consistent with that chosen for similar rules, including the Major Source Boiler Rule.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 33

Comment: ACC does not agree with the EPA’s rationale for reverting to a 99% confidence interval. The EPA states in the reconsideration proposal:

In the final rule, the EPA selected the use of a 99.9 percent confidence interval for calculating the MACT floor for CO emissions. A petitioner requested reconsideration of this selection given the fact that the EPA used a 99 percent confidence interval for all of the other emission limits in the final rule. The petitioner pointed out that if the data are highly variable, the 99 percent confidence interval should adequately reflect the variability of emissions as well as for the data sets for other pollutants. In the development of the final rule, the 99.9 percent confidence interval was selected in part because the standards covered periods of startup and shutdown, while the data did not reflect CO emissions during those periods. While the EPA finalized work practice standards for startup and shutdown periods, the selection of the confidence interval was not revisited due to time constraints. The EPA is now proposing to use a 99 percent confidence interval in order to

maintain a consistent methodology with the development of the MACT floors for other pollutants, and because optional CO CEMS-based limits are being proposed that would allow sources additional flexibility in meeting the requirements of the rule. (76 FR 80536.)

ACC does not agree that a 99% confidence interval must be used for the sake of consistency. Carbon monoxide emissions have a much greater degree of variability than other pollutants and a source must certify compliance with the CO limit under all operating conditions except startup and shutdown; therefore, the EPA's CO MACT floor should account for variability to the maximum extent possible. The small data set used in the EPA's analysis is not representative of the range of expected operations and variability that should be expected from even the best performers. The emissions data is based on stack testing performed during maximum steady state load conditions, only providing a snapshot of the day-to-day operations of each source. As shown below, the reasons for using a 99.9% UPL for setting the CO MACT floor cited in the preamble to the final Major Source Boiler Rule remain valid and the EPA should not adopt the 99% confidence interval to determine the UPL in the reconsidered final rule.

For CO, EPA considered several comments from industry and States, which provided both quantitative and qualitative comments on how CO emissions vary with load, fuel mixes and other routine operating conditions. After considering these comments EPA determined that a 99.9 percent confidence level for CO would better account for some of these fluctuations. While a good deal of CO data are available, at least for some of the subcategories, the data show highly variable emissions that can result from situations beyond the control of the operator, such as fuel moisture content after a rain event, elevated moisture in the air, and fuel feed issues or inconsistency in the fuel. The higher confidence level selected for CO is intended to reflect the high degree of variability in the emissions. (76 FR 15628.)

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 4.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 11

Comment: The EPA has studied its approved reference testing methods for years and has amassed significant information about the performance of those methods. Based on this body of knowledge, the EPA reports that, where the result of a test is near the detection level applied, most of its test procedures are accurate to within +/- 50%; at other times the EPA asserts that these tests are accurate to within +/- 15%. Monitoring devices, such as CO monitors, must meet stringent requirements for drift and must be calibrated to within 2% of the full scale value of the expected emission level of the unit. The paired testing data and other data in the record of this case show that, especially at the better performing sources, the variability in Hg and other specific pollutants is quite low. Similarly, years of testing of pollution control devices found in this sector, such as PM controls (fabric filters and ESPs), show highly consistent performance. Thus far, the EPA has not factored any of these facts into its determination of the performance of the best performing units.

In order to evaluate whether the EPA's procedure for calculating variability is appropriate, one first has to examine what "variability" the EPA is calculating and whether it is relevant under §112 or §129. The EPA's procedure involved determining the 99th percentile UPL of the difference in performance between all test runs for all units in the top 12%. This calculation improperly combines two factors: (1) the inter-unit difference between the "best performers" and "the best of the best performers" and (2) the expected variability in performance for each of the best-performing units. The EPA does not have the resources to evaluate each of these situations in detail to determine whether the difference represented inherent variability in performance of the unit or is a consequence of factors (such as fuel composition or specific hardware design) that are within the control of the source, and so it simply, and incorrectly, assumes that each of the units within the top 12% is identical and that all of the difference in performance is a "variability" in performance that is essentially random and therefore¹⁰ susceptible to statistical analysis. This can be addressed by normalizing the data so that one only examines the variability in performance.

Response: The EPA chose to address variability using a 99% confidence interval in order to maintain a consistent methodology with the development of the MACT floors for other pollutants, and because optional CO CEMS-based limits allow sources additional flexibility in meeting the rule requirements.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 21

Comment: The EPA has recommended the use of the 99th percentile UPL of pre-regulation testing and argued that its use is justified because the Agency adopted the same approach in the medical waste incinerator MACT rule. This rationale does not explain why the EPA believes the 99th percentile UPL is appropriate and not the 50th,¹⁵ 90th, or for that matter, the 99.99th percentile.¹⁶

The decision matters because with each increase in the "guaranteed" compliance margin, the standard increases, and there comes a point where the compliance margin is so great that sources can merely accept the risk of a failed compliance test rather than reduce emissions. If a source fails a compliance test it will ordinarily be afforded the opportunity for a retest and only if a source has a confirmed deficiency in its control equipment will a modification be ordered. We are unaware of any situation where a source that is willing to make such modifications as are necessary to meet an applicable limit has ever been ordered to permanently cease operation on the basis of a single failed stack test. In contrast, where an excessive compliance margin is provided emission standards can be ineffective.

The degree to which emission tests results can vary are not truly random, but are constrained by the laws of physics and chemistry and, in many instances, the performance of pollution control devices. The EPA's statistical analyses of the data show that, if the data were randomly distributed, there would be a substantial number of instances where emission rates are less than zero. We know that this is not possible and so the data are "skewed" to the right. One method

used by statisticians to adjust for this form of distribution is to assume what is known as a log-normal distribution. See Figure 1. With the assumption of a log-normal distribution, one then evaluates the distribution of the logarithm of the number rather than the number itself. The EPA has employed this method in a number of instances.

¹⁵ Civil enforcement of environmental standards is based on a "preponderance of the evidence," which merely requires that a violation be more likely than not (51st percentile).

¹⁶ Some in industry have argued that the levels should be set so that there is no significant probability that a facility would fail a compliance test at any point in its useful life.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1 excerpt 11.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 22

Comment: One feature of log-normal distributions is that they have "tails" that become very long as the variance increases. That is, the difference between the mean and the value that represents the 90th percentile probability is much greater where one assumes a log-normal distribution than otherwise. However, we know that the emission rate of specific pollutants, such as Hg, can never be larger than the amount of Hg in the fuel and that emission rates are also influenced by the operational characteristics of installed pollution control devices. Yet, the EPA's calculations routinely predict results that are inconsistent with these facts. They also lead to results, cited above, where the performance of the best performing unit is calculated to be worse than the average of the top 12% and where the calculated performance of the best units approximates the demonstrated performance of the worst units. These examples illustrate the point that in order to properly determine whether a particular statistical method is appropriate for a data set, one must determine whether the results of the method employed make sense. We submit that the EPA's decision to use the 99th percentile leads to unrealistically large calculated variations in performance of the best performing units, especially where the distribution is assumed to be log-normal and especially where the sample size is small so that relatively large variances are computed.

Fortunately, there are additional facts to help guide the EPA's determination of a standard compliance margin to be applied to all subcategories – the compliance obligations and testing conditions that are imposed by the standard. An equitable balance is struck when the same conditions used to establish the compliance margin are thereafter used to set the compliance obligation (and vice versa). If a source is required to be regularly tested under conditions that represent the 99th percentile "worst-case" conditions, then a 99th percentile compliance margin might well be appropriate. Additionally, a larger compliance margin is ordinarily appropriate for standards with short averaging periods and CEMS than for standards that have long averaging periods or where compliance is determined by scheduled stack tests conducted by the source.¹⁷ We also agree with the EPA that a larger compliance margin is warranted where the emission limit is at or near the detection limit of the reference method.

¹⁷ We do not intend to suggest that there is widespread cheating during compliance testing. Our point is that the source has substantial prior notice of such tests and is in control of the operating conditions during the test.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1 excerpt 11.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 23

Comment: The EPA observes that standards are to be complied with "at all times," but this is a truism that is not particularly helpful.¹⁸ What are helpful are the provisions in the rules that set out the conditions under which compliance will be determined. In years past, facilities were to be tested under "reasonable worst case conditions." Today, that standard has been reduced to "representative" conditions – a phrase that suggests that a compliance margin based on a 99th percentile projection¹⁹ of possible emissions may be too large and that industry projections of severe test conditions may be overstated. Moreover, the structure of the compliance obligations itself suggests that the 99th percentile may be too stringent. The following factors, among others set out in the proposed rules, bear on a determination of the appropriate compliance margin:

1. For sources that intend to comply with Hg and HCl fuel sampling, the rules require that a source conduct a stack test and demonstrate compliance using 90th percentile worst-case fuel (employing Student's t-test to determine that percentile);
2. For other purposes (e.g., PM and CO compliance), the source may select a "representative" operating condition (suggesting that neither a 90th percentile nor a 99th percentile worst-case test is required for these pollutants);
3. A source whose emissions during a test are less than 75% of the applicable limit is entitled to a reduced frequency of stack testing (suggesting that the EPA does not really believe that replicate testing of sources will vary by more than 33%);
4. Parametric operating limits may not generally be less effective than demonstrated during the stack test (a useful provision, but also one that suggests that the EPA believes that in-use emissions variability is zero);
5. Many of the applicable standards and other requirements contain exclusions from full compliance at all times (e.g., six-minute exclusion under opacity requirements, 5% exclusion for bag leak detection systems);
6. Power (voltage or amperage) to ESPs may not fall to less than 90% of that employed during a stack test²⁰ (for which we can think of no justification); and
7. Parametric limits are allowed to be based on the lowest (least effective) hourly parameters of the three runs of the compliance test. On its face this will not lead to compliance since it will be

less than the average flow rate during the test. Moreover, such parametric limits do not provide any allowance for the variations employed in setting the standard. The EPA should provide that the operating parameters be set at the levels employed during the test run that yielded the lowest emission rate, plus some additional margin to account for in-use variability.

¹⁸ The EPA also asserts that the failure of a compliance test is not a violation of a standard until and unless some governmental authority agrees. We understand the reference in the context of the annual certification of compliance (where the EPA does not intend sources to have to "confess" to a violation of law), but not otherwise.

¹⁹ We understand that a 99th percentile UPL is not precisely the same as a 99th percentile worst-case condition, but the differences are extremely subtle.

²⁰ If power to the ESP falls below that employed during the test, PM control efficiency would be reduced. The amount of this reduction is presumably unit-specific and so we can think of no justification for this provision.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1 excerpt 11.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 15

Comment: A new emissions limit calculation in the proposed reconsidered Area Source Boilers Rule demonstrates the arbitrariness of the EPA's MACT floor approach. With respect to CO emissions from existing coal-fired boilers, the EPA eliminated certain emissions data from its MACT floor calculations after discovering flaws in that data. (76 FR 80532, 80537/1.) The EPA did not seek to replace this discarded data with accurate data. The result, since the EPA's approach yields higher MACT floors when less data is available, is that the emissions limit will now be substantially higher. The increase from the elimination of just two data points more than offsets a downward adjustment to the UPL. The EPA should not employ a MACT floor approach that yields higher emissions limits when less data is available. Doing so is arbitrary and unlawful. But if the EPA persists in this approach, it must gather more data to replace discarded data rather than increase emissions limits for this reason alone.

Response: EPA reasonably applied the emissions data it had in developing the MACT floor for CO for existing area source coal-fired boilers. The commenter is correct that the Agency did not incorporate into its analysis two data points submitted by the Saint Gobain facility, which appear to have been conducted approximately one year apart. It is not apparent from the information provided to the Agency whether each data point represents a single test run that comprised the entirety of the emission test or whether each data point is the average of three test runs. More importantly, it is also not apparent whether the data were generated using the appropriate test method. Further, we have no supporting documentation as to the validity/accuracy of the two data points because we did not receive a signed, certified stack test report with the information. Because we cannot confirm that the two data points were derived using appropriate test methods

and we have no associated test reports to review, we did not include the two data points in the MACT floor calculation. The MACT floor calculation includes data on the two best performing sources that we identified based on the data in the record. Each unit in the floor had three test runs for evaluation and as such the calculation resulted in a total of six data points being evaluated.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 10

Comment: PA DEP agrees that use of the 99% confidence level in setting the CO emission limit ensures that the same approach is used consistently for the development of the MACT floors for all pollutants. However, the EPA excluded the data from a boiler which had completed only two test runs, instead of the requisite three test runs, for measuring CO emissions. Based on the results of the 99% confidence level re-analysis of the data (excluding two test runs for the boiler), the EPA has proposed to increase the CO emission limit for new and existing coal-fired boilers from 400 ppm, corrected to 3% O₂, to 420 ppm, corrected to 3% O₂. This outcome casts doubt on the validity of the EPA's final analysis of the data set (minus the two test runs) in setting the MACT floor for CO. Therefore, we recommend that the EPA re-analyze the data set and document the rationale for excluding the data from two test runs. If the variability between the two test runs is not significant, the EPA should include the data from these runs in the analysis, especially when the data set for establishing the MACT floor for CO is very limited.

Response: See the response to EPA-HQ-OAR-2006-0790-2473-A2, excerpt 15.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 32

Comment: The EPA is proposing to amend the CO emission limit for new and existing coal-fired boilers from 400 ppm by volume on a dry basis, corrected to 3% O₂, to 420 ppm by volume on a dry basis, corrected to 3% O₂. (76 FR 80536.) This change has occurred for the following reasons:

- The EPA is proposing to remove the test data from the CO MACT floor analysis from a boiler for which only two test runs were completed.
- The EPA is proposing to revise the CO MACT floor analysis to use a 99% confidence interval as opposed to a 99.9% confidence interval to determine the UPL.

ACC supports the EPA's decision to re-evaluate the CO emission limit based on the best available data. ACC agrees with the EPA's rationale to remove the data for the boiler with only

two test runs as the required number of test runs for demonstrating compliance is three, and the EPA should include data that best demonstrate variability.

Response: See the response to EPA-HQ-OAR-2006-0790-2473-A2, excerpt 15.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 17

Comment: As a practical matter, the EPA's inconsistent approach to identifying the best sources and measuring these sources' performance substantially decreases the protectiveness of its standards. By using different methods to identify sources as best performing on the one hand and to estimate these sources' performance on the other, the EPA selects sources with relatively high variation as the "best" – even though these sources would not be labeled best if the Agency ranked them under its own approach to measuring performance. Next, the EPA uses that variability of performance in the sources it picked as best – sources that necessarily have higher variability in performance than do the sources that would be "best" under the Agency's own approach to measuring performance – to inflate the floors. If the EPA used a consistent approach to identifying the best sources and to estimating these sources' performance, the standards would be far more protective. If the EPA selected as best the sources with the single lowest emission test and then – consistent with that approach – also measured sources' performance based on their single lowest emissions test, its standards would be far more protective. Likewise, if the EPA identified the best sources based on its statistical analysis of all their emissions tests and – consistent with that approach – measured their performance the same way, its standards would be far more protective. Only by changing its measurement approach part way through the floor setting process does the Agency arrive at floors that so greatly exceed the actual performance of the relevant best sources.

Response: The EPA disagrees with the commenter that the single lowest emission test should be used to evaluate/identify the best performing unit(s). Multiple test runs are required under EPA's test methods because a single test run does not adequately predict the average performance of an emission unit. The EPA considers the average of the test runs to be a predictor of the performance of the unit. For development of the MACT standard, the overall variability for all units identified as best performing is considered to be representative of the industry data set.

MACT Floor Analysis: Out of Scope

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 5

Comment: No single factor is responsible for the EPA overestimates. In its comments on the 2010 proposal for this sector, NACAA identified several errors in the proposed EPA calculation methodology, including:

- use of inconsistent definitions of "best performing unit";
- use of the UPL statistical approach for units that are not expected under §112 to currently meet a MACT floor, especially in data sets with small numbers of test results;
- treatment of "BDL" emission test results; and
- creation of large numbers of subcategories with limited numbers of emission test results.

Response: As stated in the Preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 10

Comment: In response to comments on the 2010 rule, the EPA adopted a different approach for calculating the UPL to provide for calculation of the "pooled" variability of units in a subcategory, rather than the simple variability of those units. On the basis of this change and without additional notice to interested parties, the EPA then adopted MACT floors that were significantly different from those in the 2010 proposal. On reconsideration, the EPA proposes to use the same procedure as in the final rule. The EPA's misapplication of this new technique leads it to calculate Hg MACT floors for existing oil-fired units that are seven times higher (less stringent) than would have occurred under the 2010 approach and far more lenient than the underlying data would suggest. The EPA states that it is seeking public comment only on the issues specifically identified in its 64-page list of proposed changes and that it will not respond to any comments addressing other aspects of the final rule or any other related rulemakings. However, the EPA also argues that the changes it is proposing are so comprehensive that it should provide a new 3-year compliance period for all sources. While we agree that certain issues, such as "risk-based exemptions," need not be revisited, interested parties have not had an opportunity to comment on the EPA's change in procedure. We think it is unwise for the EPA to suggest that it will not consider any and all comments related to the substance of the rulemaking.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, statistical methods for calculating the MACT floor levels

have not changed since publication of the final rule in March 2011. Comments raised concerning statistical methods were addressed in the preamble and response to comment document for the March 2011 final rule. The commenter is incorrect with respect to the statement regarding Hg MACT floors for existing oil-fired units. MACT-based Hg standards for oil-fired boilers were not included in the June 2010 proposal or the March 2011 final rule. In addition, we would like to point out that a new 3-year compliance period is not being provided.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 17

Comment: EPA Failed to Consider Malfunctions in Establishing MACT Numeric Emission Standards for Hg and CO

Under CAA §112(d)(2), MACT emission standards must be “achievable.” Moreover, when the EPA establishes emission standards for existing sources based on the “best performing 12% of units in the category” (the “MACT floor”), those emission standards must on average be “achieved” by the best performers. (See §112(d)(3).) If the EPA is going to require sources to meet a numeric standard at “all times” then the Agency must demonstrate that the standard accommodates the variability in emissions experienced, i.e., “achieved”, by best performing sources “at all times,” which would have to take into account, among other things, a potential malfunction.

Based on our review of documents in the docket for this rulemaking it appears that the EPA did not consider any data identifying the level of Hg or CO emissions that may result when a best performing source experiences a malfunction. The EPA therefore has failed to show that the Hg and CO emission levels that apply at all times reflect the reductions that are “achieved” by best performing sources during a malfunction.

Despite the fact that the EPA historically has recognized the inherent limits of technology based standards in promulgating standards under both the CAA and the Clean Water Act, in this rule the EPA chooses to ignore the fact that, despite owners’/operators’ best efforts, technology sometimes fails and that even a best performing source could experience a malfunction. Because the EPA failed to consider the level of emissions that may result from a malfunction and incorporate that consideration in the numeric standard for Hg and CO, emission standards that apply at all times, the EPA’s actions are arbitrary and capricious and not in accordance with law.

Furthermore, the EPA’s failure to establish emissions standards consistent with §112 of the CAA also raises the issue of denial of due process. By establishing standards that are not attainable “at all times”, the EPA is subjecting roughly 183,000 area sources to potential penalties and worse for failing to comply with numeric emission standards that are unattainable during a malfunction.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 15

Comment: PA DEP recommends that the EPA re-analyze the data used to establish the MACT floor for CO.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that the EPA reviewed the data used to calculate the MACT floors prior to the December 2011 proposal. Changes to limits for CO were made accordingly.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 4

Comment: Where the EPA has data from testing at levels of precision sufficient to determine the actual variation in performance of a reasonably significant number of units, and where the Agency's approach to identifying the "best performing units" does not skew the results too significantly, the resulting calculations lead to proposed limits that would lead to significant emission reductions from some of the highly polluting subcategories. However, where these factors are not present, the EPA's procedures and assumptions lead to gross overestimates of the variability in performance of the best performing units and proposed emission limits that are higher than current emissions. Such limits simply create testing and paperwork burdens without providing any public health benefit. Moreover, these limits clearly do not meet the requirements of §112 and are likely to lead to additional litigation that delays reduction in HAP emissions from the entire sector.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 3

Comment: In light of the significant errors related to variability, NACAA strongly recommends that the EPA revisit each of its MACT floor calculations, especially where the proposed floor is so lenient that a large majority of existing sources already meet the limit. We believe the EPA has sufficient information available to correct the errors in its current proposal and issue a final rule on reconsideration in the next few months.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 11

Comment: In the reconsideration of the Boiler Rules, the EPA has failed to introduce standards that sufficiently take into account the inherent variability in operations. Variability is a known part of operations at facilities with industrial boilers. While the utilization of the UPL does allow for some variability based on stack tests, there are meaningful differences between the results of stack tests, which are conducted at full-load, steady-state operations and real-world operations where fluctuations in operational conditions are the norm. The emission limits in the Boiler Rules consider testing variability but do not reflect operational variability. The D.C. Circuit has held that variability, particularly in emission controls, must be accounted for when setting MACT standards.¹¹ According to the D.C. Circuit, the CAA’s statutory requirements for setting the MACT floor authorize the EPA to set a standard which reflects what the best performing units can achieve under “the worst reasonably foreseeable circumstances.”¹² To account for the worst reasonably foreseeable circumstances, the EPA is required to estimate the variability associated with all factors that impact a source’s emissions, including operational and fuel factors.¹³

USBSA supports the EPA’s exercise of discretion to account for variability in the standard but recommends that the emission limits also reflect operational and fuel variability in addition to the UPL. The EPA properly chose to consider variability in its setting of the MACT floor but did not consider all the sources of operational variability that could be reflected in the standards. The EPA should include these other factors to develop more achievable standards.

¹¹ See *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855 (D.C. Cir. 2001).

¹² *Sierra Club v. EPA*, 167 F.3d 658, 665 (D.C. Cir. 1999).

¹³ *Nat’l Lime Ass’n v. EPA*, 627 F.2d 416, 443 (D.C. Cir. 1980).

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 15

Comment: More than any other factor, the EPA’s definition of “Best Performing Unit” leads to overestimates of performance of the best performing units. It creates a situation where units with high UPLs are designated as “best performing units” and displace better performing units in the “top 12 percent” category. The EPA is obliged to base the existing source MACT floor on the

performance of the “best performing units” and has offered no plausible explanation for its decision.

The EPA has used two (or three) different methods for establishing the “performance” of the average of the best-performing 12%. In selecting the units to be included in the top 12%, the EPA assumed that the performance of those units was demonstrated by the best test result. Thereafter, in calculating the average of the selected units, the EPA assumes that the performance of a selected unit is defined by all test results⁶ available for that unit. The EPA then multiplies these results by a fuel variability factor to establish the final number that it uses to calculate the floor. This fuel variability factor is also different for different units, and so, again, the unit with the lowest single test result is not necessarily the “best performer” as used in the EPA’s calculations.

NACAA believes that the EPA should use either the best test result for both purposes or use the best average of all test results for both purposes. This use of inconsistent definitions of performance has resulted in at least one MACT floor that is higher than it should be, as units with better average performance over all tests were excluded in favor of other units with a lower individual test result but higher overall emissions. We also believe that use of the average of all test results for an individual unit is an appropriate measure of the performance of that unit, provided that the subsequent analysis of variability does not then treat that average as a single test result. One way to address this issue may be to use the average of all test results to identify the best performing units in the calculation of the average of the top 12%, but then include all test results of the “best performers” in the determination of the potential variability of that average.⁷ The identification of the “best performers” should take place after all of the variability adjustments have been made to the universe of “candidate best performers.” In this way the MACT floor would not be artificially increased by the use of data from sources that are ultimately not the best performers within a subcategory.

⁶ The EPA includes all test results of “best performers” in its calculation of the MACT floor for each subcategory. This effectively over weights the contribution of sources that have been tested multiple times compared to those that may have been tested only once.

⁷ This is not the same as using the 99th percentile UPL of the individual runs as a factor to multiply the average.

Response: See the responses to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10, and EPA-HQ-OAR-2006-0790- 2450-A1, excerpt 11.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 14

Comment: The EPA may not simply assume that the best performing sources have highly variable emissions. As the D.C. Circuit has instructed, the EPA must point to substantial record evidence “that the best performing sources ever experience a wide range of variability at all.”

Sierra Club v. EPA, 479 F.3d 875, 881 (D.C. Cir. 2007) (quoting *Cement Kiln Recycling Coal. v. E.P.A.*, 255 F.3d 855, 865 (D.C. Cir. 2001)). The EPA must base its conclusions about variability on substantial evidence, not assumptions. Because the EPA’s statistical approach to variability is arbitrary and unlawful, the EPA should instead set MACT floors at the level of emissions reflected in the data that the EPA has.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 16

Comment: In the development of the 2004 rule for this sector, the EPA determined the base performance level of the median unit in the top 12% and then applied a variability factor that was calculated on the average of the variance in performance for all units with similar pollution technologies. The U.S. Court of Appeals determined that the EPA’s method for identifying the base performance level was inappropriate, but did not opine on the method for determining the variability factor.⁸ In developing the 2010 final rule, the EPA attempted to calculate the anticipated variation in performance of each of the units in its “best performing” group on an individual unit or subcategory basis. Rather than simply determining the variance in performance, the EPA chose to calculate the UPL of the best performing units, that is, the emission level that each unit in the top 12% could be expected to meet at a 99th percentile confidence level. The EPA’s procedure also errs by attempting to determine the emission level that the bottom half of the top 12% will meet 99% of the time. However, the EPA should not expect these units to meet the MACT floor limit since nominally half of the top 12% do not meet the average and therefore are not complying units.⁹ The development of a compliance margin should be limited to an evaluation of the variability of the top 6% performing units under the compliance conditions imposed by the regulation.

⁸ It did agree that the EPA could apply a variability factor to take into account expected variation in performance of such units.

⁹ Those units in the top 12%, but with emission levels greater than the average of the top 12% (i.e., the 6th through 12th percent best performers), do not “comply.”

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 1

Comment: Under §§112(d)(2) and 129(a)(2) of the CAA, emission limits for existing sources must reflect the maximum degree of reduction in emissions that the EPA Administrator

determines is feasible (Maximum Achievable Control Technology or “MACT”) **and** shall not be less stringent than the average emission limitation achieved by the best performing 12% of sources (for which the Administrator has emissions information) (the “MACT floor”). The EPA concludes that recent court decisions require that (a) floors for existing sources must reflect the average emission limitation achieved by the best-performing 12% of existing sources; (b) a MACT floor cannot be “no control”; (c) the EPA cannot ignore non-technology factors that reduce HAP emissions and (d) the levels of HAPs in fuels consumed by sources must be reflected in the MACT floor determination.¹

¹ A source that is a low emitter because of low levels of HAP in its fuel can still be a “best performer” whose emission levels are part of the “average of the best performing 12 percent.”

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 2

Comment: The EPA has proposed to use an array of calculations, adjustments and defaults to determine the new and existing MACT floors and has provided most of the calculations underlying its proposed floors. Our review of the detailed calculation process leads us to conclude that the EPA’s approach is flawed in several significant respects and in almost every instance overstates the variability in emissions performance that is shown in the EPA’s data set and other readily available information. These inflated calculations have resulted in the establishment of excessively lenient MACT floors. Ironically, for a few subcategories, the EPA inexplicably failed to provide any allowance for variability or arbitrarily assigned a variability that is far too low to account for expected operational differences in performance over time.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 14

Comment: The following discussion sets out our best understanding of the relative impacts of several EPA choices on the overall effectiveness of the resulting MACT floor for other subcategories. We have included herein and attached as Appendix 1 a series of charts setting out the EPA’s test data as provided as appendices to its MACT floor memo for each unit, along with the EPA’s proposed limit for the applicable subcategory. These charts provide a basis for the assessment of the effectiveness of the proposed limit. The EPA’s appendices included only the “lowest test result” for a given unit rather than all test results. In most instances, the difference in effectiveness is minimal, as most sources were only tested once, so the “lowest test result” is also the highest test result. Where a significant number of units were subjected to more than one test,

we have also produced a chart including all test results for the top 12% to assist in gauging the effectiveness of the proposed limit. We encourage the EPA to produce similar charts, including all test results, for all units for the rules it ultimately adopts.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 17

Comment: The first step in any scientifically sound measurement process is to ensure that the procedures employed are sufficiently precise to determine meaningful differences. In response to questions from industry as to whether they should extend sampling periods to ensure more precise results, the EPA advised them that they did not need to and that the Agency would address it the final rulemaking. The EPA defines the method detection limit as, "the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte." Where the "adjusted" average emissions of the top 12% is "near" the method detection level, the EPA now proposes¹⁰ to increase the calculated average so that the floor is not less than 300% of the detection level. To justify this increase the EPA observes that when measurements are near the detection level the measurement uncertainty can be as high as (+/-) 40%, while such uncertainty is reduced to (+/-) 15% if the measured value is three times (300%) the detection level. However, since such measurement uncertainties are necessarily part of the overall variability determined in step one of the EPA's procedure, there is no need or basis to substitute this arbitrary figure for the actual emission data that the statute requires be used. Additionally, it also makes no technical sense to introduce a known error of 300% in the MACT floor in order to avoid a possible error of 25%¹¹ in any individual measurement. This step constitutes yet one more bias in favor of allowing higher levels of HAP emissions. In this rulemaking the EPA proposes to compound this error by "adjusting" the detection level reported by the laboratory in accordance with established protocols, even where the EPA has no information that the detection levels reported by the laboratory are incorrect.

¹⁰ The EPA employed this technique in the Cement Kiln NSPS Rule.

¹¹ This is the difference between the potential error at the detection level and that at three times the detection level.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 20

Comment: The EPA has the means to objectively evaluate requests for subcategories and should do so for all subcategories incorporated in its rule. It should determine through the use of statistical techniques, such as a t-test of significance, that the emissions performance of each proposed subcategory is in fact significantly different from the broader category or subcategory of which it is a member. If a significant difference is shown, the EPA should determine whether the difference is a function of the design of the combustion unit itself or is related to the prevalence of post-combustion controls that can be employed throughout the category. Where the EPA determines that the emissions performance of the proposed subcategory is, in fact, significantly different from the broader category and is associated with the design of the combustion chamber itself, rather than post-combustion controls, the EPA should compute the arithmetic average of the best performing unit(s). However, unless the proposed subcategory has sufficient data (nominally 50 data points) upon which to determine the variability of performance, the EPA should apply the variability factor from the broader category to the arithmetic average of the best source(s) in the new subcategory. Where the EPA did not collect emissions data from a representative sample of all units within a proposed subcategory, the EPA has no basis to assume that any particular unit is in the top 12% of that subcategory. It is therefore insufficient to establish a subcategory on the basis that a particular unit's emissions are greater than the top 12% of the broader category.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 27

Comment: In the absence of sufficient data to make determinations of the variability of individual units and subcategories with limited data, the EPA should develop a reasonable compliance margin to apply to the best-complying sources. The underlying issues are sufficiently complex that, in the absence of truly comprehensive data, no single analysis will likely prove to be dispositive. For this reason we recommend that the EPA perform a series of analyses and examine the central tendency of the results of those analyses. From these results the EPA can establish one or more default variability factors to apply where the limited number of test results affects the calculation of variability in a given subcategory. One such group of analyses, but by no means the only approach that could prove useful, is to start with the most comprehensive data set to determine a broad "default" variability factor and examine more specific data sets to determine whether a more limited variability factor can be assigned based on the data available.²⁷ Such an approach could proceed as follows:

- Commence the process by identifying all units that may reasonably be found to be in the top 12%. This might include the top 25 – 33% of units based on their mean test result and all units whose mean test emissions are within an order of magnitude of the best performing unit.
- Calculate the nominal "performance" of each unit; by summing the mean and one standard deviation²⁸ of the unit specific data.

- Average the performance of the top performing 12%, understanding that this is likely an overestimate, based on the low number of test runs for most units.

Since this approach is likely to overestimate the variability to some degree, the results of the first assessment should be considered an upper bound of potential MACT floors. The EPA should then look to see if the variability of the broad group is less than that calculated above.

- Using the pool of "best performers" identified above, normalize the emission test results for all sources for which the EPA has data, including those not in the top 12% and determine the average variability in the performance for the broad group. The EPA could accomplish this by dividing the variance for each unit by the mean of the data for that unit and average the results, not the UPL. It has been argued that sources in the top 12% have less variability than the population at large and so this variance should be considered to represent an upper bound of a permissible variance.

- Repeat the above-described analyses for the three basic subgroups – solid, liquid and gas.

This then would form a second set of possible default variability factors for the subgroups for which sufficient data are available. Since there are more tests available for the entire liquid-fired set of units, it may prove possible to develop a separate variability factor for liquid-fired units, which, while likely larger than that for the best performing units, is more accurate than that based on limited data for the best performing units.

- Repeat the above-described analyses using data for the top best-performing, 50%, 25%, 12% and 6% of the basic subgroups. Employ these results if the average variance is less than that for the larger group or if it can be established that the calculated increase in variance is due to differences in performance and not the consequence of the reduced sample size. Iteration in this fashion should identify a point where the reduction in sample size outweighs the improvements normally expected from better performing units.
- For purposes of determining the arithmetic average, results reported at a detection limit should be employed as recorded, however, for purposes of determining variance such results should be excluded as they artificially reduce the variance.
- For purposes of determining the arithmetic average of the best performing top 12%, all test results should be employed to identify the best performers, not the best single result. This will increase the arithmetic average, but is a more reasonable estimate of the performance of units with multiple tests than the lowest single result currently employed by the EPA.
- Once the variance of the data has been determined, it should be applied to the arithmetic average of the top 12%, not to any unit in the data set. Consistent with most of the enforcement expectations, we recommend that it be applied at the 90th percentile level.
- For those subcategories where the data are sufficiently robust, a variability factor specific to the subcategory may be applied; for all others the applicable MACT floor would be the

arithmetic average of the data for the subcategory, as adjusted by the applicable default variability factor.

- Where a source or group of sources wishes to maintain that a different variability factor should apply, those parties should be responsible for providing sufficient data to develop a factor that is not dominated by the paucity of data.
- Additionally, the EPA could determine the "normalized" variance for each unit where more than a certain number of tests (perhaps 10) are available and average those values.

The EPA should examine the performance of similar units in the EGU sector and other sectors and review relevant BACT and lowest achievable emissions rate (LAER) determinations. The EPA should also examine the overall distribution of the data set at issue to determine a reasonable variability factor. Where there are a large number of units with similar emission levels, a large variability adjustment should not be applied.

Where the EPA determines that a source category's emissions are highly variable over a short period (e.g., CO), the EPA should consider longer averaging periods, such as 30-day rolling averages, that reflect and accommodate this form of variability, while still preserving the environmental benefits the CAA contemplates. However, under no circumstances should 30-day CEMS-based limits be higher than the corresponding reference method (3-hour) limit.

²⁷ We have not conducted these sorts of analyses and have no way of anticipating their results.

²⁸ It may be more appropriate to use Student's t-test at a similar level of confidence.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 30

Comment: The EPA's approach to "rounding" introduces an additional inappropriate bias to the calculation of MACT floors and should be revised to reflect technically correct rounding procedures and the requirements of the statute. In the calculation of the MACT floor, such as the application of calculated UPLs, the EPA "rounded" the interim values and in each such instance rounded the values up. In most engineering calculations, rounding protocols provide for rounding down as well as up. Rounding ordinarily includes truncating the number of significant digits that are employed in a calculation and occurs at the end of the calculation process. The EPA justifies its decision to only round up by asserting that to do otherwise would deprive sources of the "variability" cushion they were otherwise entitled to. Again, this argument ignores the public interest in reducing emissions of HAP, as well as normal engineering protocols. It would also seem to be contrary to written EPA policy concerning rounding for NSPS compliance purposes.³⁶ This policy, which has not been revised to our knowledge, adopts American Society for Testing and Materials (ASTM) standard rounding protocols – carry at least five significant

digits throughout all intermediate calculations and employ ASTM Procedure E 380 (round down if less than 5; round up if greater than 5) for the final calculation. Where a MACT floor would otherwise be calculated at 2.27, it would seem that "rounding" a final standard to 3.00 would be technically unjustifiable and would not comply with the requirement of §112 that the MACT standard be not less stringent than the average of the top 12%.

³⁶ See, "Memorandum: Performance Test Calculation Guidelines", William Laxton, OAQPS, and John Seitz, OAQPS.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 45

Comment: NACAA believes that the EPA's proposal to establish emission limits to two significant digits is a step in the right direction, but recommends that those limits be set to three significant digits. No reason has been advanced by the EPA for not doing so.

Response: See the response to EPA-HQ-OAR-2006-0790-2455-A1, excerpt 10.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 34

Comment: MACT Limits for Similar Units Should be Consistent

New and modified sources subject to §165 of the CAA must install BACT for a number of criteria pollutants regulated under the CAA, including, as relevant here, CO, SO₂, NO_x and Hg. In the proposed rules the EPA is setting limits for certain pollutants based on the application of "the maximum achievable control technology." There is nothing in the plain text of the CAA or its legislative history that suggests that Congress intended MACT, which applies to emissions of highly toxic and carcinogenic pollutants, to be less stringent than BACT, which applies to criteria pollutants. Indeed, for new sources it is clear that Congress intended MACT³⁹ to be at least as stringent as LAER, which is generally recognized as being more stringent than BACT.

Regulatory authorities are to consider costs when establishing both BACT and MACT limitations that are more stringent than the MACT floor. There is nothing in the CAA that speaks to how the EPA and permitting authorities must weigh costs against other considerations in establishing BACT. However, there has been a substantial body of precedent that speaks to this issue. In contrast, in establishing a requirement for a MACT floor, Congress effectively set a floor on what should be considered reasonable costs for MACT control technologies. Since MACT may be no less stringent than the performance level of the best-performing 12%, the

costs to those sources of achieving that level of performance (including the worst-performing unit within a subcategory) must be within what was considered to be appropriate for MACT sources in that subcategory. This is of particular relevance to the set of rules under consideration, where the cost of control for similarly situated units is essentially the same but the calculated MACT floors are substantially different.

In its MACT determinations the EPA needs to explain how an emission limit imposed for a unit subject to §129 (and therefore presumably meeting the reasonable cost test for MACT) is not reasonable for an identical unit subject to §112.

If the PM and Hg limits remain roughly as proposed for existing sources,⁴⁰ few sources will desire to be regulated under §129. Most sources will argue that they get a "meaningful" contribution to the overall combustion process from what they burn. This will increase the level of disagreement over whether a material is a waste and may result in fewer sources burning waste materials. Some sources (with low CO levels) might find it in their interests to assert that they are incinerators rather than energy recovery units. Thus, the definitions of "solid waste" and "incinerator" may matter to a number of sources.

The EPA should also consider its proposed MACT rules in light of BACT determinations for similarly situated units and explain why emission limitations deemed "available" as BACT are orders of magnitude more stringent than the ("maximum achievable") MACT standards. A review of the EPA's reasonably available control technology (RACT)/BACT/LAER clearinghouse reveals a number of BACT decisions for cement kilns that are far more stringent than the EPA's proposed limits.⁴¹ In addition, the EPA's control technologies guidelines for cement kilns,⁴² published under §108 of the CAA, document the existence of cost-effective retrofit technologies available for control of SO₂ and NO_x in cement kilns. The EPA seems to assume either that there are no cost-effective controls for these pollutants at cement kilns or that the CAA does not require MACT limits to be based on these controls. The EPA should explain its rationale in greater detail and set forth a basis for any final decision it makes. The EPA should review each of its proposed MACT limits to ensure that they reflect the application of maximum achievable technology, not merely the MACT floor. In addition, it would seem that MACT should be more stringent than either GACT or BACT. Accordingly, MACT limits for cement kilns for SO₂ and NO_x should be at least as stringent as BACT limits for such units.

Moreover, the performance demonstrated by the best performing units suggests that existing sources, if equipped with MACT level technology, would be capable of far better performance than suggested by the EPA's rules. Similarly, we note the very significant differences in the MACT limit that the EPA applies to smaller units at area sources compared to similar units at major sources. Since the MACT limits for those units are presumed to meet the statutory effectiveness tests for MACT controls, unless the cost per ton for similar units at area sources is substantially different it would seem that the test is met at those sources as well.

³⁹ The MACT floor definition is essentially the same as the definition of LAER, which applies to new and modified sources in nonattainment areas.

⁴⁰ NO_x and SO₂ limitations under §129 may also discourage combustion of solid waste. This issue can be addressed by the EPA when it adopts emission limitations for large industrial units under Phase II of its Transport Rules.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 13

Comment: The proposed MACT standards for industrial boilers and process heaters are based on pollutant-by-pollutant analyses that rely on a different set of best performing sources for each separate HAP standard. (*See, e.g.*, 76 FR 15621-23.) In other words, the EPA "cherry picked" the best data in setting each standard, without regard for the sources from which the data came. This approach violates the language of §112, which is focused on the performance of "sources," and produces arbitrary and capricious standards.

The statute unambiguously directs the EPA to set standards based on the overall performance of "sources."⁸ Sections 112(d)(1), (2), and (3) specify that emissions standards must be established based on the performance of "sources" "in practice" for the category or subcategory and that the EPA's discretion in setting standards for such units is limited to distinguishing among classes, types, and sizes of sources. In particular, §112(d)(3) emphasizes that the EPA must focus on what emissions reductions are achievable "in practice" for a "source," using the word "source" no fewer than nine times.

These provisions make clear that standards must be based on actual sources, and cannot be the product of pollutant-by-pollutant parsing which results in a set of composite standards that do not necessarily reflect the overall performance of any actual source. Congress provided express limits on the EPA's authority to parse units and sources for purposes of setting standards under §112 and that express authority *does not* allow the EPA to "distinguish" units and sources by individual pollutant as is proposed in this rule. *Sierra Club v. EPA*, 551 F.3d 1019, 1028 (D.C. Cir. 2008) (noting statutory limitations on the EPA's authority to distinguish sources).

⁸ In the proposed CISWI Rule, the EPA similarly failed to follow the statutory mandate under §129 to examine the performance of "units." For the reasons discussed above, the CISWI standards must be based on actual sources ("units"), and cannot be the product of pollutant-by-pollutant parsing.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is

not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 12

Comment: The EPA set individual limits for each HAP that reflect the best performing source only for that individual HAP. The EPA then combined the HAP limits into a suite of emissions standards for each subcategory. This methodology results in a combined set of standards reflecting purely hypothetical boilers that have never actually been achieved by any single, real world source, and possibly never will. Creating hypothetical "best performing" units that demand compliance with emission standards not achieved by any actual source in a subcategory (let alone the necessary 12% of sources for a true floor) is arbitrary and capricious and violates the EPA's statutory obligation to establish limits that are based on actual the performance of "sources."

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 14

Comment: The EPA has calculated its proposed MACT floors solely on the basis of emission data. The EPA utterly ignored the plain mandate of the CAA by entirely neglecting to determine whether there was emission control equipment in use in each subcategory that could actually achieve those inordinately strict emission limits, a critical and necessary analysis required by the CAA.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 15

Comment: The EPA's focus on individual HAPs has resulted in a failure to recognize the critical interplay between emissions controls and emissions of other pollutants. For example, the NAM is concerned that the controls necessary to meet the stringent emissions limitations for CO will result in increased energy usage, with the concomitant increase in emissions of NOx and other pollutants. Further, the EPA failed to account for this interrelationship in its economic analysis.

Response: As stated in the preamble for the proposed reconsideration of the final rule, dated December 23, 2011, we are not obligated to respond on the merits to comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Beyond-the-Floor Energy Assessment: Scope

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 8

Comment: The EPA notes that the U.S. DOE has done energy assessments and discovered that some facilities can reduce energy use by 10-15%. The requirement of an energy assessment partially solves this problem. While somewhat controversial, Professor Michael Porter and others have argued that certain types of regulations can have negative costs, by forcing firms to rethink their production processes. In this case, the energy assessment requirement will provide each regulated entity with information it did not have before. New and better information can help overcome organizational inertia by giving evidence of cost-savings. A mandatory energy assessment, rather than a voluntary program, can be justified due to persistent barriers to the voluntary pursuit of energy efficiency—lack of information, lack of attention and salience, prioritization, and so forth.

Response: The EPA thanks the commenter for their support.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 9

Comment: The energy assessment requirement is a cost-benefit justified regulation even if implementation of identified conservation measures is not mandatory. Armed with better information and focused attention thanks to an energy audit, regulated sources will be better able to take advantage of opportunities with significant private financial benefits, not to mention the environmental and health benefits from cutting energy use and associated pollution.

Response: The EPA thanks the commenter for their support.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 9

Comment: The affected source (*i.e.*, the boiler) clearly does not encompass the “boiler system” or “energy use systems” located at the area source. The fact that these systems purportedly “affect emissions from the affected boiler” does not remedy this defect. For example, the EPA’s definition of “boiler system” includes “the boiler *and associated components*” that are clearly outside of the boiler, such as, the combustion air system, the boiler fuel system (including burners), blowdown system, combustion control system, steam system, and condensate return system. Similarly, the “energy use system” includes “process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning (HVAC) systems; hot heater systems; building envelop; and lighting.”None of these components are part of the boiler.

Accordingly, §112 does not provide the EPA with the authority to promulgate a requirement to conduct an energy assessment on energy use systems or parts of the boiler system that do not consist of the boiler, because such systems are not sources in the listed source category.

Response: The EPA is amending the definition of “energy assessment” to clarify that the scope of the energy assessment does not encompass energy use systems located off-site or energy use systems using electricity purchased from an off-site source. The energy assessment is limited to only those energy use systems located on-site associated with the affected boilers. We are also clarifying that the scope of the assessment is based on energy use by discrete segments of a facility and not by a total aggregation of all individual energy using segments of a facility. The definition of “boiler system” is being revised in the final rule to clarify that it means the boiler and associated components directly connected to and serving the energy use systems. We are amending the definition of “energy use system” to clarify that energy use systems are only those systems using energy clearly produced by affected boilers.

We disagree with the commenter that the EPA lacks authority to impose requirements on portions of the source that are not designated as part of the affected source, such as non-emitting energy using systems at a facility. As explained in the March 21, 2011 final rule (76 FR 15567-68), we have carefully limited the requirement to perform an energy assessment to specific portions of the source that directly affect emissions from the affected boiler. The emissions that are being controlled come from the affected source. For coal-fired units, the process changes resulting from a change in an energy using system will reduce the volume of emissions at the affected source. For biomass-fired and oil-fired area sources, better management practices at energy using systems will reduce the emissions of HAP from the affected source by reducing fuel consumption and the HAP released through combustion of fuel. In either case, the requirement controls the emissions of the affected source.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1
Comment Excerpt Number: 17

Comment: The NAM continues to believe that the EPA's proposed energy assessment requirements are unwarranted. Further, although the EPA has indicated that it is limiting the scope of its energy assessment requirements, the NAM believes that the measures still exceed the scope of the EPA's authority. Section 112(d) of the CAA is focused entirely on regulation of "sources." It requires the EPA to set emissions standards that are "applicable to new or existing sources" (§112(d)(2)). Thus, it reaches no further than the specific "sources." The "affected source" regulated by this NESHAP is the specified emission unit – boilers – not any other portions of the plant. Thus, if the EPA retains the energy assessment requirements, they should be clearly limited to addressing only the boiler and auxiliaries.

Response: See the response to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1
Comment Excerpt Number: 44

Comment: CIBO agrees that energy use systems located off-site should not be covered by this rule, nor should any other energy using systems because the EPA's §112 authority is limited to emission sources of HAPs.

Energy use systems located off-site and systems that run on purchased power should never have been covered by the rule, because the source category and emission source is the boiler only. Although the EPA appears to concur that scope is a concern, in fact, the EPA selectively addresses the comments, focusing only on the systems located off-site and that utilize purchased power. The EPA provides a cursory and insufficient dismissal of the fundamental concern that requiring reporting of information regarding any energy systems is beyond the scope of the Agency's §112 authority.

Response: See the response to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9.

Commenter Name: Timothy Serie
Commenter Affiliation: American Coatings Association (ACA)
Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1
Comment Excerpt Number: 12

Comment: As such, ACA generally supports the following proposed changes to the area source boiler rules:

EPA clarification that it did not intend to include in the energy assessment energy use systems using electricity purchased from an off-site source, nor include energy use systems located off-site;

Response: The EPA thanks the commenter for their support.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 12

Comment: OCC fully supports the clarification of the scope of the required energy assessments.

This includes the final definition for “Energy use system,” which is intended to clearly limit the scope of the energy assessment to equipment that is located on-site and associated with the affected boilers and process heaters.

Response: The EPA thanks the commenter for their support. We would like to point out, however, that process heaters are not one of the categories of sources being regulated under this area source action.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates (SOCMA)

Document Control Number: EPA-HQ-OAR-2006-0790-2467-A2

Comment Excerpt Number: 1

Comment: SOCMA notes that our industry coalition comments don’t address one of the major issues we raised in our August 2010 comments on the original proposed rule: the proposed energy assessment. In those comments, we had urged the Agency to reconsider its proposed one-time energy assessment for existing area source facilities with boilers that have a heat input capacity equal to or greater than 10 MMBtu/hr, noting that such an assessment could be especially burdensome for area sources. We had noted the potential significant costs of that assessment "depending on the size of the facility." SOCMA also observed that the Agency’s own cost estimate was vague and noted that, by its own admission, the EPA acknowledged that it did not "have enough information to determine whether one of the primary justifications of the energy assessment – the energy conservation opportunities that it would identify – were large enough to make the assessment requirement economically feasible."

We strongly support the Agency’s proposal in the reconsidered rule to reduce the scope of the energy assessment from the entire facility to the onsite systems that get electricity from the regulated boiler. In the new proposal, the EPA admits: "We did not intend that the energy assessment would include energy use systems using electricity purchased from an off-site source. We also did not intend that the energy assessment include energy use systems located off-site." This reduction in scope will help to reduce the costs of this proposed assessment.

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 11

Comment: ACA generally supports the following proposed changes to the area source boiler rules: EPA proposal to remove process heaters from the energy assessment requirement;

Response: The EPA thanks the commenter for their support. We would like to point out that process heaters have never been a listed category of area sources and that the reference to process heaters with regard to the energy assessment requirement was in error. Process heaters are not one of the categories of sources being regulated under this area source action.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 33

Comment: As indicated in §63.11193, the final Area Source Boiler Rule is only applicable to boilers, not process heaters. (76 FR 15591.) Despite this fact, the EPA references process heaters in paragraphs (2) and (3) of the definition of "Energy assessment." (76 FR 15600.) The EPA should revise both of those paragraphs to delete the term "process heater." This will help to avoid confusion and maintain consistency with rule applicability

Response: Process heaters have never been a listed category of area sources and the reference to process heaters with regard to the energy assessment requirement was in error. The term "process heater" was removed from the definition of "Energy assessment" in the December 2011 proposal.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 41

Comment: The EPA makes clear in the reconsidered rule that the definition of "energy use system" is a non-exclusive list of examples of systems that a source may be required to include in its energy assessment. This is borne out by the regulatory text and the EPA emphasizes the open-endedness of this requirement in response to a comment, stating that the definition of "energy use system" is "intended only to list examples of potential systems that may use the energy generated by affected boilers and process heaters." (76 FR 80537; though incorrectly stated since process heaters are not subject to this rule.) Therefore, as broadly as "energy use system" is already defined, as applied to specific sites, the assessment requirement could be even broader.

Response: In the final rule, the EPA has made a number of clarifications to better define the energy assessment requirements. We are amending the definition of "energy assessment" to clarify that the scope of the energy assessment does not encompass energy use systems located off-site, including energy use systems using electricity purchased from an off-site source. We are clarifying that the energy assessment is limited to only those energy use systems, located on-site,

associated with the affected boilers. We are also clarifying that the scope of the assessment is based on energy use by discrete segments of a facility and not by a total aggregation of all individual energy using segments of a facility. The definition of "boiler system" is being revised in the final rule to clarify that it means the boiler and associated components directly connected to and serving the energy use systems. We are amending the definition of "energy use system" to clarify that energy use systems are only those systems using energy clearly produced by affected boilers. In addition, we would like to point out that process heaters have never been a listed category of area sources and that the reference to process heaters with regard to the energy assessment requirement was in error. Process heaters are not one of the categories of sources being regulated under this area source action.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 40

Comment: The scope of the energy assessment is illegally broad.

As proposed in the reconsidered rule, it remains as such, requiring sources to consider, inter alia, the "operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints . . .;" "major systems consuming energy;" "available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage . . .;" and to identify "major energy conservation measures. . . ." (76 FR 80549; see also 75 FR 31932.) The EPA's authority under §112 is limited to setting emission limits for the affected combustion unit and does not extend to non-§112 sources, or generally to the entire "facility." What the EPA requires goes far beyond its §112 authority.

Response: See the response to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 42

Comment: In the preamble, the EPA asserts that it revised the requirement to address comments that the scope of the energy assessment was too broad. However, the EPA pared back the scope of the energy assessment in one minor respect, which does not cure the problem. The assessment as re-proposed in the reconsideration rule remains illegally broad. The reconsidered rule did not propose to modify the term "energy use system(s)"; therefore, it still includes without limitation, process heating and cooling, in addition to boiler systems, machine drives, HVAC, and lighting. (76 FR 15600.)

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1 excerpt number 41.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 36

Comment: EPA does not have the Authority to Include Non-Affected Sources in the Energy Assessment

The EPA's authority under CAA §112 is to establish HAP emission standards for the source categories specified elsewhere in the Act; in this case, ICI boilers. The final rule defines "affected sources" as all existing and new ICI boilers located at an area source. The "affected source" regulated by this NESHAP is the specified emission unit in this case, a boiler unit and not the facility where the emission unit is located.

Limiting the regulation to the affected source is also consistent with Congress's general statutory scheme, under which the EPA is to publish a list of all categories and subcategories of major sources and area sources of the listed HAP. (§112(c)(1).) The EPA's published list of source categories groups every conceivable type of industrial process and process unit into a category, each of which is regulated by its own NESHAP, each published as a separate Subpart to 40 CFR Part 63. Therefore, any §112 source other than the boiler affected units for this rule is covered separately by another NESHAP. The statutory scheme does not assign duplicative source category regulations for the same unit.

Since 1992, the sources to be regulated relevant to this rule have been "industrial boilers" and "commercial/institutional boilers." (57 FR 31591.) In this rule, the EPA defines each of these sources. An industrial boiler is "a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity." A commercial boiler is "a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water." (76 FR 15599.)

However, the energy assessment requirements associated with the "source" actually apply to the facility in which the source is located. ACC believes that the assessment should be made on the "boiler system," which the EPA defines as "the boiler and associated components, such as, the feedwater system, combustion air system, boiler fuel system (including burners), blowdown system, combustion control system, steam system, and condensate return system." (76 FR 80547.)

Response: See the response to EPA-HQ-OAR-2006-0790-2472-A2 excerpt 9.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates (SOCMA)

Document Control Number: EPA-HQ-OAR-2006-0790-2467-A2

Comment Excerpt Number: 3

Comment: Given the potential cost impacts on small businesses, we continue to urge the Agency to go further by limiting the scope of the assessment to the boiler itself. SOCMA notes again that every other aspect of the proposal applies solely to boilers.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1 excerpt number 41.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 45

Comment: While the scope of the covered energy use systems should certainly be narrowed, the EPA's proposed exclusion of energy use systems that run on purchased electricity creates an arbitrary distinction among efficiency measures at a facility based on the source of electricity. There is no logic to requiring sources that depend more heavily on electricity generated onsite to collect and report more information than sources that purchase electricity. The EPA's logic – the sole basis of this regulatory requirement – is that reduced energy demand = less fuel used = lower emissions from the combustion source. It matters little whether the electricity is produced by a utility or by an industrial boiler, if the EPA rationally applies its reasoning to regulatory requirements. As the EPA has made clear, the goal is “to reduce the facility energy demand which would result in reduced fuel use.” (76 FR 15573; 75 FR 31907.) While CIBO supports the EPA's proposal to narrow the scope of the energy assessment, the current definition of energy assessment remains over-broad and lacks record support and legal authority.

Response: We disagree with the commenter that the definition of "energy assessment" is over-broad, lacks record support, and legal authority. See the response to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9. The energy assessment requirement serves to reduce demand on boilers *within the source category*, thereby reducing the emissions associated with affected sources. Such boilers are limited to those within the area source. Boilers powering electricity generating equipment are not within the area source. We do not claim authority in this rule to address emissions from sources other than the affected source in this source category. While it is true that equipment using electricity purchased from offsite could potentially become more efficient and reduce the demand on the grid, we do not claim in this rule to have authority to address emissions from power sources burning fuel when the power source is not in this source category.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 43

Comment: The proposed amendment creates a division among affected sources that arbitrarily imposes a greater burden on facilities with peripheral power demand supplied by electricity generated onsite than on facilities that rely more heavily on purchased power.

Response: The EPA disagrees with the commenter that a greater burden is arbitrarily imposed on facilities with onsite electricity generation. The applicability of the rule is limited to boilers located at area source facilities. See the responses to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9, and EPA-HQ-OAR-2006-0790-2443-A1, excerpt 45.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 11

Comment: The final regulation should also require an energy assessment for new sources several years after they come into existence. Even assuming a reason to exempt new sources when they first come online, the distinction between “new” sources and existing sources will diminish over time. After the passage of several years, conditions will change compared to when a new facility was originally designed. Markets and technologies evolve. If interest rates drop (and thus the related discount rates), more projects may become cost-effective. If expected fuel prices increase, the financial return from a given quantity of energy savings will be higher. Existing technologies may become cheaper. New technologies will increase the number of projects to consider. All of these changes mean that new sources may no longer be optimized after several years of operation. The energy assessments of existing sources will become out of date on a similar timeframe. A new set of cost-effective energy conservation measures could be discovered every few years as a result. Thus, for both new and existing sources, audits should be periodic. This should be achievable at relatively low cost because much of the initial work would be done on the first assessment and would not need to be repeated.

Response: In the final rule, we are requiring a one-time energy assessment for all existing facilities that have one or more existing coal, biomass or oil-fired boilers with a heat input capacity of 10 MMBtu/hr or greater. We do not believe that such an assessment is necessary for new sources. We believe most new sources will optimize their energy use at the time of installation. At this time, we are not requiring periodic energy assessments at existing or new facilities.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 47

Comment: If the EPA continues with its broad scope of coverage for energy assessment energy use system(s), further clarification is required to limit the scope of effort relative to the percent of affected boiler(s) energy output for different size facilities. Specifically, it is unclear how the percentages in the energy assessment definition are to be applied. We believe that the EPA’s intentions are to limit the scope of assessment based on energy use by discrete segments of a facility, and not by a total aggregation of all individual energy using elements of a facility, because the latter would be disjointed and unwieldy at best. The applicable discrete segments of a facility could vary significantly depending on the site and its complexity. However, we believe

the following addition to the energy assessment definition in §63.11237 would help resolve current problems and allow for more streamlined assessments:

“...(4) The on-site energy use systems serving as the basis for the percent of affected boiler(s) energy output in (1), (2), and (3) above may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).”

Response: The EPA agrees with the commenter and we are amending the definition of "energy assessment" accordingly.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 38

Comment: ACC believes that since the EPA's authority is limited to setting emission limits for the affected source as defined in the rule, and that any energy assessment requirements beyond the scope of that definition are beyond the floor requirements. ACC urges the EPA to limit the scope of the energy assessment to the boiler and its immediate auxiliaries. However, if the EPA continues with this broad scope of coverage for the energy assessment, clarification would be needed to limit the scope of the percent of affected boiler(s) energy output for different size facilities. Specifically, it is unclear how the percentages in the energy assessment definition are to be applied. ACC believes that the EPA's intentions are to limit the scope of assessment based on energy use by discrete segments of a facility, and not by a total aggregation of all individual energy using elements of a facility, because the latter would be disjointed and unwieldy at best. The applicable discrete segments of a facility could vary significantly depending on the site and its complexity. However, ACC believes that addition of the following text to the energy assessment definition in §63.11237 would help resolve the issues described above, thereby facilitating a more streamlined assessment:

"...(4) The on-site energy use systems serving as the basis for the percent of affected boiler(s) energy output in (1), (2), and (3) above may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z)."

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 47.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 11

Comment: It is obvious that it was the EPA's intention to limit the scope of the energy assessments to that which was associated with the energy output from boilers regulated by the

rule. Nonetheless, the EPA defines “Energy use system” to include "energy use which in many cases is only associated with electricity use, i.e., compressed air systems, machine drive (motors, pumps, fans), process cooling, facility HVAC, building envelop(e), and lighting.” (76 FR 15600.) In other provisions of the final Area Source Boiler Rule, the EPA provides that where this electricity is purchased from others (such as an electric utility), it has no impact on the combustion unit fuel use or associated emissions regulated by this rule, and thus is outside the intended scope of the assessment (see above). Energy assessment under subcategory 4, item (7) includes cost of specific improvements, benefits, and time frame for recouping investments. (76 FR 15602.) This is an expansion from the proposed rule that will require significant time and effort for some level of design and estimating to determine vs. time limits earlier in the rule. Considering these issues, clarification needs to be made to the rule to exclude those energy uses that are not associated with combustion sources on the site.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 10

Comment: The EPA appears to have intended that the scope of the energy assessments be limited to those components associated with the energy output from boilers that are regulated by the rule. Despite many indications that this was the EPA's intent, the actual text of the final Area Source Boiler Rule appears to include a broad scope of what is included in the energy assessment. Considering this, the EPA should reconsider these provisions and clarify its intent with regard to the scope of the energy assessment.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 6

Comment: The EPA should clarify that required energy assessments are limited to the regulated boiler/unit, and are not applicable to the entire facility.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 13

Comment: The EPA needs to clarify that the scope of the energy assessments is to be limited to those facilities and equipment associated with the energy output from the boilers regulated under Subpart JJJJJ. In those cases where cogeneration is incorporated into the facility utilizing steam output from the regulated boilers and the cogenerated electrical output is utilized on site, then incorporation of those electricity using facilities and equipment is legitimately included within the scope of the energy assessment.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41, for a description of the final rule clarifications to the energy assessment requirements. We agree with the commenter's assertion that in cases where cogeneration is incorporated into the facility utilizing steam output from the regulated boilers and the cogenerated electrical output is utilized on site, incorporation of those electricity using facilities and equipment should be included within the scope of the energy assessment.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 37

Comment: Energy usage within most manufacturing facilities is directly and inextricably related to the processes being used and the qualities of the specific products being produced. The sweeping language the EPA has included for assessing manufacturing processes out of concern for HAP and non-HAP emissions could lead to the EPA requiring redesign of proprietary and confidential manufacturing systems at industrial sites across the country. The assessment might require many industrial facilities to grant third-party auditors and the EPA (through a CAA §114 request) access to highly Confidential Business Information (CBI). This access could put at risk competitive advantages that many manufacturers have secured for their products through careful technical and commercial analysis. Neither third-party auditors nor the EPA fully understand the myriad technical and commercial analyses developed over years, or in some cases decades, by companies to optimize energy consumption, product performance and quality, and safety. This would paradoxically create a regulatory vehicle that would allow the EPA the ability to mandate changes in energy-consuming manufacturing processes without first developing the in-house expertise to understand the full breadth of the processes, and with it the impact of potential changes to the safety of employees, competitive advantage of the product, or upstream and downstream processing activities at integrated sites.

Response: In the final rule, the EPA has made a number of clarifications to better define the scope of the energy assessment (see the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41). There is no provision in the rule that allows the EPA to mandate changes to energy-consuming processes, contrary to the concern expressed by the commenter. The intent of the assessment is not to create a regulatory vehicle that would allow the EPA to require redesign of proprietary and confidential manufacturing systems. We are removing the requirement for submitting, upon request, the energy assessment. This revision is in response to our consideration of petitioner concerns regarding the sensitivity of CBI contained in energy assessments.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 35

Comment: The Definition of Energy Assessment is too broad as it includes units that are not "Affected Sources."

For area sources with an affected boiler with heat input of 10 MMBtu/hr or greater, the EPA appears to have proposed a beyond-the-floor "energy assessment" standard. The definition of energy assessment at §63.11237 states that the assessment must include an evaluation of "the boiler system and on-site energy use system... to identify energy savings opportunities..." (76 FR 80547.) Specifically, the assessment must include the following requirements:

- (1) A visual inspection of the boiler system.*
- (2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.*
- (3) Inventory of major systems consuming energy from affected boiler(s).*
- (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.*
- (5) A list of major energy conservation measures that are within the facility's control.*
- (6) A list of the energy savings potential of the energy conservation measures identified.*
- (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. (76 FR 80549)*

The definition of "energy use system" appears to be too broad because it establishes obligations beyond the boiler source. The requirements listed above imply that facilities must look beyond air emissions and into other media such as solid waste and water consumption, which is beyond the scope of the final rule.

In the list of requirements above, affected sources must assess the "boiler system," and the "major systems consuming energy from affected boiler(s)," which are unregulated sources and non-sources at the facility. In addition, sources would have to review of "available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage." See Table 2 to Subpart JJJJJ at 76 FR 80549. Regulated entities would be required to subject not only the affected source itself, but also other non-covered units at the covered source to an examination, potentially by a third party.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1 excerpt number 41.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 7

Comment: Nothing in the proposal or proposal preamble addresses 1) the legality of imposing this [energy assessment] requirement on sources outside the regulated source category (i.e., steam consumers), 2) how this assessment is linked to HAP emissions, the legal basis for this rulemaking (which are miniscule from light liquid fired equipment), 3) how equipment reliability, safety, and operability are to be protected, or 4) the real costs of the proposal.

Response: See the response to EPA-HQ-OAR-2006-0790-2472-A2, excerpt 9, with regard to item 1) in the comment. With regard to items 2), 3), and 4), as stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Specifically, comments were requested on the scope, compliance date, and maximum duration requirements of the energy assessment.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 7

Comment: The EPA should exempt area sources that have a historical capacity factor less than 30% from the energy assessment requirements under 40 CFR Part 63 Subpart JJJJJ, specifically Table 2. Requiring an entire facility to be drawn into this review is overkill based on the limited operation of these units which results in insignificant emissions. By the EPA's own estimate the cost of such a facility assessment could range from \$2,500 to \$55,000. The Agency has provided no support that this requirement will result in any reduction in HAP emissions from the affected sources (Subpart JJJJJ units) nor has the Agency provided any support that this requirement is even needed based on some unknown risk.

Response: The EPA disagrees with the commenter's suggestion that area sources that have a historical capacity factor less than 30% should be exempt from the energy assessment requirements. The commenter is mistaken in their belief that the energy assessment includes the entire facility. In the final rule, the EPA has made a number of clarifications to better define the energy assessment requirements. See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 5

Comment: The EPA proposes to restrict the energy assessment to sources and uses (our terms) on-site. USCHPA questions this. USCHPA also questions the limitation to rely on a 2-year or less payback criterion. Many capital investments, including combined heat and power (CHP) systems, typically have longer payback periods, considering all benefit streams (both thermal and electricity). This should be reconsidered and broadened to permit greater aggregation of benefit streams. For example, Federal, State and even local tax credits should be applied to the benefit side of the calculation.

Removing the benefit obtained by reducing electricity purchases can undermine unnecessarily the benefits of CHP installations, especially one-off installations.

Unfortunately when CHP is involved, this approach will undervalue the benefit of the CHP system, both in energy savings and in emissions reductions.

Response: See the response to EPA-HQ-OAR-2006-0790-2451-A1, excerpt 6. We also note that the final rule does not rely on payback criterion.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 6

Comment: As indicated earlier, CHP has off-site benefits because the site doesn't have to buy so much electricity from "away." The energy savings and the carbon dioxide (CO₂) avoidance in the quotation from Oak Ridge National Laboratory cited above and referenced in footnote 5 is based upon avoidance of energy consumption both at the site and away. CHP has off-site benefits because the site doesn't have to buy so much electricity from "away." The energy savings and the CO₂ avoidance in the quotation from Oak Ridge National Laboratory cited above and referenced in fn 5 is based upon avoidance of energy consumption. Remember that the existing CHP fleet (82 gigawatts (GW)) already avoids more than 1.8 Quadrillion British thermal units (Quads) of fuel consumption and 241 million metric tons of CO₂ emissions annually compared to traditional separate production of electricity and thermal energy. This CO₂ reduction is the equivalent of removing more than 45 million cars from the road. The potential additional CHP of 130-170 GW could double these benefits for the additional installations in terms of fuel consumption and CO₂ reduction.

Fortunately these benefits can be readily calculated for CHP projects at relatively low cost during the energy assessment phase. We realize that cost of the energy assessments is an important factor in the EPA's analyses. However, a ready tool developed by the EPA already exists. It is the CHP Emissions Evaluator available from the EPA's CHP Partnership.⁶

Using a tool such as the CHP Emission Evaluator, even if it requires some modification for the purpose, should not significantly raise the average energy assessment costs.

⁶ <http://www.epa.gov/chp/basic/calculator.html>.

Response: We agree that there is a benefit in reducing electricity purchases but the applicability of the rule is limited to boilers located at area source facilities.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates (SOCMA)

Document Control Number: EPA-HQ-OAR-2006-0790-2467-A2

Comment Excerpt Number: 4

Comment: Even with the reduced scope of the energy assessment in the new proposal, facilities where boilers are a very small aspect of overall operations would still be disproportionately burdened.

Response: We disagree with the commenter. The energy assessment does not include the entire facility. In the final rule, we are making a number of clarifications to better define the energy assessment requirements. See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 9

Comment: The definition is unclear whether the energy assessment applies to just boilers or to both boilers and process heaters. Since the size criterion (i.e., facility boiler and process heater energy consumption) is based on both boilers and process heaters, we would assume the proposed definition means the assessment must deal with both steam and process heat. However, the area source rule only deals with boilers and thus there is no basis for evaluating process heaters or process heat consumers. If the energy assessment requirements are finalized, the area source energy assessment must be limited to boilers and steam consumers. The definition wording, as exemplified in Item 4 below, should be clarified on this point.

Paragraph 3 of the energy assessment definition should read as follows:

(3) In the Energy assessment for facilities with affected boilers and process heaters using greater than 1.0 trillion Btu per year, the boiler system and any energy-steam use system accounting for at least 20 percent of the energy-steam output production or consumption will be evaluated to identify energy-steam savings opportunities.

Response: In the final rule, we are clarifying that "energy use system" includes the following systems located on the site of the affected boiler that use energy provided by the boiler: (i) process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning systems; hot water systems; building envelop;

and lighting; or (ii) other systems that use steam, hot water, process heat, or electricity, provided by the affected boiler.

Beyond-the-Floor Energy Assessment: Compliance date

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 7

Comment: Because emission standards compliance must be met by the compliance date and that date is now set at March 21, 2014, it is appropriate that the energy assessment for existing sources be completed by the compliance date of March 21, 2014.

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 13

Comment: ACA generally supports the following proposed changes to the MACT and Area Source Boiler Rules:

EPA clarification that energy assessments must be completed by the compliance date

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul J. Allen

Commenter Affiliation: Constellation Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2477-A2

Comment Excerpt Number: 3

Comment: Constellation requests that more time be allowed for completion of the one-time energy assessment.

The proposed rule requires that a one-time energy assessment be performed for existing industrial boilers. We respectfully request that more time be allotted to schedule and complete the task so that it can efficiently be coordinated with plant operations.

Response: The final rule provides the 3-year maximum length of time for existing sources to comply with the rule requirements, including the requirement to complete an energy assessment. The EPA does not agree with the commenter that more time is necessary. The final rule includes a number of clarifications regarding the scope of the energy assessment requirements (see the

response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41). With a clearer understanding of the energy assessment requirements, we believe that affected sources can efficiently coordinate completing the energy assessment.

Beyond-the-Floor Energy Assessment: Maximum duration requirements

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 4

Comment: The definition of energy assessment in §63.11237 states: “(3) *In the Energy assessment for facilities with affected boilers and process heaters using greater than 1.0 trillion Btu per year, the boiler system and any energy use system accounting for at least 20 percent of the energy output will be evaluated to identify energy savings opportunities.*” Unlike the facilities with lesser heat usage, this category does not specify the appropriate duration of conducting energy assessments. Leaving the duration of the energy assessment open-ended for this category and the scope of the assessment unclear could result in long and expensive energy assessments.

Based on the other two categories used by the EPA, less than 0.3 and 0.3 to 1.0 trillion Btu/yr (TBtu/yr), it appears that the EPA is using a ratio of 8 technical hours per every 0.3 TBtu/yr. For larger facilities, this ratio is excessive and does not recognize the economy of scale (larger boilers servicing large buildings). DOD recommends a ratio of 8 technical hours per every additional 1.0 TBtu/yr beyond 1.0 TBtu/yr not to exceed 160 technical hours although facilities could perform longer duration energy assessments at their discretion. For example, excluding limited-use boilers, the largest USAF facility, in terms of TBtu/yr is Tinker Air Force Base (AFB) with approximately 93 boilers having a total capacity of approximately 17.6 TBtu/yr. Using 24 hours for the first TBtu/yr and a ratio of 8 hours per additional 1.0 TBtu/yr, results in a technical hour limit for Tinker AFB’s energy assessment of 157 technical hours or about 1.7 hours per boiler, which is sufficient for the purposes of the required energy assessment. However, this ratio could require an unreasonable number of technical hours in certain circumstances; therefore a cap on the number of technical hours should also be included. For example, Arnold AFB has a combined rated heat input capacity of 32.1 TBtu/yr when limited-use boilers are included, and a combined capacity of 14.5 TBtu/yr if limited-use boilers are excluded. Using 24 hours for the first TBtu/yr and a ratio of 8 hours per additional 1.0 TBtu/yr results in a technical hour limit for Arnold AFB’s energy assessment of 273 technical hours for 41 units including the limited-use units, or about 6.6 hours per boiler. The number of technical hours per boiler for the energy assessment in this case is excessive. This could be prevented by establishing a limit on the maximum number of technical hours for larger facilities.

DOD provided the preceding detail in our discussion of a similar comment on the Major Source Boiler Rule. The facilities discussed in this paragraph are currently major HAP sources, but DOD also has large bases with many boilers that are area sources. The definitions in both rules

should be consistent when possible so if the EPA adds maximum labor hour language to that rule, it should also be added to the Area Source Boiler Rule.

Recommendation: Revise numbered paragraph (3) in the definition of “energy assessment” in §63.11237 for facilities with units using greater than 1TBtu/yr to specify time duration/size ratio and include a cap to the maximum number of hours that should be used in the energy assessment as follows:

(3) The energy assessment for facilities with affected boilers and process heaters using greater than 1.0 TBtu/year will be up to 24 technical labor hours in length for the first TBtu/yr plus 8 technical labor hours for every additional 1.0 TBtu/yr not to exceed 160 technical hours, but may be longer at the discretion of the owner or operator. The boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected unit(s) energy output will be evaluated to identify energy savings opportunities.

Response: The EPA agrees with the commenter that leaving the duration of the energy assessment open-ended for boilers with greater than 1.0 TBtu/yr heat input capacity could result in long and expensive energy assessments. In the final rule, the numbered paragraph (3) in the definition of "energy assessment" is revised as follows:

(3) The energy assessment for facilities with affected boilers with greater than 1.0 TBtu/year heat input capacity will be up to 24 on-site technical labor hours in length for the first TBtu/year plus 8 on-site technical labor hours for every additional 1.0 TBtu/year not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 46

Comment: In the final Area Source Boiler Rule, the EPA included stated maximum time language in the definition of energy assessment, which could have implied that a deviation or a potential violation would occur if the energy assessment effort exceeded the listed time limits. (76 FR 15600 (§63.11237).) CIBO supports the EPA’s new approach because it clarifies that actual time for conducting the assessment may exceed stated maximum times depending on site-specific conditions. Clearly defining terms is critical so that deviations or enforcement actions are not applicable to the elapsed times expended on energy assessments.

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie
Commenter Affiliation: American Coatings Association (ACA)
Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1
Comment Excerpt Number: 14

Comment: ACA generally supports the following proposed changes to the MACT and Area Source Boiler Rules:

EPA proposal changing the maximum duration requirements from 1 day to 8 technical hours, and 3 days to 24 technical hours to limit the time/effort of an outside energy assessor to perform the energy assessment

Response: The EPA thanks the commenter for their support.

Commenter Name: Jessica Bridges
Commenter Affiliation: U.S. Clean Heat & Power Association
Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1
Comment Excerpt Number: 8

Comment: The shorter assessment time period is better, i.e. changing the maximum time from 1 day to 8 technical hours and from 3 days to 24 technical hours.

Response: The EPA thanks the commenter for their support.

Commenter Name: Daniel Moss
Commenter Affiliation: Society of Chemical Manufacturers and Affiliates (SOCMA)
Document Control Number: EPA-HQ-OAR-2006-0790-2467-A2
Comment Excerpt Number: 2

Comment: SOCMA supports the EPA's clarification of the maximum number of hours that an assessment needs to involve.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2
Comment Excerpt Number: 14

Comment: The EPA includes in the final Area Source Boiler Rule a definition for the "stated maximum time" to conduct an energy assessment. None of the maximum times were included in the proposed rule. Considering this, CIBO members had no opportunity to comment and the EPA should therefore reconsider these issues. In the final Area Source Boiler Rule, the EPA provides that the "stated maximum time" for conducting an energy assessment, i.e., 1 day maximum for <0.3TBtu/yr heat input and 3 days maximum for 0.3 to 1 TBtu/yr heat input. (76 FR 15,600.)

This phrasing could imply that a deviation and a potential violation could occur if the energy assessment effort exceeded those time limits. The EPA should reconsider and clarify that these times are actually "expected" maximum times for conducting the assessments. The EPA should recognize that actual times can exceed those figures depending on site specific conditions. This clear statement is critical so that deviations or enforcement is not applicable to the elapsed times expended on energy assessments.

Response: The December 2011 reconsideration of final rule proposal included language in the definition of "energy assessment" to address this issue. Specifically, the definition clarifies that the duration of the assessment may be longer at the discretion of the owner or operator of the affected source. Similarly, this final rule includes such clarifying language.

Commenter Name: William H. (Bill) Wilson
Commenter Affiliation: WSU Extension Energy Program
Document Control Number: EPA-HQ-OAR-2006-0790-2461-A1
Comment Excerpt Number: 1

Comment: My greatest concern about energy assessment language in the final rule reconsideration is the approach specifying the duration of an energy assessment by prescribing maximum time expenditure ("technical labor hours") based on affected boilers annual energy consumption threshold brackets. As a definition of "technical labor hours" has not been provided, my assumption is this terms means the total time expenditure by an energy assessor to perform an energy assessment from pre-assessment contact and information gathering through the "onsite" systems observation period at the facility and subsequent post-assessment analyses and generation of a final report.

Response: The December 2011 reconsideration of final rule proposal included language in the definition of "energy assessment" to clarify that duration of the energy assessment may be longer at the discretion of the owner or operator of the affected source. In addition to including such clarifying language, this final rule specifies that the technical labor hours are "on-site."

Commenter Name: William H. (Bill) Wilson
Commenter Affiliation: WSU Extension Energy Program
Document Control Number: EPA-HQ-OAR-2006-0790-2461-A1
Comment Excerpt Number: 2

Comment: I believe the prescribed hours for the two lower annual energy use brackets are inadequate for conducting the full energy assessment process in a manner which successfully fulfills the energy assessment criteria and outcomes listed in Table 2 to Subpart JJJJJ of Part 63 – Work Practice Standards, Emission Reduction Measures and Management Practices, Item 10. The 8 hour maximum for the lowest annual energy use bracket is woefully inadequate, and I believe will raise unrealistic expectations by those seeking energy assessment expertise.

Response: See the response to EPA-HQ-OAR-2006-0790-2461-A1, excerpt 1.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 6

Comment: For smaller area sources, cost might be reasonable if they could avail themselves of the proposed 8 hour and 24 hour limit on assessment hours, but there is no chance of any benefits in those cases, since 8 and 24 hours is inadequate to meet the assessment requirements as outlined in Table 2 or to certify compliance.

Response: See the response to EPA-HQ-OAR-2006-0790-2461-A1 excerpt number 1.

Commenter Name: William H. (Bill) Wilson

Commenter Affiliation: WSU Extension Energy Program

Document Control Number: EPA-HQ-OAR-2006-0790-2461-A1

Comment Excerpt Number: 3

Comment: I would also like to point out energy assessment is only technical service described in the Final Rule Reconsideration in which hours to perform a task have been prescribed. Other technical services like burner tuning, stack testing, etc. do not have labor time limits prescribed.

Response: As indicated in the March 2011 final rule, the EPA's intent for including "maximum time" in the definition of "energy assessment" was to minimize the burden on the smaller fuel-use facilities, many of which are likely small entities, by limiting the extent of the energy assessment. The EPA's concern was that if there was no time limit, then the small facilities would have no means to limit the time and effort of an outside energy assessor that is contracted to perform the energy assessment. We realized that this may result in not identifying all the potential energy conservation measures but the energy assessment can be longer at the owner's or operator's discretion. The final rule definition has been revised to clarify that the technical hours are "on-site" technical hours to conduct the evaluation of the boiler and its energy using systems, and does not include the off-site effort to prepare the report. The final rule does not include hours to perform other tasks such as stack testing or a boiler tune-up because the extent of those tasks is generally known and better defined than an energy assessment.

Commenter Name: William H. (Bill) Wilson

Commenter Affiliation: WSU Extension Energy Program

Document Control Number: EPA-HQ-OAR-2006-0790-2461-A1

Comment Excerpt Number: 4

Comment: In my experience, the amount of pre-assessment time devoted making arrangements and obtaining information, on-site observation time and post-assessment analysis and report generation time expenditure is quite independent of unit maximum heat input ratings or system annual energy consumption. My experience has been no less than 24 hours of on-site time is typically required with very a very considerable amount of pre-assessment and post-assessment

time involvement required. The stated time does not include time expenditures required by facility personnel. 24 hours (3 days) also the approximate on-site time allotted to assessors performing U.S. DOE steam system Save Energy Now (SEN) assessments. Significant additional time is allotted for preliminary tasks and reporting and follow-up activities.

Response: We disagree with the commenter that the amount of pre-assessment time, on-site observation time, and post-assessment time is independent of unit size. See the response to EPA-HQ-OAR-2006-0790-2461-A1, excerpt 3.

Commenter Name: William H. (Bill) Wilson

Commenter Affiliation: WSU Extension Energy Program

Document Control Number: EPA-HQ-OAR-2006-0790-2461-A1

Comment Excerpt Number: 5

Comment: I feel the prescriptive technical labor hour statements should be eliminated entirely. The Energy Assessment requirement was introduced presumably for identifying and quantifying opportunities which could, if implemented, reduce energy consumption and emissions. This outcome will not likely be realized, especially for smaller facilities, with the severe time restrictions prescribed.

Response: We disagree with the commenter. See the response to EPA-HQ-OAR-2006-0790-2461-A1, excerpt 3.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 8

Comment: On page 80615 of the major source proposal preamble the EPA states; “We have revised the definition of “Energy assessment” to change the maximum time from 1 day to 8 technical hours and from three days to 24 technical hours. This would allow sources to perform longer assessments at their discretion.” All this change does is revise the criterion for when the violation occurs (i.e., it is now a violation if you fail to meet all the energy assessment criteria in Table 3⁵⁷ because to do so would require more than 8 hours or 24 hours, rather than 1 day or 3 days.). Nothing in the proposed energy assessment definition relieves sources from the Table 3 requirements for energy assessment content if they cannot complete the assessment in the specified time. In fact, proposed §63.11214(c) requires that a facility certify in the NOCS that “the energy assessment was completed according to Table 2 to this subpart and is an accurate depiction of your facility.” Thus, sources have no discretion whether or not to spend more time and it is false for the EPA to assume the 8 and 24 hour limits have any meaning or to rely on those limits for the burden and cost analyses.

The Table 2 requirements involve significant technical work and thus will always require more than the 8 or 24 hours specified by the EPA for facilities less than 1 TBtu/yr. Thus, to avoid

violating §63.11214(c) sources will always expend more than 8 or 24 hours. The EPA needs to include a realistic time estimate in the record for the energy assessment and justify the real costs as required by §112(d) of the CAA and provide that justification to the Office of Management and Budget (OMB) and to the public, rather than setting artificial and unrealistic time limits to justify reduced cost estimates for this arbitrary requirement.

⁵⁷ Table 2, Item 10 of the proposal states “The energy assessment must include” [emphasis added] and then lists eight elements, some of which are major technical efforts.

Response: In the final rule, the EPA has made a number of clarifications to better define the energy assessment requirements (see the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41). We disagree with the commenter that the energy assessment requirements will always require more than the time specified by the EPA and believe that our time estimates are realistic.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 13

Comment: Proposed §63.11214(c) requires that the NOCS certify that “an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility.” If the 8 hour and 24 hour limits on the energy assessment for facilities producing < 1 TBtu/yr are made meaningful, most sources in those production ranges will not have completed energy assessments, since that amount of time is inadequate to even get started. Thus, those sources will be unable to sign the proposed certification wording. For those sources alternate wording must be provided. We suggest the following be provided as an alternate certification.

This facility has expended at least 8 or 24 technical hours, as applicable, towards evaluating steam production and consumption efficiencies.

Response: We disagree with the commenter and in the final rule are requiring a signed certification in the NOCS report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 and is an accurate depiction of the facility. In the final rule, the EPA has made a number of clarifications to better define the scope of the one-time energy assessment (see the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 41).

Beyond-the-Floor Energy Assessment: Out of Scope

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 10

Comment: The EPA continues to propose an "above the floor" requirement to require facilities to conduct energy assessments. The EPA's concept is in general, that by identifying cost-effective energy conservation measures, HAP emission would be reduced if some of the measures are implemented.

Weyerhaeuser stridently opposes this proposed provision. While under the right circumstances there may be some merit to the general concept of conducting energy assessments to identify ways to reduce energy use and thereby reduce HAP emissions, the EPA's proposal misses the mark as an inefficient redundancy of a differently structured non-voluntary process that will potentially disrupt our continuing internal program and participation in voluntary efficiency programs. We refer the EPA to our 2010 comments on this in the docket EPA-HQ-OAR-2002-0058 and the current comments by our trade groups.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that the final rule specifies that a source operating under an energy management program compatible with ISO 50001 that includes the affected boilers satisfies the energy assessment requirement.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 13

Comment: The TCEQ strongly recommends that the EPA remove the energy assessment requirement from 40 CFR 63 Subpart JJJJJ. While energy efficiency evaluations should be encouraged, such evaluations should remain voluntary through programs such as the EPA's Energy Star Program and not mandated through regulation.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that the final rule specifies that a source operating under an energy management program compatible with ISO 50001 that includes the affected boilers satisfies the energy assessment requirement.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 21

Comment: To ensure that energy assessments lead to tangible improvements in energy use and emissions, NESCAUM encourages the EPA and the states to work with facilities to implement cost-effective improvements identified in the energy assessment.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 22

Comment: NESCAUM recommends that the EPA work with agencies to establish clear guidelines as to what constitutes a cost-effective energy efficiency improvement.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 10

Comment: The requirement of an energy assessment should provide net benefits to regulated entities as a whole, as well as substantial environmental and health benefits to the entire country. But in order to ensure that maximum net benefits are reaped, the EPA should go further and require implementation of all “cost-effective energy conservation measures.” Mandatory implementation is justified regardless of whether the EPA continues to use its flawed definition of “cost-effective,” or adopts the more economically rational definition discussed above.

First, it should be noted that the statutory touchstone for whether the EPA should issue this requirement is whether it is “achievable” under CAA §112(d). For a range of definitions of “cost-effective,” the EPA can determine that requiring implementation of “cost-effective energy conservation measures” is, in fact, both achievable and economically feasible. As explained above, the EPA has defined “cost-effective” to reflect only private costs and benefits. This makes the case for requiring implementation very simple. Given a suitable discount rate and time period for the analysis (discussed above), there will be zero net costs to regulated entities from implementing cost-effective measures. Since there will be zero net costs, the requirement should not pose any burden on regulated entities.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 6

Comment: Wyoming DEQ would appreciate clarification in the rule regarding the EPA's expectations for implementing the results of the energy assessment. By definition, an energy assessment is a review of the boiler system and energy use system accounting for specified percentages of the energy output to identify energy savings opportunities, within the time limit of performing energy assessment. It is anticipated that the results of the energy assessment will vary significantly in cost, and without guidance from the EPA on implementing the results of the energy assessment, implementation will be fragmented.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that implementation of the results of the energy assessment is not required by Subpart JJJJJ.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 8

Comment: Operation of some of our industrial boilers generally occurs only when the primary EGU is not in operation. Even if facility energy improvements could be discovered and implemented at a Subpart JJJJJ unit, the environment will see no benefit from implementation of such energy improvements due to their limited operation.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that the final rule does not require implementation of the energy assessment findings.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 12

Comment: The TCEQ opposes any revision to the rule that would require the implementation of the energy assessment recommendations. Only the companies operating the facilities are qualified to determine those energy efficiency improvement measures that are appropriate and cost-effective for implementation at the site. Attempting to enforce which recommendations a company should have implemented as being cost-effective energy efficiency measures would be difficult and entail the TCEQ performing a separate independent evaluation of the measures. Neither the TCEQ nor the EPA should arbitrarily accept an energy assessor's recommendations as an enforceable requirement under the rule. Additionally, a requirement to implement the results of the energy assessment might bias companies providing energy assessment services, particularly if the assessment companies also provide the services or products necessary for the energy improvements. The EPA has already expressed concern of outside energy assessors attempting to expand the scope and effort required for an energy assessment beyond what would be necessary for a facility. This concern was the EPA's rationale for establishing the maximum time limits for the energy assessment so that companies would have a means to limit the time and effort of an outside energy assessor contracted to perform the assessment (76 FR 80538). Attempting to mandate companies implement the recommendations of the energy assessors would only further encourage such actions.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we would like to point out that implementation of the results of the energy assessment is not required by Subpart JJJJJ.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 6

Comment: The TCEQ is aware that the EPA is only proposing to amend certain definitions associated with the energy assessment requirements. However, the TCEQ does not consider it appropriate for the EPA to mandate energy efficiency assessments via a NESHAP rule. The energy assessment in 40 CFR 63 Subpart JJJJJ is not a work practice or operational standard and is not within the EPA's regulatory authority under CAA, §112. Requiring companies to evaluate possible improvements in their operations does not constitute an actual work practice. Commenters challenged the EPA's authority on this requirement in the original proposal. The EPA's responses to these comments (76 FR 15567-15568, 15573-15574) were that improvements in energy efficiency that reduce fuel use would reduce emissions, the requirement to perform an assessment was an enforceable requirement in the rule, and the EPA assumed that companies would implement those recommendations from the energy assessment auditor that

they believed to be prudent. The EPA's responses to these comments fail to address the fundamental flaws in the EPA's beyond-the-floor argument for the energy assessment.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Allison Watkins, Baker Botts

Commenter Affiliation: Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1

Comment Excerpt Number: 8

Comment: The Class of '85 urges the EPA to eliminate the requirement that facilities complete a one-time energy assessment to identify cost-effective energy conservation measures for the boiler system and its energy use systems located at the area source. The EPA does not have the authority under CAA §112 to go beyond the sources listed in a source category and impose requirements on other aspects of a facility. Section 112 does not provide the EPA with the authority to promulgate a requirement

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Mark R. Vickery

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A2

Comment Excerpt Number: 2

Comment: While the TCEQ supports voluntary energy efficiency measures, mandating energy efficiency evaluations through regulatory action, such as the energy assessment required in 40 CFR 63 Subpart JJJJJ, is beyond the EPA's authority under CAA §112. An energy assessment is neither a work practice nor an operational standard; it is merely a requirement to evaluate possible improvements in work practices and operations. The EPA has not justified the energy assessment as a "beyond the floor" measure and the requirement for the energy assessment should be removed from the final rule.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Randal G. Oswald
Commenter Affiliation: Integrys Energy Group
Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2
Comment Excerpt Number: 8

Comment: Integrys urges the EPA to eliminate the requirement that facilities complete a one-time energy assessment to identify cost-effective energy conservation measures for the boiler system and its energy use systems located at the area source. The EPA does not have the authority under §112 to go beyond the sources listed in a source category and impose requirements on other aspects of a facility.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Matthew Todd
Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)
Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2
Comment Excerpt Number: 4

Comment: The proposal to impose a facility-wide energy assessment through this rulemaking is not practical, overstates benefits, understates costs, and is not authorized by the CAA. Since the energy assessment requirement impacts units other than boilers/process heaters in a facility by including energy consuming systems, this rulemaking expands this rulemaking to many other source categories. The Agency's authority under §112 of the CAA for that expansion is unclear at best.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2
Comment Excerpt Number: 15

Comment: The EPA lacks authority to mandate the energy assessment. An energy assessment does not purport to limit emissions, nor impose more stringent standards than the MACT floor and is therefore not a beyond-the-floor standard consistent with the text of the CAA. Furthermore, even if efficiency measures identified in the energy assessment are actually

implemented, the reduced demand for the output of a regulated source is not an "emission control" technology to limit emissions from the regulated source. §112(c)(2); 42 U.S.C. §7412(d)(3).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 8

Comment: The EPA's claim that measures that conserve steam use from the boiler would reduce emissions through fuel savings might be correct in some cases but is not necessarily true in all cases. For example, a company may be able to expand operations as a result of the improved efficiency and not actually decrease the operating rates of the boiler. Any presumed benefit from the energy assessment is based on the assumption that companies will implement some of the measures as well as assumptions of the companies' future actions. The EPA's justification for the "beyond the floor" determination that the energy assessments will result in additional emission reductions is based solely on the EPA's assumptions.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 10

Comment: The EPA cannot reliably quantify emission reductions associated with the energy assessment.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 7

Comment: The EPA is not correct in its claim that the energy assessment is a measure identified in CAA §112(d)(2) under the category of measures that "reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications..." (76 FR 15573). An actual reduction in fuel use would constitute such a measure; however, a requirement to conduct an evaluation of possible energy efficiency improvements that might reduce fuel use is not a measure included in CAA §112(d)(2). Furthermore, while the energy assessment is an enforceable requirement in the rule, the rule does not (and should not) require implementation of any aspect of the energy assessment. Therefore, the actual measure that could reduce emissions is not enforceable and the EPA cannot maintain that the requirement to perform an energy assessment results in emission reductions as provided in CAA §112(d)(2).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 33

Comment: NACAA has long supported the general notion of output-based standards as a way to encourage energy efficiency and mitigate emissions of air pollutants. However, unlike the EGU sector, determining energy efficiency improvements from a variety of industrial processes is a complex task that the EPA has not yet addressed. Moreover, the EPA has not developed the MACT floors using net output-based data and is not proposing to promulgate mandatory output-based MACT limits. Rather, it has converted the results of MACT data for sources selected as best-performing units on an input-basis and proposes to offer sources the option of complying with either the input-based limits or the converted limits. In addition, the uncertainties associated with past and future determinations of the unit's net heat rate are larger than potential efficiency gains that may result from adoption of output-based standards for existing units using common factors. NACAA believes that the most significant effect of offering existing sources the option of output-based standards based on a pre-determined conversion factor will be a reduction in the effectiveness of the rule, rather than any measureable improvement in efficiency of existing or new sources.

For existing units, the principal effect of an "optional" output-based standard would be to establish a class of "winners" that qualify for lower emission rates based on their currently existing condition, rather than providing an incentive to reduce emissions. Since facilities with

low efficiencies (high heat rates) may elect to comply with the input-based limit, the only "losers" in this process are the members of the public who are subjected to higher emissions of HAPs than would otherwise be the case. For this reason the EPA should not allow an output-based standard as an option for existing sources to employ, but should set standards based on net output emissions data. This could be accomplished at the next review of the standard, as required by the CAA every 8 years and discussed below.

Opportunities for improvement in the heat rate of existing sources are relatively small. In addition, many efficiency improvement options, such as soot removal, are not permanent and require ongoing maintenance to sustain improved performance. Before proceeding in this area the EPA should develop a record that would enable accurate measurement and determination of sustainable efficiency improvements. The record in this rulemaking is not sufficient to establish such procedures.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 20

Comment: NESCAUM supports efforts to have facilities conduct energy assessments in order to identify cost-effective, energy conservation measures on boilers larger than 1.6 MMBtu/hr. NESCAUM agrees with the specific requirements and clear language for what constitutes an energy assessment, which NESCAUM had commented on previously.

Response: The EPA thanks the commenter for their support.

Commenter Name: Pilar Rodarte

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2476-A2

Comment Excerpt Number: 3

Comment: The proposed amendments require existing large boilers (with heat input capacity greater than 10 MMBtu/hr) that burn oil, coal, and biomass fuels to do a one-time energy audit or assessment, performed by a qualified energy assessor. This proposed requirement has my full support and is very much needed for industrial, commercial, and institutional facilities that have a tendency to use antiquated boilers and meet emissions limitations through alternating use.

Response: The EPA thanks the commenter for their support.

Commenter Name: Pilar Rodarte

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2476-A2

Comment Excerpt Number: 4

Comment: I am disappointed by the requirement of only one energy audit and the fact that there is not an implementation requirement for the findings of the energy audit. What is the use of having such a requirement if facilities don't have to fix the problems they find?! Some of the measures needed to remedy the problems found in the proposed energy audits are as simple as insulating pipes, instituting energy conservation protocols, and switching to a cleaner fuel such as natural gas. These measures are commonly known as Best Management Practices ("BMPs"), usually reducing the cost of operation for a facility and the need to consume as much fuel for the same amount of energy needs. In short: BMPs are efficient. BMPs lead to cleaner air for citizens; they are right up the facility's alley, so why are they not up the EPA's?

The proposed energy audits would be more effective if they were required periodically and facilities with boilers large boilers were required to implement the findings of their energy audit. It is not asking too much to have industrial, commercial, and intuitional facilities to look out for their economic and efficiency based interests.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 5

Comment: There is no basis to claim any benefits for the energy assessment requirement since 1) larger area sources typically have already performed extensive energy assessments and installed those projects with high economic returns that make sense from a safety, reliability, operability and capital management perspective, 2) smaller area sources have neither the expertise or wherewithal to execute such assessments, and 3) the proposal separately requires boiler/process heater tune-ups, the EPA's claimed main source of energy assessment benefits .

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Rationale for Subcategories: Subcategory for Seasonally Operated Boilers

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 10

Comment: We support the addition of a seasonal boiler subcategory. These boilers are used in seasonal agricultural operations or for comfort heat and typically operate only about 100 days per year, so the number of hours actually operated over a 5-year period is much less than a boiler in normal operation. Therefore, a 5-year tune-up frequency for these units is appropriate and is comparable to the tune-up frequency required for units that operate continuously.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Chelly Reesman

Commenter Affiliation: J.R. Simplot Company

Document Control Number: EPA-HQ-OAR-2006-0790-2431-A2

Comment Excerpt Number: 1

Comment: Simplot supports the EPA's proposal to include a subcategory for seasonally operated boilers.

Response: The EPA thanks the commenter for their support.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 6

Comment: OCC supports the inclusion of a separate category for seasonal boilers that may only operate a few months of the year. Since these units have reduced operating time, we support requiring that tune-ups be conducted only once every 5 years.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 37

Comment: We support the addition of a seasonal boiler subcategory. These boilers are used in seasonal agricultural operations or for comfort heat and typically operate only about 100 days per year, so the number of hours actually operated over a 5-year period is much less than a boiler in

normal operation. Therefore, a 5-year tune-up frequency for these units is appropriate and is comparable to the tune-up frequency required for units that operate continuously.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 1

Comment: PA DEP concurs with the EPA's proposal to create a new subcategory for seasonally operated boilers and to specify that seasonal boilers would be required to complete the initial tune-up by March 21, 2014, and then a subsequent tune-up every 5 years after the initial tune-up.

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 11

Comment: This subcategory should also cover units that only operate during short periods of high electricity demand in the summer and for semi-annual capacity testing requirements. Because of the semi-annual testing required by the electric utility, the units will not meet the proposed criterion of being completely shut down for 7 consecutive months, but would otherwise be considered seasonal units and their limited operation is consistent with the EPA's intent when developing this subcategory. Therefore, the EPA should revise the definition of seasonal boiler to allow intermittent operational testing (e.g., up to 15 days) during the 7 month period. This would allow biomass or oil units at area sources that have availability requirements to ensure that the unit is available on short notice.

Response: We agree that an allowance for testing during the seasonal boiler's shutdown period is appropriate and the final rule includes an amended definition of seasonal boiler that allows for periodic testing not to exceed a combined total of 15 days of use during the shutdown period.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 38

Comment: This subcategory should also cover units that only operate during short periods of high electricity demand in the summer and for semi-annual capacity testing requirements. Because of the semi-annual testing required by the electric utility, the units will not meet the proposed criterion of being completely shut down for 7 consecutive months, but would otherwise be considered seasonal units and their limited operation is consistent with the EPA's intent when

developing this subcategory. Therefore, the EPA should revise the definition of seasonal boiler to allow intermittent operational testing (e.g., up to 15 days) during the 7 month period. This would allow biomass or oil units at area sources that have availability requirements to ensure that the unit is available on short notice.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1 excerpt 11.

Commenter Name: Derek Grasso

Commenter Affiliation: Covanta Energy Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2430-A2

Comment Excerpt Number: 4

Comment: Covanta suggests that the definition of "seasonal boiler" be amended to allow for up to 15 total days of required boiler testing during the 7-month shutdown period. This would allow biomass or oil area sources that have availability requirements to ensure that the boiler is available on short notice.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1 excerpt 11.

Commenter Name: Chelly Reesman

Commenter Affiliation: J.R. Simplot Company

Document Control Number: EPA-HQ-OAR-2006-0790-2431-A2

Comment Excerpt Number: 2

Comment: The seasonally operated boilers category needs to include coal-fired boilers, and it needs to accommodate a longer season for boilers that operate in locations that have longer winter seasons, Simplot proposes the following definition of Seasonal Boiler:

Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 5 months due to seasonal conditions.

As an example, at Simplot's Smoky Canyon Mine (elevation approximately 7,000 feet), has a coal-fired boiler with a maximum heat input of 12 MMBtu/hr. Historically, the facility has never operated that boiler at or above 10 MMBtu/hr heat input. The coal-fired boiler's sole purpose is to provide building heat in the shop and office area at the mine only during the colder months of the year (October through April). There are no other demands of the boiler at the mine.

Response: The EPA's intent in creating a seasonal boiler subcategory is to reduce the requirements on biomass-fired and oil-fired boilers that operate for a short duration (i.e., 5 or fewer consecutive months) each 12-month period. Units that operate for the majority of the year do not meet that intent and are, therefore, excluded from the seasonal boiler subcategory. The standards for biomass-fired and oil-fired boilers reflect the application of GACT whereas the standards for coal-fired boilers must reflect the application of MACT for emissions of Hg and POM.

Commenter Name: Chelly Reesman
Commenter Affiliation: J.R. Simplot Company
Document Control Number: EPA-HQ-OAR-2006-0790-2431-A2
Comment Excerpt Number: 3

Comment: Simplot supports the EPA's proposal to exempt temporary boilers. Simplot also proposes to include in the exemption, seasonally operated boilers at and under 10 MMBtu/hr heat input regardless of portability and length of time at the facility location.

Response: The EPA appreciates the commenter's support of the temporary boiler exclusion. We disagree with the commenter's suggestion that seasonally operated boilers with heat input capacity equal to or less than 10 MMBtu/hr, regardless of portability and length of time at the facility location be included in the temporary boiler exclusion. The final rule's definition of "temporary boiler" does not limit heat input capacity but does specify that the boiler must be designed to, and be capable of, being carried or moved from one location to another and that a boiler is not a temporary boiler if it remains at a location within the facility and performs the same or similar function for more than 12 consecutive months unless the regulatory agency approves an extension.

We would like to point out that the final rule does not exclude seasonal boilers. Seasonal boilers are biomass- or oil-fired boilers of any heat input capacity that undergo a shutdown for a period of at least 7 consecutive months each 12-month period, except for periodic testing, which cannot exceed a combined total of 15 days during the 7-month shutdown. The final rule requires that seasonal boilers conduct tune-ups every 5 years.

Commenter Name: Arthur Marin
Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)
Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1
Comment Excerpt Number: 15

Comment: The proposed definition of a seasonal boiler is:

Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) due to seasonal market conditions. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

NESCAUM is concerned that this seasonal boiler definition creates an opportunity for facilities with boilers used as heating units during the heating season to claim that they are "seasonal units," although that is not the EPA's stated intent. Boilers operating from November through March (i.e., that are shut down between April and October) might qualify as seasonal units under the proposed language and operate under the reduced tune-up requirements. Therefore, NESCAUM does not support the creation of a seasonal use category. Instead, NESCAUM proposes that the EPA create a "limited-use" subcategory that would serve to fulfill EPA's intent to include facilities that are used on a more limited basis than units operated year-round. The limited-use subcategory would be similar to the limited-use subcategory described in the Major Source Boiler Rule (76 FR 80609), specifically applying to units operating less than 10% of the

hours in a year. This has the benefit of being consistent with the major source rule approach, and similar boilers would be treated the same way in different categories.

Response: The EPA has determined that a limited-use boiler subcategory is appropriate and is including a limited-use subcategory in the final Area Source Boiler Rule. See the response to EPA-HQ-OAR-2006-0790-2443-A1 excerpt 39.

We also have determined that a seasonal boiler subcategory is appropriate and the final rule includes a seasonal boiler subcategory. The seasonal boiler subcategory and the limited-use subcategory address boilers operating under different circumstances. The EPA's intent in creating a seasonal boiler subcategory is to reduce the requirements on biomass-fired and oil-fired boilers that operate for a short duration over consecutive months (i.e., 5 or fewer consecutive months) each 12-month period. For example, sugar mills that operate during the grinding season have boilers that operate on a seasonal basis. The EPA's intent in creating a limited-use boiler subcategory is to reduce the requirements on solid fuel and liquid fuel-fired boilers that operate on an intermittent basis each 12-month period (i.e., average annual capacity factor of no more than 10%). For example, boilers that serve for standby or low load purposes operate on such a limited basis. A tune-up frequency of every 2 years is more burdensome on industries with short seasonal operations. The EPA considers an adjustment in the frequency of tune-ups for seasonally operated boilers to every 5 years to be appropriate because the boiler will undergo a tune-up after a similar period of actual operation (i.e., not more than 25 months).

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 10

Comment: We support the creation of the seasonally operated boiler subcategory, which, like many of the changes, will reduce requirements on boilers that operate infrequently or otherwise are likely to be insubstantial sources of HAPs. The EPA proposes that seasonal boilers would include boilers that undergo "a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) due to seasonal market conditions." However, many seasonal boilers are subject to separate regulatory requirements that they be officially available for longer periods. For example, in New York City and other cities in colder climates, heating is required to be available from October 1 to May 31. Other jurisdictions may have differing seasons depending on local needs. Thus, we recommend that the EPA consider a wider range of seasonal definitions, or allow for a 3-year rolling average of actual months of operation, without requiring a permit limit restricting months of availability.

Response: See the response to EPA-HQ-OAR-2006-0790-2431-A2, excerpt 2.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 3

Comment: A number of our members have expressed support for the creation of the seasonally operated boiler subcategory, which, like many of the changes, will reduce requirements on boilers that operate infrequently or otherwise are likely to be insubstantial sources of HAPs. However, the EPA proposes that seasonal boilers would include boilers that undergo “a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) due to seasonal market conditions.” Seasonal changes affect differing parts of the US. The 7-month shutdown period benefits only facilities in the southern part of the country. The definition should be based upon differing regional climate conditions to allow for northern seasonal variances or shortened to 5-month shutdown criteria.

Response: See the response to EPA-HQ-OAR-2006-0790-2431-A2, excerpt 2.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 3

Comment: In the reconsideration of the boiler rules, the EPA determined it is appropriate to revise the regulations to add subcategories to reflect unique boilers.⁴ In particular, the EPA added limited-use and non-continental liquid unit subcategories to the Major Source Boiler Rule. In addition, the EPA also added a seasonally operated subcategory to the Area Source Boiler Rule. In doing so, the EPA demonstrated that the Agency is currently reassessing how to properly regulate seasonal and agricultural sources under the boiler rules. In light of this, the USBSA urges the EPA to expand the area source seasonal subcategory to include area source boilers used in the production of beet sugar by increasing the time of operations allowed for the seasonal subcategory and removing the fuel restriction, or to introduce a new subcategory for those boilers used to support seasonal agriculture.

⁴ In the reconsideration of the Major Source Boiler Rule, the EPA explains that it is reconsidering several subcategories. (76 FR 80607.) In the reconsideration of the Area Source Boiler Rule, the EPA is proposing to create a new subcategory for seasonally operated boilers. (76 FR 80534.)

Response: The EPA does not find it appropriate to expand the seasonal boiler subcategory to allow for longer periods of operation each 12-month period or to include coal-fired boilers. The EPA's intent in creating a seasonal boiler subcategory is to reduce the requirements on biomass-fired and oil-fired boilers that operate for a short duration (i.e., 5 or fewer consecutive months) each 12-month period. From comments seeking the creation of this subcategory, we believe most of the sources highlighted to us operate for shorter durations, and the 5-month period was intended to clearly capture them while distinguishing from sources that operate for most of the year. Units that operate for the majority of the year do not meet that intent and are, therefore, excluded from the seasonal boiler subcategory. The standards for biomass-fired and oil-fired boilers reflect the application of GACT whereas the standards for coal-fired boilers must reflect the application of MACT for emissions of Hg and POM. For coal-fired sources sized greater than 10 MMBtu/hr, numeric limits are required to meet minimal floor MACT requirements, and for

smaller coal-fired units, the top performing sources perform more frequent tune-ups than every 5 years.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 6

Comment: The EPA should expand the current seasonal subcategory or create a separate subcategory for agricultural, seasonal boilers.

In the reconsideration of the Area Source Boiler Rule, the EPA acknowledged that it is appropriate to treat boilers that are operated on a seasonal basis differently from boilers that run continuously all year long. Boilers that run on a partial schedule have less overall environmental impact and can often tie their use to seasonal agricultural production. Boilers located at sugarbeet processing facilities fall into such a seasonal use category because they are only used for a finite agricultural season. The average use is less than 32 weeks, during which sugarbeets are being processed into granulated sugar. Over 80% of the boilers at sugarbeet processing facilities operate eight months or less per year.

The USBSA recommends that the EPA build upon the differentiation for seasonal sources already present in the reconsideration of the Area Source Boiler Rule to either include such boilers in the seasonal subcategory or create a separate subcategory for seasonal, agricultural boilers that are located in remote locations and tied to the production of a crop. The EPA has broad authority to subcategorize sources, and therefore, the Agency is strongly supported in creating an agricultural, seasonal boiler subcategory. Indeed, expanding or creating an additional subcategory is an effective way to avoid unnecessarily costly emissions standards while still effectively protecting human health.

Response: See the response to EPA-HQ-OAR-2006-0790-2450-A1 excerpt 3. We also note that the time limit on the seasonal boiler subcategory (5 months) would require a tune-up every 25 months, maximum, of operating time. That is close to the 2-year calendar time cycle for non-seasonal boilers. Boilers that operate 8 months a year, like those mentioned by the commenter, would reach 24 months in 3 operating years, which is closer to the cycle for non-seasonal boilers.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 9

Comment: The remote nature of the USBSA members' boilers; such boilers are used only on a seasonal basis.

Because the boilers are tied to the production of an agricultural product, they are used only during the season for processing sugarbeets into granulated sugar. There is no other market for

sugarbeets other than being processed into granulated sugar, and the sugarbeets must be processed in a timely manner such that they do not spoil. Once the yearly harvest of sugarbeets has been processed, the boilers at such facilities cease to operate until the next harvest is received.

The limited-use nature of the boilers further supports either adding them to the current seasonal subcategory or creating a separate subcategory because the overall emissions impact of such boilers is low. Over 80% of the boilers run for 8 months or less a year. It is appropriate for the Agency to take these lower levels of operation for agricultural boilers into account and to either add them to the existing seasonal use subcategory or create a new subcategory to reflect their unique characteristics.

Response: See the responses to EPA-HQ-OAR-2006-0790-2450-A1 excerpts 3 and 6.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 4

Comment: With regard to boilers located at beet sugar processing facilities that are area sources, the USBSA requests that in the final rule the EPA provide that area source facilities located away from concentrated urban centers that adhere to agricultural and seasonal use patterns may either:

- be included in the seasonal subcategory or in the alternative may be found to constitute a separate subcategory, and
- be permitted to comply with the final Boiler Rules using a management practices standard during normal operations as well as during startup, shutdown, and periods of malfunction.

Response: See the response to EPA-HQ-OAR-2006-0790-2450-A1 excerpt number 3.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 7

Comment: The CAA requires that the EPA publish a list of "all categories and subcategories of major sources and area sources" of HAP.⁵ In creating such a list, the EPA is required to be consistent with the categories created for NSPS and PSD programs, only "to the extent practicable." Indeed, the statute gives the EPA significant discretion in the creation of additional subcategories "as appropriate." No other place in §112 of the CAA speaks to or limits the EPA's abilities to create subcategories when appropriate. Courts also have found that the Agency's ability to subcategorize sources is quite broad and is limited only by the general reasonableness to which all agencies must adhere.⁶ In addition, the EPA itself has acknowledged that it should

address the creation of subcategories on an "as appropriate" basis, with the understanding that "each HAP- emitting industry presents its own unique situation and facts to be considered."⁷ The EPA already has created subcategories based on use and on geography,⁸ and thus such additional subcategories would simply be an expansion of what the Agency already has done, using the same rationale.

⁵ CAA, §112(c)(1); 42 U.S.C. §7412(c)(1).

⁶ See *Sierra Club v. EPA*, 479 F. 3d 875, 885 (D.C. Cir. 2007).

⁷ 69 FR 45944; 45989 (July 30, 2004).

⁸ 76 FR at 80607 (December 23, 2011).

Response: See the responses to EPA-HQ-OAR-2006-0790-2450-A1 excerpts 3 and 6.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 13

Comment: The EPA also proposes to reduce the frequency of tune-ups for a new subcategory of "seasonally operated boilers." This is not a lawful subcategory, because a boiler that is operated seasonally is not of a different class, type, or size from boilers operated more frequently. (42 U.S.C. §7412(d)(1).) Moreover, it is arbitrary and unlawful to fail to require these boilers to undergo tune-ups every 2 years. The EPA has not determined that the environmental benefits of tune-ups every 2 years do not also apply to seasonally operated boilers. Instead, the EPA bases its decision with respect to these boilers on an assertion by industry that tune-ups are more burdensome for seasonally operated boilers. Even if true, this is not a relevant criterion in the decision whether tune-ups every 2 years are a generally available control technology.

If the EPA persists in this special accommodation for seasonally operated boilers, it should at least revise the definition to limit it to boilers that undergo a 7-month shutdown *each year*. To classify boilers as seasonal when they are sometimes put to more regular use was presumably not the EPA's intent. Doing so would be arbitrary.

Response: A tune-up frequency every 2 years is more burdensome on industries with short seasonal operations than non-seasonal industries. The EPA considers an adjustment in the frequency of tune-ups for seasonally operated boilers to every 5 years to be appropriate because the boiler will undergo a tune-up after a similar period of actual operation (i.e., not more than 25 months). In the final rule's definition of seasonal boiler, we have clarified that a seasonal boiler is a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period.

Commenter Name: Derek Grasso
Commenter Affiliation: Covanta Energy Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-2430-A2
Comment Excerpt Number: 3

Comment: The infrequent and short operation of the Covanta boiler (in Jonesboro, ME) appears to be consistent with the EPA's intent regarding its proposal for seasonal boilers in the agriculture industry. In fact, the boiler will probably be operated for significantly less total time than other seasonal boilers that could run for 5 months. The boiler will run continuously for only a period of at most a few weeks. However, the proposed definition of "seasonal boiler" requires that a boiler be shut down for 7 consecutive months (210 consecutive days) to qualify for the less-frequent tune up schedule. The short periods (1 to 3 days) of capacity testing for the Jonesboro facility twice per year would occur within 7 months of each other.

Response: The final rule includes an allowance for testing during the seasonal boiler's shutdown period. Specifically, the final rule includes an amended definition of seasonal boiler that allows for periodic testing not to exceed a combined total of 15 days of use during the shutdown period.

Commenter Name: W. Allan Cagnoli
Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)
Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1
Comment Excerpt Number: 6

Comment: HPBA proposes the following specific changes to the amendments the EPA proposed at 76 FR 80544-52 to the Area Source Boiler Rule:

Add the following sentence to proposed §63.11223(c) (76 FR at 80545 col.2): "As an exception to the preceding sentences in this subsection, seasonal biomass boilers with heat input capacity less than 3.0 MMBtu/hr instead shall adhere to the manufacturer's recommendations for good combustion as those recommendations appear in the manufacturer's applicable operation and maintenance manual for the boiler in question."

Response: The EPA appreciates the commenter's input but is not providing separate requirements for seasonal biomass-fired boilers with heat input capacity less than 3 MMBtu/hr. We continue to believe that a 5-year tune-up requirement is appropriate for all boilers meeting the definition of seasonal boiler and are retaining that requirement as proposed in December 2011.

Commenter Name: W. Allan Cagnoli
Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)
Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1
Comment Excerpt Number: 7

Comment: HPBA proposes the following specific changes to the amendments the EPA proposed at 76 FR 80544-52 to the Area Source Boiler Rule:

Add the following clause before the period at the end of the proposed definition of "seasonal boiler" in §63.11237 (76 FR at 80548 col.2): "or that undergoes a shutdown during the warmest months of the year due to seasonal climatic conditions."

Response: In the final rule, "seasonal boiler" is defined as a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory. The boiler described by the commenter would be considered a seasonal boiler as long as the boiler is biomass-fired or oil-fired and undergoes a shutdown for a period of at least 7 consecutive months each 12-month period. The EPA does not find it appropriate to expand the seasonal boiler subcategory to allow for longer periods of operation each 12-month period or to include coal-fired boilers. The EPA's intent in creating a seasonal boiler subcategory is to reduce the requirements on biomass-fired and oil-fired boilers that operate for a short duration (i.e., 5 or fewer consecutive months) each 12-month period. Units that operate for the majority of the year do not meet that intent and are, therefore, excluded from the seasonal boiler subcategory. Coal-fired boilers, which are regulated to meet the requirements of CAA §112(c)(6), require controls that meet CAA §112(d)(2), 112(d)(3), or 112(h). The best performing coal sources have more stringent requirements than a tune-up every 5 years.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 39

Comment: The EPA should also include a limited-use subcategory in the Area Source Boiler Rule for the same reasons they determined a seasonal boiler subcategory was appropriate. The EPA should establish work practices as the appropriate compliance approach for a limited use subcategory, and establish the following definition for limited use unit:

Limited-use boiler means any boiler that burns any amount of solid, liquid, or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable limit of no more than 876 hours per year of operation or 10% capacity factor.

A capacity utilization factor of 10% was chosen for the 2004 final Boiler MACT Rule as the best means of defining a limited use unit.¹¹ The 2011 Boiler MACT Rule also includes a subcategory for limited-use units that is currently based on operation at less than 10% of the potential annual operating hours.¹² The EPA has taken a capacity factor approach in the recently finalized MATS Rule, establishing a subcategory for limited use liquid-fired units with an 8% capacity factor (limited-use liquid oil-fired subcategory means an oil-fired electric utility steam generating unit with an annual capacity factor of less than 8% of its maximum or nameplate heat input, whichever is greater, averaged over a 24-month block contiguous period).¹³

¹¹ See National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 69 FR at 55223.

¹² See 40 CFR 63.7500(c).

¹³ See 40 CFR 63.10000 and 63.10042.

Response: The EPA has determined that a limited-use boiler subcategory is appropriate and is including a limited-use subcategory in the final Area Source Boiler Rule. We believe that establishing a limited-use subcategory is consistent with our logic in establishing a seasonal boiler subcategory in that, due to both boiler types' annual operating schedule, they do not need tune-ups on as frequent of a basis as other boilers. The seasonal boiler provision allows no more than 5 months of annual operation. On a 5-year tune-up cycle that means a seasonal boiler would operate for no more than 25 months in between tune-ups which is approximately the same number of months full-time boilers operate in between biennial tune-ups. Boilers that operate at no more than 10% load (i.e., a limited-use boiler) would operate for no more than the equivalent of 6 months full load in between tune-ups on a 5-year tune-up cycle. We believe that establishing a limited-use subcategory is reasonable.

Specifically, a limited-use boiler is defined in the final rule to mean any boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10%. We are using a capacity-factor approach for the same reasons that the approach is being used in the major source boiler rule. A capacity-factor approach allows operational flexibility for units that operate on standby mode or low loads for periods longer than would be allowed under an approach that limited hours of operation (e.g., the 876 hours per year included in the proposed limited-use definition for major source boilers). The operational flexibility associated with a capacity-factor approach can be achieved without increasing emissions or harm to human health and the environment. Units operating at 10% load for 8,760 hours per year would emit the same amount of emissions as units operating at full load for 876 hours per year. Further, it is technically infeasible to test these limited-use boilers since these units serve as back up energy sources and their operating schedules can be intermittent and unpredictable.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 2

Comment: The EPA should apply the same 5-year tune-up cycle for limited-use oil units such as auxiliary boilers that it is proposing in this rule for seasonally operated units and small units. In the electric utility industry, these auxiliary boilers are typically used to generate the steam necessary to bring a main EGU on line (during startup). Since auxiliary boilers are primarily operated during unit startup, operation for many of these boilers is typically very limited and sporadic. Therefore, the EPA should modify the frequency of required tune-ups for oil-fired auxiliary boilers from biennial to every 5 years. In the alternative, or at a minimum, the EPA

should apply the same triennial cycle (tune-ups every 3 years) that is established for limited-use oil units in the final Utility MATS rule for oil-fired auxiliary boilers.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1 excerpt 39.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 4

Comment: The EPA proposed a definition for seasonal boilers with a less rigorous tune up schedule for these boilers. The EPA should instead provide an exemption for "limited-use" boilers in the Area Source Boiler Rule, consistent with the Major Source Boiler MACT.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 39.

Rationale for Subcategories: Out of Scope

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 1

Comment: The proposed source subcategorizations may not represent the groupings that would lead to the most efficient regulatory program. Subcategorizations should be made to the extent that they increase the rule's net benefits. Setting separate standards for multiple different subcategories incurs administrative costs: collecting separate information, setting the different standards, and monitoring and enforcing different standards. Such costs are only warranted if different sources face sufficiently different costs or could generate sufficiently different benefits such that setting a unique standard would increase overall net benefits.

The EPA should justify any subcategorizations it makes along these grounds. Its current explanation for the subcategories begins to address the differing costs and benefits of regulating different existing sources. Retrofitting existing plants with control devices or process changes can be costly, and plants designed for different fuel types may face different retrofit costs and may be able to achieve different levels of emissions reductions. But the EPA should be more explicit about the costs and benefits it is weighing in making these determinations, should try to quantify the costs and benefits to the extent possible, and should only propose subcategories for existing sources to the extent that different standards will enhance net benefits.

The EPA should explore the justifications for subcategorization for new sources separately. Compared to existing sources, new sources do not face the same limitations on their design options. The EPA must explain why for new, still-unconstructed sources, it would not be more efficient to set a single standard and let all new sources choose any fuel type and design option capable of meeting that standard.

Response: The comment presents a generalized approach to developing subcategories but does not specifically link the suggestions to rule provisions. As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 9

Comment: Since the processed fats samples metal HAP emissions are drastically different in type and quantities than the petroleum-based liquid fuels, the boilers burning these two types of fuels are not similar sources. Due to the fuels not being identified as similar sources, the NRA requests that processed fats fired boilers be defined separately from oil subcategory.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. The EPA solicited comments for the Area Source Boiler Rule on the proposed subcategory for seasonally operated boilers. During the time for requesting reconsideration, the parties petitioning for the seasonal boiler subcategory provided a basis for establishing the subcategory. We note the proposal for a subcategory for processed fats fired boilers is incomplete in many respects. The commenter does not provide a basis for distinguishing a boiler capable of burning processed fat-derived fuel from a boiler that otherwise burns petroleum-based liquid fuels. The contemplated subcategory would only be distinguishable based on what fuel is sold to the liquid-fueled boiler. Sources would be capable of switching between subcategories with relative ease, thereby posing compliance assurance difficulties. The EPA is not in a position to adopt the suggested subcategorization as a logical outgrowth of the proposed reconsideration.

Commenter Name: Chelly Reesman

Commenter Affiliation: J.R. Simplot Company

Document Control Number: EPA-HQ-OAR-2006-0790-2431-A2

Comment Excerpt Number: 4

Comment: Because NESHAP regulations apply to existing sources, unlike NSPS regulations, the EPA should allow facilities to accept a production limit to de-rate a boiler. This would allow facilities to match actual historical use with the appropriate level of environmental requirements and environmental protection.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Chelly Reesman
Commenter Affiliation: J.R. Simplot Company
Document Control Number: EPA-HQ-OAR-2006-0790-2431-A2
Comment Excerpt Number: 5

Comment: The EPA should make clear in the preamble that plugging boiler tubes is a sufficient means to de-rate a boiler when it would be otherwise subject to 40 CFR 60 Subpart JJJJJ.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Arthur Marin
Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)
Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1
Comment Excerpt Number: 3

Comment: NESCAUM urges the EPA to create a new subcategory for biomass EGUs of 25 MW or greater and establish emissions standards for these units at a MACT level of control consistent with how EGUs powered by other fuels are regulated. Though most types of EGUs have a separate MACT rule regulating them, EGUs that burn biomass fuel do not. Therefore, biomass EGUs with emissions below the major source threshold will be regulated as area source boilers, which is an inappropriate classification. There are many such sources that fall into this subcategory; in the NESCAUM region alone, at least a dozen facilities fall into this category and are subject only to area source requirements.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Arthur Marin
Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)
Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1
Comment Excerpt Number: 4

Comment: The Area Source Boiler Rule has created categories that are too large, and include a broad variety of boiler types that are not comparable. The current and proposed requirements for existing and new biomass boilers with heat input higher than 30 MMBtu/hr do not adequately address the potential impacts and reductions that could be achieved by these very large units captured under the Area Source Boiler Rule. Therefore, the NESCAUM states urge that the EPA

develop a subcategory for biomass EGUs of 25 MW or greater that include appropriate emission limits and testing requirements as required for similar sized units firing liquid fuels and coal.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 11

Comment: Each year NRA members test several thousand samples of processed fats for the presence of the chlorinated pesticides and polychlorinated biphenyls (PCBs) as a good manufacturing practice (GMP) to assure compliance with tolerances established by the Federal Drug Administration (FDA) or EPA. Three of the aforementioned processed fats samples (Yellow Grease No. 1, Poultry Grease, and Tallow No. 1) were also analyzed using ASTM D 4327 and indicated no detected chloride content. The methods used for chlorinated pesticide testing are also recognized by the World Health Organization (WHO) as an approved method for the screening of dioxins and dioxin like substances and therefore the referenced test results also indicate these compounds are not typically present in processed fats...The NRA considers these GMP practices and results of monitoring processed fats for chlorinated pesticides and PCBs as demonstrating that total chloride and PCB content is insignificant...Due to insignificant content of the urban HAP (based on separate FDA requirements for the industry) in the processed fats prior to combustion, the NRA believes the correlation to insignificant emissions from boilers located at area sources burning processed fats is direct. Any PCB emissions result from the actual PCB content in the fuel source combusted and are not produced by combustion due to insignificant levels of chlorinated compounds in the fuel source. Without high content of PCBs in processed fats due to industry quality requirements, area source boilers burning processed fats do not fit the group of emission sources representing 90% of the total urban HAP emissions of PCBs.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Michael G. Dowd

Commenter Affiliation: Virginia Department of Environmental Quality (VADEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2434-A1

Comment Excerpt Number: 1

Comment: VADEQ suggests that the EPA further divide the oil-fired subcategory for new units into distillate and residual oil-fired subcategories and establish particulate limits for only residual oil-fired units. Because particulate emissions are typically low for new distillate oil-fired units, VADEQ recommends the units in this subcategory should only be required to meet work practice standards.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. The 2010 proposed rule proposed to cover all oil-fired boilers within one category. The EPA responded to similar comments at the time of the 2011 final rule. Nevertheless, the final rule includes revised provisions that regard oil-fired boilers and particulate emissions. Specifically, in the final rule, new or reconstructed oil-fired boilers that (1) combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart; and (2) do not use a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions, are not subject to the PM emission limit providing the type of fuel combusted is monitored and recorded on a monthly basis. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM. In addition, the final rule specifies that the owner or operator of an affected boiler does not need to conduct further PM emission testing if, when demonstrating initial compliance with the PM emission limit, the performance test results show that the PM emissions are equal to or less than half of the PM emission limit. Also, see the response to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 10.

Commenter Name: Michael G. Dowd

Commenter Affiliation: Virginia Department of Environmental Quality (VADEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2434-A1

Comment Excerpt Number: 2

Comment: If the EPA subdivides the oil-fired subcategory into distillate and residual oil-fired subcategories, VADEQ recommends that the EPA exclude existing gas-fired units with distillate oil-fired back-up capability that make the fuel switch to distillate oil after June 4, 2010 from being classified as a new affected source as currently required by §63.11194(d).

Response: See the responses to EPA-HQ-OAR-2006-0790-2434-A1, excerpt 1, and EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 10

Comment: We believe that it would be good practice for the EPA to incentivize pollution prevention. One way this could be accomplished is to treat distillate oil and ultra-low sulfur diesel differently than residual oils. The AP-42 emission factor for filterable particulate from

these boilers is 2 lb/1,000 gallons or 0.0143 lb/MMBtu heat input, which is less than half of the Subpart JJJJJ standard of 0.03 lb/MMBtu. Splitting up the category of oil-fired boilers to simplify the requirements for cleaner oils, by requiring work practice standards on a longer time frame (5 years instead of 2 years) for larger units (up to 10 MMBtu/hr from the proposed 5 MMBtu/hr), would provide an incentive to use the cleaner fuels.

Response: All existing oil-fired boilers and new oil-fired boilers with heat input capacity of less than 10 MMBtu/hr are subject to tune-up requirements under the final rule. The EPA received a number of comments urging that we provide an exemption from the PM limit for units burning low-sulfur liquid fuel as is provided in Subpart Dc of 40 CFR Part 60 (standards of performance for new small industrial-commercial-institutional steam generating units). Commenters asserted that such an exemption is justified since the low sulfur content indicates low PM emissions and that boilers firing low-sulfur liquid fuel should only be subject to a requirement to maintain records documenting the liquid fuel fired. We agree with commenters that use of low sulfur liquid fuels results in much lower PM emissions. Use of low sulfur liquid fuels also results in much lower HAP metal emissions. Specifically, the HAP metal emission factors for distillate fuel oil are 7 to 10 orders of magnitude lower than the emission factors for number 6 fuel oil.

In the final rule, we are amending 40 CFR 63.11210 to specify that new or reconstructed oil-fired boilers that:

- (1) combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart; and
- (2) do not use a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions

are not subject to the PM emission limit providing the type of fuel combusted is monitored and recorded on a monthly basis. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM. In addition, the final rule specifies that the owner or operator of an affected boiler does not need to conduct further PM emission testing if, when demonstrating initial compliance with the PM emission limit, the performance test results show that the PM emissions are equal to or less than half of the PM emission limit.

Work Practices/Management Practices: Initial tune-ups at new sources

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 3

Comment: We agree with the EPA that decreased frequency of tune-ups is appropriate. For new sources we believe that is correct to remove the requirement for the initial tune-up. Representing original equipment manufacturers (OEMs) we agree that new units will be typically tuned during the startup process. If the applicable biennial (> 5MMBtu/h) or 5-year (<= 5MMBtu/h) tune-up

schedule is set it is acceptable that it should occur no later than 25 months or 61 months respectively after the initial startup.

Response: The EPA thanks the commenter for their support.

Commenter Name: Andrea Grant
Commenter Affiliation: Castle Oil Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2
Comment Excerpt Number: 3

Comment: The EPA has properly recognized that new units will typically be tuned during the startup process when they are installed. They should therefore not need an initial tune-up. Accordingly, Castle supports the EPA's proposal to eliminate the requirement for initial tune-ups for new units.

Response: The EPA thanks the commenter for their support.

Commenter Name: Heather Parent
Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)
Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2
Comment Excerpt Number: 2

Comment: Maine DEP disagrees with the removal of the tune-up requirement for new boilers. The EPA should require a modified tune-up for new sources that focuses on the optimization of boiler efficiency. The EPA should also allow for sources to request approval for modified tune-up procedures from the delegated authority, similar to mechanisms provided in the EPA's rules regarding stack testing and monitoring.

Response: We are not requiring an initial tune-up on startup because new boilers should be installed optimized for efficiency, i.e., "in tune". It is reasonable to assume that new boilers will be optimized for efficiency and installed consistent with manufacturers' performance specifications. However, over time, boiler efficiency can diminish. Periodic tune-ups after startup restore the boiler to an efficient state given its age and other parameters. As we discuss elsewhere, emission reductions occur by maintaining efficient combustion through periodic tune-ups.

The requirements of the tune-up have been specified in the rule "as applicable" to the unit, therefore a request for a modified tune-up procedure is unnecessary. Although new and reconstructed boilers are not required to complete an initial tune-up, they are required to complete a tune-up every 2 or 5 years after the initial startup of the new or reconstructed boiler, as applicable.

Commenter Name: W. Allan Cagnoli
Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)

Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1

Comment Excerpt Number: 4

Comment: The rule's tune-up program currently requires the owner/operator of a new outdoor hydronic heater (OHH) unit to complete a full tune-up within a relatively short time after installation. Even putting aside the requirement to measure before-and-after CO/O₂ levels, this is plainly governmental overkill. The owner/operator and the installer have strong and adequate incentives independently of the Area Source Boiler Rule to ensure that the unit is configured to combust cordwood with maximum efficiency. The current initial tune-up requirement, as it relates to OHH units, is inappropriate and irrational.

Response: The requirement to perform an initial tune-up on new sources does not appear in the December 2011 proposal nor is it included in this final rule. New sources are not required to conduct initial tune-ups.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 9

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provision:

Eliminate the requirement for tune-ups for new units

Response: New and reconstructed boilers are not required to complete an initial tune-up, but are required to complete a tune-up every 2 or 5 years after the initial startup of the new or reconstructed boiler, as applicable.

Work Practices/Management Practices: Tune-up schedule for seasonal boilers

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)

Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1

Comment Excerpt Number: 5

Comment: The rule's tune-up program currently requires the owner/operator of a new OHH unit to complete a full tune-up within a relatively short time after installation. The best solution to the problems described above is to re-define the rule's tune-up requirements, as they apply to the special case of ICI OHH units, solely in terms of adherence to the manufacturer's recommendations for optimum combustion as they appear in the applicable operation and maintenance manual. Such a substitution of mandates would eliminate the requirements for CO/O₂ measurement, biennial tune-ups during operation, and initial tune-ups for new OHH units. They would put in place for OHH units precisely the well-tailored tune-up regime that long practical experience in the OHH industry has produced over the years. That regime is

"appropriate" and rational. The EPA has full authority to substitute it for the current tune-up program in the case of OHH units. Indeed, a failure to substitute it would be indefensible before the D.C. Circuit.

Response: New and reconstructed boilers are not required to complete an initial tune-up, but are required to complete a tune-up every 2 or 5 years after the initial startup of the new or reconstructed boiler, as applicable. We consider subsequent tune-ups every 2 or 5 years, as applicable, to be appropriate and are retaining the requirement in the final rule.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)

Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1

Comment Excerpt Number: 3

Comment: The current tune-up regime still suffers by comparison with OHH manufacturers' recommendations on optimizing combustion efficiency as they appear in the applicable operation and maintenance manual. Within the OHH industry, those recommendations embody decades of practical experience with optimizing the combustion of cordwood in OHH units. As Exhibits A and B exemplify, those recommendations reflect a "systems" approach to such optimization, addressing first the continuous operational adjustment of airflow and other factors to account for the different types and moisture levels of the cordwood and then calling for maintenance and repair at the end of every season of operation. In other words, as typically recommended, the owner/operator starts each season with a fully refurbished unit, operates it daily in a manner that makes best use of the cordwood according to its varying characteristics, and ends the season with refurbishment.

By comparison with that pattern as recommended by the manufacturer, the rule's current tune-up program is unnecessary and burdensome. It forces the owner/operator every 2 years to conduct entirely artificial procedures that interfere with daily operation and can result in premature maintenance and repair. The rule's program assumes continuous year-round operation, when in fact OHH units operate seasonally and are therefore best managed on that basis. Also, the program assumes a rate of significant degradation in the functionality of a given biomass boiler - every 2 years - that has no basis in the reality of OHH units. OHH units are relatively simple in design and, while structurally durable, nonetheless generate large amounts of byproducts, such as ash, from the combustion of cordwood as fuel. As the recommendations of OHH manufacturers attest, the most efficient way to assure maximum combustion efficiency in the case of an OHH unit is to perform post-season maintenance and repair and then operate the unit in season with a careful eye to the type and moisture content of the cordwood in use. There is no good reason to break into that seasonal operation with any sort of tune-up procedure. To the contrary, such interference only compromises the steady operation that produces best results and it imposes costs that have no corresponding benefit. It is not "appropriate" within the GACT concept, nor rational.

Response: The final rule requirements for seasonal boilers are an initial tune-up for existing boilers followed by tune-ups every 5 years. The definition of seasonal boiler is also being altered

to allow for up to 15 days of testing during the shutdown period to avoid interference with seasonal use.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 1

Comment: The EPA is proposing to create a new subcategory for seasonally operated boilers. For these seasonally operated boilers, the EPA is proposing to require a tune-up every 5 years (following the initial tune-up). Seasonally operated boilers would be defined as follows:

Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) due to seasonal market conditions. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory. (76 FR 80535.)

ACC supports the addition of a seasonal boiler subcategory. These boilers are used in seasonal agricultural operations or for occasional indoor heat. They typically operate only about 100 days per year, so the number of hours operated over a 5-year period is much less than that for a boiler in normal operation. However, requiring the same tune-up frequency, every 5 years, for these units as that required for units that operate continuously is not appropriate. In addition, an allowance should be made for those seasonal units to conduct maintenance and test firing during the 7 month period to ensure the unit is in good operating condition for the upcoming seasonal operations.

Response: The EPA considers the tune-up requirement for seasonal boilers to be appropriate and is retaining it in the final rule. Non-seasonal boilers do not necessarily operate continuously (24/7/365), so we disagree that the comparison of some (not all) seasonal boilers to the hours of operation of a hypothetical full-time boiler is not an accurate one. The definition for seasonal boiler is being altered to allow facilities to perform up to a combined total of 15 days of testing during the shutdown period.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 8

Comment: There are many instances where boiler operation may be too irregular to qualify as seasonal use, but run infrequently enough that a tune-up would be due while the unit is not operational, including at nuclear facilities. The final Area Source Boiler Rule states that boilers due for a tune-up while they are not operating are not required to run the boiler only for the tune-up. Boilers in these situations would be required to conduct the tune-up within 1 week of startup. It does not appear that the proposed reconsideration seeks to alter this provision; however, the Clean Energy Group expresses support for and encourages the EPA not to alter this common-

sense provision that eliminates unnecessary boiler operation and associated emissions. One week in which to complete the tune-up is reasonable and in line with state requirements (see, for example, New Jersey's code at 7:27-19.4(c), which allows seven days from initial operation for boilers not running when combustion adjustments are due).

Response: The EPA thanks the commenter for their support. We would like to point out that the final rule specifies that if a boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. A comment on the major source boiler tune-up requirements pointed out that CO levels are not stable initially after startup and suggested that additional time be allowed for CO optimization prior to the tune-up. We agree with the comment and determined that revisions to the Area Source Boiler Rule are appropriate.

In addition, the EPA has determined that a limited-use boiler subcategory is appropriate and is including a limited-use subcategory in the final Area Source Boiler Rule. Specifically, a limited-use boiler is defined in the final rule to mean any boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10%. We believe that establishing a limited-use subcategory is consistent with our logic in establishing a seasonal boiler subcategory in that, due to both boiler types' annual operating schedule, they do not need tune-ups on as frequent of a basis as other boilers. Boilers that operate on an irregular and infrequent basis, such as boilers at nuclear facilities described by the commenter, are anticipated to meet the final rule's definition of a limited-use boiler and, thus, would be subject to a tune-up every 5 years. Also, see the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 39.

Work Practices/Management Practices: General

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 9

Comment: The EPA received comments from the agriculture industry, specifically from the sugar industry that indicated some boilers are not equipped to measure CO and O₂ and would be required to conduct stack testing in order to meet tune-up requirement in 40 CFR 63.11223(b)(5):

"Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made..."

For most boilers subject to tune-up requirements, a portable combustion gas analyzer is utilized to measure CO and O₂ in flue gases before and after the boiler adjustments are made. For these units, performance stack testing is not necessary to measure these gases in the effluent stream. The EHSCP requests that care be taken to ensure that the final rule and its associated preamble

do not contain statements that could be interpreted to require performance stack testing to comply with the tune-up requirements.

Response: We agree with the commenter and the final rule specifies that measurements may be taken using a portable CO analyzer.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 2

Comment: PA DEP supports the proposed requirement of stack testing for both CO and O₂ during the tune-up as required by 40 CFR 63.11223(b)(5).

Response: In the final rule, we are clarifying that CO measurements may be taken with a portable CO analyzer. Stack testing before and after a tune-up is not required.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 8

Comment: The EPA received comments from the agriculture industry, specifically from the sugar industry that indicated some boilers are not equipped to measure CO and O₂ and would be required to conduct stack testing² in order to meet tune-up requirement in 40 CFR 63.11223(b)(5):

*"Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made . . ."*³

For most boilers subject to tune-up requirements, a portable combustion gas analyzer is utilized to measure CO and O₂ in flue gases before and after the boiler adjustments are made. For these units, performance stack testing is not necessary to measure these gases in the effluent stream. The EHSCP requests that care be taken to ensure that the final rule and its associated preamble do not contain statements that could be interpreted to require performance stack testing to comply with the tune-up requirements.

² 76 FR 80535

³ 76 FR 80545

Response: In the final rule, we are clarifying that CO measurements may be taken with a portable CO analyzer. Specifically, 40 CFR 63.11223(b)(5) specifies that "Measurements may be taken using a portable CO analyzer."

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 9

Comment: The Lung Association recommends that the records and reports of monitoring and compliance measures for emissions limits be made easily and readily accessible to the public. The public has an established right to know about the emissions of toxic substances. For 25 years, the EPA has required companies to make public information on toxic chemicals released into the community through the Toxic Release Inventory (TRI). We support a system similar to TRI, where facilities are required to report toxic emissions to the database and make data relating to those emissions available online.

The EPA should require boiler operators to publicly disclose and report all monitoring data and compliance documentation—including with required work practices standards—and submit those data reports to the EPA for public access online. These would include data and results from performance tests of facilities and emissions that occur during malfunctions of boiler equipment. Communities have a right to know what toxic air pollutants are emitted by boilers and incinerators, the quantities of each type of pollutant being emitted, when those emissions are occurring, particularly when the emissions exceed limits set by the EPA.

The EPA's proposed use of the WebFIRE database to store performance test data for use in developing emissions factors and submission of emissions test data through the Electronic Reporting Tool (ERT) are good first steps in facilitating the organization and analysis of emissions data (EPA, 2011d). Furthermore, this should also include measureable steps under the work practice standards as well, since so many facilities will be permitted to use that compliance method. These data must then be made public online in the form of annual reports, similar to the TRI data reports. Along with other measures to enforce emissions limits, we believe this offers a community or "Wiki" enforcement approach to assist in reducing toxic air emissions from boilers and incinerators.

Response: The EPA plans to have many of the required reports be submitted to the EPA directly where they will be available on a public database for access and review by all users, including the public. Although the EPA will require the electronic submission of some compliance reports, the EPA does not plan to require electronic submission of all reports and, in some cases, these reports would include the work practice standards compliance status. Again, all reports that are electronically submitted to the EPA will be made available to all users on the WebFIRE database.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 18

Comment: The EPA proposes not to require reporting of fuel use as part of its work practice standard unless the unit was “physically and legally capable” of using more than one type of fuel

over the preceding twelve months. (76 FR 80532, 80545/2.) The EPA should reconsider this exclusion from the reporting requirements. First of all, that a unit is capable of using only one *type* of fuel tells the EPA and the public nothing about the *amount* of fuel used. It is therefore arbitrary to eliminate the requirement that a unit report the amount of fuel burned based on whether or not it is capable of burning more than one type. Second, requiring that a unit capable of burning only one type of fuel include the type of fuel it burned over the previous twelve months in its tune-up report imposes virtually no regulatory burden. In those cases, the owner or operator can easily identify the type of fuel. Third, the EPA should not simply assume compliance with regulatory requirements, such as those limiting a unit to use of a particular type of fuel. Recordkeeping and reporting will spur owners and operators to comply with requirements like the requirement to use only certain fuels, and will enable the EPA oversight of such compliance. To assume compliance defeats the purpose of oversight. Finally, the exact limits of the exemption from reporting for units not “legally capable” of burning more than one type of fuel are unclear. The exemption may be confusing to operators. It would be easier and more effective simply to require reporting of fuel use for all units subject to the tune-up requirement.

Response: We are not requiring reporting on the amount of fuel burned by single-fuel boilers subject to work practice requirements because it is not relevant to compliance with the energy assessment or the tune-up. Reporting of the type and amount of fuel used by each affected boiler subject to an emission limit is required by the final rule. Elimination of the requirement for single-fuel boilers subject to tune-up requirements to report the type and amount of fuel used during the 12 months prior to their tune-up reduces the burden on boilers that are clearly in a certain subcategory based on their use of a single fuel. Even this minimal burden is unjustified if it does not relate to compliance with a requirement of the rule. The type and amount of fuel used by multi-fuel boilers are used to determine under which subcategory those boilers belong; thus, the distinction between requirements. We also note that the final rule requires notification if a boiler has switched fuels and the fuel switch resulted in the applicability of a different subcategory within Subpart JJJJJJ or the applicability of Subpart JJJJJJ, or a switch out of Subpart JJJJJJ due to a switch to 100% natural gas. We believe that elimination of the requirement that single-fuel boilers subject to tune-up requirements report the type and amount of fuel used during the 12 months prior to their tune-up is appropriate.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 7

Comment: NESCAUM recommends that sources be required to maintain records of fuel use for each unit.

Response: See the response to EPA-HQ-OAR-2006-0790-2473-A2, excerpt 18.

Work Practices/Management Practices: Out of Scope

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 16

Comment: In its reconsideration of the final Area Source Boiler Rule (76 FR 80540), the EPA is proposing to require that boiler tune-ups use the same type of fuel that provided the majority of the heat input to the boiler over the previous year. This closes a potential loophole for boilers that have the capability of burning multiple types of fuel to circumvent emissions limits by burning cleaner fuel for the compliance demonstration but burning dirtier fuel under typical operation. NESCAUM supports this change because it will create clearer tune-up protocols for regulators and regulated entities and reduce emissions.

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 3

Comment: We support the decision to forego a numerical emission limit for smaller sources (<10MMBtu/hr). As the EPA has acknowledged, it is not appropriate to set a numerical emission limit for small units because of technical limitations of testing PM emissions from boilers with small diameter stacks. The installation of ports into small diameter vents may interfere with the functionality of exhaust systems for new and existing boilers. Many existing area source boilers with a capacity below 10 MMBtu/hr have stacks with diameters less than 12 inches, and many area source boilers do not currently have sampling ports or a platform for accessing the exhaust stack. Furthermore, very small boilers (less than 5 MMBtu/hr) typically exhaust through vents and not stacks, which would cause further complications to meet testing requirements. (See 75 FR 15568). The EPA determined that the testing and monitoring costs that area source boiler facilities would incur to demonstrate compliance with numerical emission limits would present an excessive burden for smaller sources. Thus, we support the EPA's decision to establish work practice standards for these smaller sources.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert E Hunzinger, General Manager

Commenter Affiliation: Gainesville Regional Utilities (GRU)

Document Control Number: EPA-HQ-OAR-2006-0790-2425-A1

Comment Excerpt Number: 1

Comment: GRU supports the use of a work practice/management practice approach for compliance of smaller sources and those powered by natural gas.

Response: The EPA thanks the commenter for their support.

Commenter Name: William O'Sullivan

Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2479-A2

Comment Excerpt Number: 4

Comment: We support the proposed tune up work practice standard for ICI boilers. New Jersey has similar requirement already in place.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 15

Comment: The EPA also relied on its authority under CAA §112(h), and established work practice standards in lieu of numeric emission limits for those sources with heat input capacities less than 10 MMBtu/hr. (76 FR 80537.) As discussed in the “*Work Practice Standards*” section below, the EPA has authority to prescribe work practice standards in lieu of emission limitations in circumstances where it is not feasible to enforce such a standard. The EPA’s decision to establish work practice standards here is appropriate because compliance with numerical emission limits is not practicable due to technological and economic limitations.

Response: The EPA thanks the commenter for their support.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 7

Comment: We support the EPA’s decision to replace its 2010 proposed MACT standards for existing biomass- and oil-fired boilers with tune-up work practices in the March 2011 final rule.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert E Hunzinger, General Manager

Commenter Affiliation: Gainesville Regional Utilities (GRU)

Document Control Number: EPA-HQ-OAR-2006-0790-2425-A1

Comment Excerpt Number: 2

Comment: GRU supports this approach for periods of startup and shutdown. It is not technically feasible to conduct stack testing during periods of startup and shutdown because of physical

limitations and the short duration of startup and shutdown periods. The EPA correctly concluded that operating in startup and shutdown mode for sufficient time to conduct test runs to demonstrate compliance with a stack testing requirement could result in higher emissions than would otherwise occur and therefore a work practice standard was appropriate.

Response: The EPA thanks the commenter for their support.

Commenter Name: Allison Watkins, Baker Botts
Commenter Affiliation: Class of '85 Regulatory Response Group
Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1
Comment Excerpt Number: 1

Comment: The Class of '85 supports the work practice/management practice approach for startup and shutdown. It is not technically feasible to conduct stack testing during periods of startup and shutdown because of physical limitations and the short duration of startup and shutdown periods. The EPA is correct that operating in startup and shutdown mode for sufficient time to conduct test runs to demonstrate compliance with a stack testing requirement could result in higher emissions than would otherwise occur.

Response: The EPA thanks the commenter for their support.

Commenter Name: Kate Williams
Commenter Affiliation: Alaska Oil and Gas Association (AOGA)
Document Control Number: EPA-HQ-OAR-2006-0790-2466-A1
Comment Excerpt Number: 4

Comment: AOGA supports the EPA's proposal to decrease the work practice standard tune-up frequency requirements for the smallest units. However, we still strongly believe that a simpler work practice standard based on good air pollution control practices ("GAPCP") and ensured by a requirement to maintain boiler tuning according to the manufacturer's specifications or an appropriate operator's maintenance plan is a much more reasonable approach for small boilers due to their very low inherent emissions rates, the associated very small emissions reductions related to the rule's work practices (regardless of their exact requirements) and the reduced compliance cost for GAPCP.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert R. Perry
Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)
Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1
Comment Excerpt Number: 4

Comment: The EPA should exempt small units (e.g. units less than 2 MMBtu/hr) from tune-up work practice requirements under 40 CFR Part 63 Subpart JJJJJ for at least two reasons. First, the emissions from these units are insignificant.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The commenter had an opportunity to raise the issue of an exemption for small units during the 2010 comment period.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 5

Comment: The EPA should exempt small units (e.g. units less than 2 MMBtu/hr) from tune-up work practice requirements under 40 CFR Part 63 Subpart JJJJJ for at least two reasons. The emissions are comparable to residential heating units of similar size which are exempt. The impact of these units on the environment is negligible while further regulation places additional burdens on the regulated community as well as governmental agencies that will need to administer permits for these insignificant sources.

Response: See the response to EPA-HQ-OAR-2006-0790-2445-A1, excerpt 4.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 10

Comment: As these comments demonstrate, it is appropriate for the EPA to either add boilers at sugarbeet processing facilities to the seasonal subcategory or create a separate area source subcategory for those boilers. Because of the agricultural-based locations and consequent lower emissions impacts of such boilers, as well as the challenging economic circumstances surrounding many such agriculture processing facilities, USBSA requests that the EPA create a management practices standard for such sources. The EPA has the discretion to create management practices standards under CAA §112(d)(5) for area sources to reduce HAP emissions.

As currently written, the reconsidered rule would require that sugarbeet processing facilities undergo significant physical modification in order to comply with the emission limits. These facilities would have a very difficult time meeting the standards especially considering that appropriate technology may not be readily available, is extremely costly, and has unknown reliability, and there is limited time for implementation. Therefore, there is a strong rationale for adopting management practices for a seasonal subcategory of boilers located away from

concentrated urban centers. Management practices would provide for environmental protection while avoiding burdensome regulations that negatively impact the United States' agricultural industry and do not provide meaningful environmental and public health benefits.

USBSA suggests that the EPA adopt management practices for agriculturally-based seasonal boilers that include actions such as employing good combustion practices on a boiler-specific basis, creating and carrying out operations and maintenance plans for individual boilers, periodic tune-ups of the boilers, and a periodic maintenance inspection. There also may be other suitable management practices, and USBSA looks forward to working with the Agency to determine appropriate work practices for agricultural, seasonal boilers.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that, except for boilers that are greater than 10 MMBtu/hr and which are coal-fired, no existing area source boiler will have to meet a numeric limit. For coal-fired sources sized greater than 10 MMBtu/hr, numeric limits are required to meet minimal floor MACT requirements. Coal-fired area source boilers are subject to CAA §112(c)(6), which, as more fully explained in the record for the final rule, does not allow for the use of CAA §112(d)(5) authority.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 4

Comment: AOGA encourages the EPA to consider replacing the proposed biennial tune-up requirements with a simpler work practice standard where good combustion practice is ensured by a requirement to maintain boiler tuning according to the manufacturer's specifications or an appropriate operator's maintenance plan. Such an approach for GACT has already been utilized by the EPA (e.g., Reciprocating Internal Combustion Engines (RICE) MACT), and importantly, would eliminate the problematic units the EPA is addressing via the current GACT, i.e., boilers that have not been properly maintained/tuned.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 3

Comment: Although §112(h) of the CAA permits the EPA to establish work practice standards as an option for reducing emissions, the CAA intentionally limits their use, with explicit instructions that these are to be used *only* if it is infeasible to prescribe or enforce emission standards and further requires that any work practice standards be consistent with actual emission standards that the EPA would set under §112(d) if it were feasible to do so. Here, the EPA has not shown and cannot show that it is infeasible to set emission standards for boilers, and the work practice standards it issued are not consistent with §112(d). Rather, the EPA has merely used work practice standards as an excuse to rationalize allowing industry to keep doing the same thing they currently do as being consistent with setting emissions standards on 195,000 boilers.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that we have exercised authority under CAA §112(d)(5) with regard to over 95% of this source category, and only relied upon CAA §112(h) for small coal-fired boilers.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 4

Comment: In the prior final rule issued March 21, 2011, and in this proposed rule, the EPA argues against measuring emissions in these boilers from the stacks and justifies the use of work practice standards as the only remaining option. Even if the EPA could demonstrate that the Agency could not set emission standards for boilers, the Agency misses the opportunity to take one of the other options available under CAA §112(h): that is, to "promulgate a design, equipment," or "operational standard" that might ensure that these toxic emissions are reduced. Requiring the adoption of equipment that is in use in the lowest emitting facilities would be much more likely to reduce exposure than just ordering a periodic "tune up."

Instead, the EPA argues that "tuned up" boilers will suffice to address toxic emissions from 195,000 boilers (EPA, 2011d). We support fully encouraging plants to follow the manufacturer's instructions for preventing emissions from getting worse, but that is not the same as reducing already harmful emissions. Unfortunately, the proposed rule does not seek to improve work practice standards or to assess whether they effectively reduce toxic air emissions from those facilities. It is hard to imagine that emissions standards cannot be successfully incorporated that would actually reduce emissions from one in eight boilers.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Janice Nolen
Commenter Affiliation: American Lung Association
Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2
Comment Excerpt Number: 6

Comment: We support steps to improve work practices to ensure emissions do not increase. However, that is not enough. Work practice standards do not reflect measures that yield the maximum achievable degree of reduction in these pollutants nor, at a minimum, reflect the measures adopted by facilities with the lowest emission levels. If the EPA were to set work practice standards, it would have to require the use of these technologies at a minimum.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, as explained in the 2010 proposed rule and the 2011 final rule, the provisions requiring MACT and CAA §112(d)(10) do not apply to the non-coal portions of the areas source boiler source category.

Commenter Name: Sheila C. Holman
Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)
Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2
Comment Excerpt Number: 3

Comment: The AP-42 emission factor for uncontrolled filterable PM from these boilers is 0.014 lb/MMBtu (2 lb/1000 gallons) which is well less than the GACT Subpart JJJJJ PM standard of 0.03 lb per MMBtu heat input. This indicates a No. 2 oil-fired boiler with mandated biennial tune-ups would meet the PM standard.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Sheila C. Holman
Commenter Affiliation: NC Division of Air Quality (NCDAQ), North Carolina Department of Environment and Natural Resources (NCDENR)
Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2
Comment Excerpt Number: 7

Comment: While most newer boilers can perform the required tune-up as specified in Subpart JJJJJ, some of the older existing boilers may not be able to complete all the elements of the tune-up procedure. This is true particularly for those units burning solid biomass (wood) fuels

that may have variable fuel quality such as moisture content. The existing 5-step procedure in the §63.11223(b) tune-up requirements does not directly apply to many wood-fired boilers because most units are mass burn designs without distinct burners to be adjusted. Newer, larger and more modern boilers may be equipped with both under fire and over fire airflow dampers, fuel feed controls, and gas-property monitors for both combustion gases and combustion air suitable for some form of feedback and adjustment. Older wood-fired boilers such as Dutch Oven designs or Stoker boilers are less likely to be equipped with most or all of these features.

NCDAQ suggests that the EPA provide supplemental guidance on tune-up procedures for older wood-fired boilers and how it views optimized conditions for these circumstances.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, the tune-up requirements in §63.11223(b) of the final rule have been specified as "as applicable" to the unit and, therefore, only the applicable elements of the tune-up requirements must be completed.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 17

Comment: NESCAUM urges the EPA to require tune-ups for wood-fired boilers. As currently proposed by the EPA, the tune-up requirements for other boiler types are not appropriate for wood-fired boilers. As an alternative, NESCAUM is currently working with EPA Region 1 to develop regional guidance for what would constitute appropriate requirements for tuning a biomass boiler. NESCAUM recommends that the EPA adopt this regional guidance as national guidance for biomass boiler tune-ups.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Also, see the response to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 7.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 5

Comment: While most boilers can perform the required tune-up as written, some cannot. To eliminate gray areas, it may help facilities to not have to rely on the often repeated phrases "as applicable" and "as necessary" found in the tune-up requirements of §63.11223 (b). Perhaps more complete procedures could be added for outliers, particularly small, hand-fed, biomass fuel-fired boilers. A costly portion of the tune-up, measuring CO and O₂ both before and after the tune-up, seems pointless if there are no adjustments that can be made that would affect those levels.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 4

Comment: NFIB suggests that to improve these rules further, the EPA should adopt the suggestions the small-entity representatives provided the Agency during the SBAR panel held in 2009. These recommendations include:

- Allowing facilities to use work practice standards rather than emission limits for additional pollutants.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that we have acted consistently with the SBAR recommendation for the vast majority of sources subject to the Area Source Boiler Rule (the management practice of a tune-up is identical to the work practice referred to by the commenter).

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 6

Comment: NFIB suggests that to improve these rules further, the EPA should adopt the suggestions the small-entity representatives provided the Agency during the SBAR panel held in 2009. These recommendations include:

- Requiring annual boiler tune-ups as a way to improve boiler efficiency instead of emissions standards.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Joseph Seymour

Commenter Affiliation: Biomass Thermal Energy Council (BTEC)

Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2

Comment Excerpt Number: 5

Comment: BTEC is confident that its proposed alternative standards and requirements move towards a common-sense balance between significantly reducing emissions from new biomass boilers as well as fostering a strong renewable biomass thermal sector. Based on this approach, the initial and interim recommended limits and practices include: Initial emissions testing at the factory and work practice standards for maintenance of systems in the field will ensure that clean-burning boilers are installed and that they consistently achieve high emission standards.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Other Comments on Data: Out of Scope

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 5

Comment: NESCAUM is providing numerical emissions limits typical of individual permitted biomass EGU sources in New Hampshire (specifically, for PSNH Schiller and Pinetree Power, Tamworth) and Massachusetts (based on the Renewable Portfolio Standard) as a possible basis for emission limits for national implementation. NESCAUM suggests the limit of 0.1 lb/MMBtu for CO and 0.012 lb/MMBtu for PM. NESCAUM notes that these limits are contingent on the biomass being clean and uncontaminated (rather than wood waste fuel).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. The issue for comment in reconsideration was whether standards should be based on GACT. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Rule Language Corrections: Definition of Natural gas curtailment

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 3

Comment: The EPA should further clarify the definition of "Period of gas curtailment or supply interruption. The definition of "Period of gas curtailment or supply interruption" should be revised to also incorporate scenarios that are beyond the control of the facility that "restrict" the supply of gas fuels to a site in such a manner that the type of fuel used by some on-site boilers would need to be changed for a short period of time. The proposed definition could be interpreted to mean that the only conditions that would meet this definition are those where the gas supply to the site is completely stopped or halted.

Therefore, the EPA should consider adding "or restricted" to the first sentence in the definition as follows:

*means a period of time during which the supply of gaseous fuel to an affected facility is halted **or restricted** for reasons beyond the control of the facility.*

Response: The EPA agrees with the commenter and is altering the definition accordingly.

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 4

Comment: Many contractual agreements are possible for supplying gas fuel to a site and the EPA should clarify that the use of back-up fuel is allowed under certain situations where the supply of gas fuel is restricted to a site under a purchase contract agreement to the extent that a very high cost or penalty would be involved for continued gas use under certain situations. Thus, the first sentence of the definition could be further amended as follows:

*means a period of time during which the supply of gaseous fuel to an affected facility is halted **or restricted** for reasons beyond the control of the facility or due to the terms of a contractual agreement with a supplier of gas fuel that allows gas curtailment or supply interruption.*

Response: The EPA agrees with the commenter and has altered the definition accordingly.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 28

Comment: The definition of natural gas curtailment should be modified to indicate that the period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted, restricted, or penalized for reasons beyond the control of the facility

Response: The EPA has altered the first sentence of the definition to read “Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility.”

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 5

Comment: The EPA should make the last sentence of the natural gas curtailment definition consistent with the Boiler/Process Heater MACT Regulation definition by removing the word "may" from the last sentence. The last sentence would then read as follows:

On-site gaseous fuel system emergencies or equipment failures ~~may~~ qualify as periods of supply interruption when the emergency of failure is beyond the control of the facility.

Response: The EPA agrees with the commenter and has altered the definition accordingly.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 13

Comment: The following definition in the Area Source Boiler Rule could be changed as shown to match the Major Source Boiler Rule.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures ~~may~~ qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

Response: See the response to EPA-HQ-OAR-2006-0790-2423, excerpt 5.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 5

Comment: PA DEP supports the EPA's effort to clarify the definition of "period of natural gas curtailment or supply interruption." While the proposed definition specifies that certain factors including "an increase in the cost or unit price of natural gas due to normal market fluctuations ... does not constitute periods of natural gas curtailment or supply interruption," it is not clear whether periods of natural gas curtailment or supply beyond the control of the facility would be limited to certain onsite fuel system emergencies or equipment failures. The reconsidered rule should allow permitting authorities to determine "reasons beyond the control of the facility" on a case-by-case basis.

Response: The definition does not specify that *only* on-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility. This subpart can be implemented and enforced by the EPA or an administrator such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency has the authority to implement and enforce the subpart. Agencies implementing and enforcing rule requirements can, and do, consider each situation on a case-by-case basis as necessary.

Commenter Name: Pamela Lacey

Commenter Affiliation: American Gas Association (AGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2468-A2

Comment Excerpt Number: 4

Comment: We very much appreciate the proposed definition of "period of gas curtailment or supply interruption" stating that this is a "period of time during which the supply of gaseous fuel to an affected facility is halted for *reasons beyond the control of the facility*" and not because (1) the facility owner chooses to enter into a contract with the utility to purchase natural gas at a lower price in exchange for a contractual provision saying the operator would accept switching from natural gas during periods of high peak demand, or (2) the facility owner chooses to switch fuels in order to obtain a lower price "due to normal market fluctuations not during periods of supplier delivery restriction."

Response: The definition of "Period of gas curtailment or supply interruption" does include supply interruptions due to contractual obligations, as mentioned in the sentence, "The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition."

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 26

Comment: The EPA did not address the issue of on-site natural gas system emergencies that might occur and restrict the ability to burn natural gas in boilers and process heaters. Similar to natural gas supplier emergency conditions such as equipment or piping failures, similar failures can occur within the affected facility fence line. If and when such failures occur, it is necessary for operators to cease firing of natural gas in certain affected units to maintain safety of personnel and effect repairs. Where backup fuel is available, use of that fuel could allow facilities to remain in operation and prevent facility shutdowns, severe equipment problems and unsafe conditions due to loss of steam or process heat. The EPA should allow use of backup liquid fuel under similar conditions as supply curtailments or interruptions for emergencies within the plant site that necessitate ceasing use of natural gas on specific affected units.

Response: The EPA agrees and in response to this possibility includes the following language in the definition of "Period of gas curtailment or supply interruption": "On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility."

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 31

Comment: The EPA should clarify that on-site natural gas system emergencies or equipment failures can be similarly treated as periods of supply interruption.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A2, excerpt 26.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 3

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

Revised definition of natural gas curtailment to clarify that a curtailment does not include normal market fluctuations in the price of gas that are not associated with periods of supplier delivery restrictions; however, the term "halted" may be interpreted to interfere with existing contractual obligations and therefore is too restrictive. ACA recommends that the EPA incorporate the language changes suggested by the ACC.

Response: The EPA thanks the commenter for their support and notes that the definition has been changed to address "restricted" gas supply as suggested.

Commenter Name: Barbara Schulze
Commenter Affiliation: Merck & Co., Inc.
Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2
Comment Excerpt Number: 3

Comment: Merck supports the EPA's proposed changes to the definition of "Period of natural gas curtailment or supply interruption."

Merck supports the EPA's change which clarifies that entering into a contract for natural gas established for curtailment purposes does not constitute a circumstance that is under the control of the facility for purposes of this rule. The economics of facility operations can be significantly impacted by fuel prices. A key way to manage these costs is by entering into a contract for natural gas that is subject to curtailment. By recognizing this reality the EPA has correctly distinguished between burning oil because of price changes and burning oil because of natural gas supplies being shifted to higher priority users.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 6

Comment: There is a lack of consistency in the definition of "natural gas curtailment" in the reconsidered proposed boiler major source rule⁷ and in this rule. Specifically, the last sentence of the definition differs in the two rules.

We recommend that the EPA adopt the following revisions to the definition of natural gas curtailment or supply interruption:

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected facility is halted or restricted for reasons beyond the control of the facility or due to the terms of a contractual agreement with a supplier of natural gas that allows gas curtailment or supply interruption. An increase in the cost or unit price of natural gas due to normal market fluctuations that does not occur during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. Restriction of supply by a natural gas supplier under a contractual order (e.g., operational flow order under a user's interruptible supply contract) does constitute a period of natural gas curtailment. On-site gaseous fuel system emergencies or equipment failures ~~may~~ qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

⁷ 76 FR 80598, 80653

Response: See the responses to EPA-HQ-OAR-2006-0790-2423-A1, excerpt 5, and EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 56

Comment: If the definition of curtailment is not revised to include contractual orders whose supply is halted or restricted due to an Operational Flow Order (OFO), interruptible supply users have but no option other than to cease operations during periods of gas curtailment and suffer the economic has not been assessed. Such a cost impact would have severe effects on the U.S. economy, with its harshest effects falling on smaller manufacturers. We request that the EPA clarify that the Agency does not intend to restrict the ability of natural gas consumers to obtain the most appropriate gas purchasing arrangement for their purposes, while at the same time complying with the Federal Energy Regulatory Commission (FERC) or state regulations. In addition, the EPA should clarify that EPA will allow use of backup liquid fuel firing under those situations where the supply of natural gas is restricted to affected facilities under a purchase contract arrangement. The revised text does not account for the many contractual arrangements possible, and the definition should be amended so that it does not restrict the ability of natural gas-fired units to obtain the most appropriate gas purchasing contract arrangement for their purposes. In addition, the EPA should revise the text to allow use of backup liquid fuel firing under situations where the supply of natural gas is restricted to affected facilities under a purchase contract arrangement to the extent that a very high cost or penalty would be involved for continued natural gas use at pre-restriction levels.

We suggest the following revisions to the definition in the Proposed Reconsideration Rule:

“Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected facility is halted or restricted for reasons beyond the control of the facility. ~~The act of entering into or due to the terms of a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition~~ that allows gas curtailment or supply interruption or due to the terms and conditions of a tariff or supply rate offered by the local utility provider that allows curtailment or supply interruption. Restriction of supply by a natural gas supplier under a contractual order (e.g., operational flow order under an interruptible supply contract) does constitute a period of natural gas curtailment or supply interruption. An increase in the cost or unit price of natural gas due to normal market fluctuations ~~not~~ that does not occur during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures ~~may~~ also qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.”

Response: The definition of "Period of gas curtailment or supply interruption" does take contractual orders into consideration when it says, "The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition." In other words, restricted gaseous fuel supply during periods of supplier delivery restriction and a contractual agreement covering these periods is considered to be beyond the control of the facility.

However, if a facility chooses to switch to a different fuel due to "normal market fluctuation" at a time when their supply of natural gas is not restricted, such a change does not constitute a period of natural gas curtailment or supply interruption.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 24

Comment: The intention of the new sentence added to the definition of "period of natural gas curtailment or supply interruption" in the final rule per the comment and the EPA response to that comment noted above appears to be to clarify that the act of establishing a natural gas purchase contract itself is not the action being used to trigger the curtailment or interruption, but that only the action of the supplying entity to restrict gas consumption under any available contract arrangement is the triggering event relative to gas supply to the facility.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 27

Comment: The EPA should modify the wording of the final rule to clarify that nothing in the final rule impacts the ability of natural gas consumers to utilize any available natural gas purchase contract arrangement and that the curtailment or supply interruption provision applies similarly to any purchase contract arrangement.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 5

Comment: The EPA has proposed to amend the definition of "period of gas curtailment or supply interruption" to clarify that it does not include normal market fluctuations in the price of gas that are not associated with periods of supplier delivery restrictions. The revised definition would also clarify that supply interruption can include on-site natural gas system emergencies and equipment failures. ACC supports both of these clarifications. The proposed definition is as follows:

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas

established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures may qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility. (76 FR 80536.)

This definition nevertheless presents a major concern for industry because the term "halted" may be interpreted to interfere with existing contractual obligations and therefore would be too restrictive.

Many ACC member companies that use natural gas fired boilers operate under contract supply agreements with local utilities, often at reduced cost to the company in exchange for either the utility's ability to curtail the supply or a facility's commitment to switch fuels when regional demand by residential or other critical users (e.g., hospitals) is high. Critical regional demand is frequently a function of inclement weather when residential and medical facilities require more gas than normal, thus limiting the amount of gas available to industrial customers. However, most gas suppliers do not have automatic shutoff capability so they rely on industrial customers to reduce gas use when needed.

Given the many possible contractual arrangements, ACC recommends that the EPA modify the definition in the final reconsidered rule so that it does not restrict the ability of natural gas consumers to obtain the most appropriate gas purchasing contract arrangement for their purposes. Specifically, the EPA should indicate that it will allow the use of backup liquid fuel firing when the supply of natural gas to affected facilities is restricted due to a purchase contract arrangement. Otherwise natural gas suppliers would impose a significant cost or penalty on such facilities for having to maintain natural gas supplies at non-restriction levels.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2
Comment Excerpt Number: 22

Comment: The EPA should not restrict the ability of natural gas consumers to obtain the most appropriate available gas purchasing contract arrangement for their purposes.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2
Comment Excerpt Number: 23

Comment: The EPA should allow use of backup liquid fuel firing under those situations where the supply of natural gas is restricted to the boiler/process heater operator under any purchase contract arrangement to the extent that either a very high cost or a penalty would be involved for continued natural gas use at pre-restriction levels. Note that gas suppliers do not have automatic shutoff capability, but rather they rely on customers taking appropriate action to reduce gas use when needed.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 29

Comment: The last sentence should be deleted or modified to indicate that an increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment.

Response: The EPA agrees, and believes the sentence mentioned properly reflects that. It states: "An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption."

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 30

Comment: The EPA should clarify that financial penalties for exceeding curtailment events (such as "Operational Flow Orders", etc.) described in tariff agreements regulated by FERC are considered to be supply interruptions beyond the control of a facility.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 55

Comment: The EPA's revisions to the definition of natural gas curtailment on reconsideration do not address the significant concerns raised by sources. This definition continues to present a major compliance concern for industry because the term "halted" is too restrictive and may be interpreted to interfere with existing contractual obligations. The bottom line for sources is that under this narrow definition of curtailment, ordinary gas supply circumstances will result in Gas

1 sources being re-defined out of the Gas 1 category, if they make sensible market-based decisions regarding fuel availability and pricing impacts.

This definition is apparently written to protect firms whose supply is downstream of a Local Distribution Company (LDC). Users downstream of a LDC can indeed have their supply restricted or halted when the needs of users exceed the LDC's available supply. In such a scenario, residential users, hospitals and others would be given priority and an industrial company would be shut off. In that simple case, the industrial source must burn its alternate fuel. However, most curtailments are not that simple, and instead reflect complex supply and demand circumstances that the EPA does not account for in its simplistic approach to curtailments. The proposed definition does not address the range of gas supply arrangements and would likely create confusion and eliminate routine cost-effective use of gas purchase contract arrangements. Such impacts would extend beyond EPA authority and implicate state and FERC regulatory authority. The range of gas supply arrangements can include purchase from an LDC under state jurisdiction or purchase from a gas supplier that transports the supply on an interstate/intrastate gas pipeline system under FERC jurisdiction. Purchased transportation can be firm (a consumer contracts for a specific amount of transport capacity) or interruptible (a consumer can be interrupted by the transporting entity at the transporting entity's will), or a combination of firm and interruptible. Because a site must pay a cost for firm transportation whether the gas is actually purchased or not, many large natural gas consumers utilize contracts that incorporate a combination of firm and interruptible supply contracts to optimize transportation costs in light of variation in natural gas demand.

Response: See the responses to EPA-HQ-OAR-2006-0790-2423-A1, excerpt 3, and EPA-HQ-OAR-2006-0790-2443-A1 excerpt 56, for a full response to these comments as they pertain to the Area Source Boiler Rule. We note that the Gas 1 category referenced by the commenter only regards the Major Source Boiler Rule.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 11

Comment: The EPA proposes to amend the natural gas curtailment definition to clarify that it does not include normal market price fluctuations but would include on-site emergencies and equipment failures and is applicable to all gaseous fuels. This seems to be a clarification of rather than a change to the final rule, which we support.

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 23

Comment: We appreciate the EPA’s movement on this matter, but additional clarification is still needed. The current definition is unclear and problematic, particularly as it relates to typical requirements of interruptible gas supply contracts such as those often in place at industrial facilities. Many manufacturing companies that utilize natural gas-fired boilers and process heaters operate under contractual supply agreements with local utilities and natural gas suppliers. These entities often utilize FERC-regulated natural gas pipelines to transport natural gas supply from point of production to the consuming manufacturing facilities. Utilities and natural gas pipelines offer limited “firm supply” contracts and “interruptible supply” contracts, as appropriate, under FERC regulations to ensure the integrity of the natural gas pipeline transportation system and to maximize service according to defined user priorities for a given supply. Hospitals for example are critical users and are afforded high priority. Interrupting or “curtailing” service is required by FERC to ensure the integrity of the pipeline system. Contracts for supply define the terms of that curtailment. Interruptible service may involve lower gas prices than firm service prices because the higher priority commands a higher price. In many areas firm service is no longer available and interruptible service is the only option for manufacturing sites. When disparity between overall supply and overall demand threatens the integrity of the pipeline transportation system, interruptible supply contracts are curtailed first generally by OFOs (or similar contractual requirements by another name) issued to users under their supply contract terms. These orders do not generally involve physically blocking the supply pipeline, but rather an evaluation after the fact of possible non-contractually compliant use during the curtailment period and the institution of a fine or penalty that can be assessed as high as 10 or so times the contract gas sales price. Payment of a penalty due to unauthorized natural gas usage during an OFO is regularly not considered an increase in the cost or unit price of natural gas or a surcharge due to market supply/demand fluctuations. The contracts and user requirements are to protect the integrity of the pipeline system and allow its operation in compliance with FERC requirements. The current definition could be interpreted to mean that if a company contracts for interruptible natural gas supply, where the interruption could either mean the supply is halted by the utility/FERC regulated pipeline or the facility must switch fuels to avoid contractual fines, the use of backup liquid fuel during periods of high residential/critical infrastructure demand would not constitute curtailment unless the utility/FERC-regulated pipeline actually physically halts the entire supply of gas to the facility. Most utilities/FERC regulated pipelines do not have automatic shutoff capability, but rather rely on customers taking appropriate action to reduce gas use when needed. Therefore, due to the inclusion of the word “halted” in the current definition, we are concerned that the only conditions that would meet the definition are those where the gas supply to the facility is completely stopped beyond the control of the facility.

Given the many contractual arrangements possible, we request that the EPA clarify that the Agency does not intend to restrict the ability of natural gas consumers to obtain the most appropriate gas purchasing contract arrangement for their purposes. In addition, please clarify that the EPA will allow use of backup liquid fuel firing under those situations where the supply of natural gas is restricted to affected facilities under a purchase contract arrangement. We suggest the following revision (see underlined text) to the definition:

“Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected facility is halted or restricted for reasons beyond the control of the facility or due to the terms of a contractual agreement with a supplier of natural gas that allows gas curtailment or supply interruption. An increase in the cost or unit price of natural gas due to

normal market fluctuations that does not occur during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. Restriction of supply by a natural gas supplier under a contractual order (e.g., operational flow order under a user's interruptible supply contract) does constitute a period of natural gas curtailment. On-site gaseous fuel system emergencies or equipment failures also qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.”

The definitions in both the Boiler MACT and GACT rules should be consistent.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 25

Comment: However, the following EPA statement in the preamble creates confusion: “... the definition of “Period of natural gas curtailment” was revised to clarify that contractual agreements for curtailed gas usage or fluctuations in price do not constitute periods of gas curtailment under the scope of this regulation.” This could be interpreted to mean that if an entity contracted for interruptible gas, that the use of backup liquid fuel during periods of supplier curtailment would actually not be allowed under this rule. It is hard to believe that the EPA would intentionally use this hammer to push boiler and process heater operators to higher priced contracts for firm gas, when such action would directly impede gas suppliers from being able to provide adequate gas supplies to other “critical” customers (e.g. residential consumers). CIBO assumes this was not the EPA’s intent, but rather the EPA was trying to address “hedging” or other market transactions not associated with supply limitations. In any case, the EPA must provide further clarification so that owners/operators are not disadvantaged in the natural gas market simply by trying to maintain high facility uptime with use of backup fuels.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 21

Comment: The overall construct of the final rule definition of “Period of natural gas curtailment or supply interruption” presents problems that could be resolved through technical clarification or through further rulemaking action... This definition is apparently written to protect those firms whose supply is downstream of a LDC. Users downstream of a LDC can indeed have their supply halted when the needs of users exceed the LDC’s available supply. In such a scenario, residential users (& hospitals, etc) would be given priority and an industrial firm would be shut off. This definition is a good and constructive thing for such users. However, the current definition does not address the range of gas supply arrangements and would likely create confusion and eliminate routine cost-effective use of gas purchase contract arrangements. Such

impacts would extend beyond EPA authority and delve into state and FERC regulatory authority. The range of gas supply arrangements can include purchase from a LDC under state jurisdiction or interstate gas purchase under FERC jurisdiction. Purchased transportation can be firm (a consumer contracts for a specific amount of transport capacity) or interruptible (a consumer can be interrupted by the transporting entity at the transporting entity's will), or a combination of firm and interruptible. Because a site must pay a cost for firm transportation whether the gas is actually purchased or not, many large natural gas consumers utilize contracts that incorporate a combination of firm and interruptible supply contracts to optimize transportation costs in light of variation in natural gas demand... For interruptible service, or for that portion of a supply contract that is interruptible, both interstate and local distribution would be "halted" or "restricted" under OFO conditions (or pre-OFO conditions). Because many large consumers of natural gas utilize contracts that combine firm and interruptible transportation, an OFO represents an unpredictable constraint on a firm's ability to operate their plant at optimal levels. Those firms whose natural gas supply contracts consist entirely of firm delivery, this would be an infrequent event.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 56.

Rule Language Corrections: Definition of Process heater

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 57

Comment: As now indicated in proposed 40 CFR 63.11193, the final Area Source Boiler Rule applies only to boilers, not process heaters. For the reasons asserted in its Petition for Reconsideration, CIBO supports the EPA's decision to revise the "Boiler" definition and add a definition for "Process Heaters" to ensure that they are not included in the boiler source category. (76 FR 80540- 80541.)

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 7

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

Proposal that process heaters are excluded from the definition of boilers;

Response: The EPA thanks the commenter for their support.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2
Comment Excerpt Number: 6

Comment: WM requests that the Agency clarify within the Area Source Boiler Reconsideration Rule that autoclaves do not fall within the definition of "process heater", consistent with the definition of "process heater" adopted in the Major Source Boiler Rule, and that autoclaves are not otherwise covered by the Area Source Boiler Rule.

Response: The EPA agrees that it is not our intention to regulate autoclaves under the Area or Major Source Boiler Rules. We have reviewed all of the terms used in the Area Source and the Major Source Boiler Rules in order to harmonize definitions between the two rules as much as possible. In the case of "process heater", because process heaters are specifically included in the major source category and specifically excluded from the area source category, the definitions are not identical. In order to address the applicability of autoclaves, the definition of "boiler" in the Area Source Boiler Rule is being modified to exclude autoclaves.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2
Comment Excerpt Number: 2

Comment: The definition of "process heater" would include autoclaves. See 76 FR at 80541. However, the definition of "process heater" in the text of the proposed rule does not include autoclaves. See 76 FR at 80548.

Response: See the response to EPA-HQ-OAR-2006-0790-2465-A2, excerpt 6.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2
Comment Excerpt Number: 3

Comment: Inclusion of autoclaves within the definition of "process heater" would be inconsistent with the definition of "process heater" included in the Agency's NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD (herein after referred to as the "Major Source Boiler Rule"). The definition of "process heater" within the Major Source Boiler Rule expressly excludes autoclaves. See 40 CFR §63.7575.

Response: See the response to EPA-HQ-OAR-2006-0790-2465-A2, excerpt 6.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)

Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2

Comment Excerpt Number: 4

Comment: WM supports the Agency's intention to exclude autoclaves from both the Major Source Boiler Rule and the Area Source Boiler Reconsideration Rule; however, we believe it is important to include a clear and consistent definition of "process heater" within these related rulemakings so that there is no confusion with respect to the scope of that term under each rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2465-A2, excerpt number 6.

Commenter Name: Kerry Kelly

Commenter Affiliation: Waste Management (WM)

Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2

Comment Excerpt Number: 5

Comment: While WM supports the exclusion of autoclaves from the ambit of the Area Source Boiler Reconsideration Rule, WM does not agree that an autoclave falls within the category of sources commonly understood to constitute process heaters. As a general matter, process heaters are units that have the primary function of in direct heat transfer. An autoclave is not a director in direct heat generator. An autoclave receives steam from an external heat source for the purpose of sterilization, in a high pressure atmosphere. Autoclaves do not constitute boilers because they do not combust materials, but rather sterilize with steam and pressure. Autoclaves typically achieve temperatures of 250° F for the purpose of sterilization, so the autoclaved material is too wet and the temperature too low to achieve combustion.

Response: See the response to EPA-HQ-OAR-2006-0790-2465-A2, excerpt 6.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 8

Comment: Whether equipment at an area source is a boiler or a process heater is critical in determining rule applicability. However, §63.11237 does not provide a definition of process heater. AOGA encourages the EPA to amend §63.11237 by including either the major source definition of process heater in §63.7575 or a similar definition.

We also suggest the EPA consider adding the following clarifying language to the definitions of boiler and process heater (underlined):

Boiler means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or steam and hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. Waste heat boilers are excluded from this definition.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid; raw, intermediate or finished) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit (including process or storage tanks), instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

The proposed changes are intended to help differentiate between boilers and process heaters. Consider a piece of equipment used to heat a 50-50% mix of glycol and water. The glycol mixture (i.e., the heat transfer material) is routed via hard-piping to a process tank where it is circulated in heating loops contained in the tank, to maintain the temperature of the liquid in the tank (the process material) at a given set point.

Response: In the final rule, we have included definitions for "boiler" and "process heater" that we believe appropriately clarify the definitions as applicable to the area source boilers rule. Specifically, the definitions read as follows:

Boiler means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers, process heaters, and autoclaves are excluded from this definition.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. Process heaters include units that heat water/water mixtures for pool heating, sidewalk heating, cooling tower water heating, power washing, or oil heating.

Commenter Name: Kate Williams

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A1

Comment Excerpt Number: 3

Comment: We support the inclusion of the definition for "process heater" in §63.11237. As discussed in our Petition for Reconsideration, whether a unit qualifies as a boiler or process heater is critical in determining rule applicability. We also appreciate the EPA incorporating our suggested changes to the definition intended to aid in differentiating between boilers and process

heaters. Similarly, we appreciate the EPA's proposed changes to the definition for "boiler" which clarify that boilers may heat steam, hot water, or both, and that process heaters are excluded from the definition of boilers.

Response: The EPA thanks the commenter for their support.

Commenter Name: Kerry Kelly

Commenter Affiliation: Waste Management (WM)

Document Control Number: EPA-HQ-OAR-2006-0790-2465-A2

Comment Excerpt Number: 1

Comment: WM supports the Agency's effort on reconsideration to clarify that process heaters are not included within the category of boilers affected by the rulemaking. The Agency proposes to accomplish this clarification through an amendment to the definition of "boiler" and through the addition of a definition of "process heater." However, WM notes that the definition of "process heater" as proposed in the Area Source Boiler Reconsideration Rule is ambiguous in several respects.

Response: See the response to EPA-HQ-OAR-2006-0790-2465-A2, excerpt 6.

Rule Language Corrections: Definition of Residential boiler

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 10

Comment: There are many historically single unit residences that have been subdivided into several condominiums or apartments. The specification of a number of units as the threshold for exemption from the rule creates a situation where similar residences with similar boilers will be treated differently. In the extreme case, if an unusually large and heavily emitting unit were to reside in a 1-3 unit dwelling at an institution (e.g., a university), it would be appropriate to regulate that unit under this rule. That scenario is extremely unlikely given the proposed boiler definition in the reconsidered rule. The number of units a building is subdivided into does not have a bearing on the size or emissions of the boiler. Therefore, the exemption for ICI boilers at dwellings should be deleted from the final rule. NESCAUM suggests that the EPA abandon this approach for exempting residential units, and instead rely solely on the exemption for units below a unit-size threshold to exempt residential units.

Response: The EPA disagrees that the exclusion for residential boilers should be deleted. See the response to comment EPA-HQ-OAR-2006-0790-2454-A1, excerpt 9. The intent of Subpart JJJJJ is to cover commercial facilities like apartment buildings and condominiums. However, we do recognize that a single family residence could be subdivided into more than 4 living units. The definition of "residential boiler" in the final rule has been revised to include single unit

residence dwellings that have since been converted or subdivided into condominiums or apartments.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 9

Comment: The EPA has proposed that residential boilers not be subject to Subpart JJJJJ and is proposing to define residential boiler as follows:

A residential boiler would be defined in 40 CFR 63.11237 as: “* * * a boiler used to provide heat and/or hot water used by the owner or occupant of a dwelling designed for and used for not more than four family units. This definition includes boilers used primarily to provide heat and/or hot water for a dwelling containing four or fewer families located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm).”⁷

This is similar but not the same as the related provision offered for comment in the Major Source proposals for reconsideration.⁸ We introduce it to promote harmony and make the same recommendation for both rulemakings.

Congress encouraged exploration of the use of small-scale combined heat and power in residential heating appliances in Energy Policy Act (EPAct) 2005, Section 923.⁹

⁷ 76 FR 80539

⁸ *Residential boiler* means a boiler, used in a dwelling containing four or fewer family units, to provide heat and/ or hot water. This definition includes boilers used primarily to provide heat and/or hot water for a dwelling containing four or fewer families located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm). Major Source Proposed Rule 76 FR 80616

⁹ 42 USC §16213 - MICRO-COGENERATION ENERGY TECHNOLOGY

Response: See the response to EPA-HQ-OAR-2006-0790-2451-A1, excerpt 10.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 9

Comment: NESCAUM believes that almost all residential units will be exempted under the proposed reconsidered boiler definition, which specifies that units with heat inputs of 1.6 MMBtu/hr and larger are subject to the rule (these units are much larger than a typical residential

boiler). Hot water heaters below that threshold will be exempt. Therefore, by creating a duplicative exemption for residential units does not achieve additional environmental benefits, but does exempt some ICI sources that should be subject to control. This change in definition would allow some significant sources to circumvent the rules. NESCAUM believes that sources should be regulated based on the size and emission potential of the unit, not the type of facility in which it resides.

Response: We disagree that the exclusion for residential boilers is duplicative of the exclusion for hot water heaters. The source categories covered by the Area Source Boiler Rule are industrial boilers located at area source facilities and institutional and commercial boilers located at area source facilities. Residential boilers are, thus, not covered by the rule. We added the exclusion for residential boilers to clarify that they are not subject to Subpart JJJJJ since applicability questions were raised by regulatory agencies and regulated facilities regarding boilers located at residences at institutional (military bases, universities) and commercial (farms) facilities. The exclusion for hot water heaters pertains to boilers generating hot water. The exclusion does not cover boilers generating steam for heating. The final rule retains both exclusions.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 6

Comment: The proposed rule would list "residential boilers" as boilers not subject to the NESHAP regulations of Subpart JJJJJ. "Residential boilers" are described as boilers used in single and multi-family residences (duplexes, townhouses) where each dwelling typically has its own heating and hot water system, rather than a shared central system as in an apartment building or dormitory. These boilers are usually small and are not included in a facility's operating permits. The EPA recognized that they should not be subject to the NESHAP regulations because they are not part of the ICI source category. Castle agrees with the EPA analysis and strongly supports the specific exclusion from NESHAP for residential boilers.

Response: The EPA thanks the commenter for their support.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 12

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provision:

Specify that residential boilers are exempt from the NESHAP for Area Source Boilers

Response: The final rule maintains the proposed exclusion from Subpart JJJJJ for residential boilers.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 10

Comment: USCHPA is cognizant that advances in residential micro-combined heat and power technology have led since 2005 to the installation more than 120,000 systems in residences globally. These systems function with the heat/or hot water system. The description above aptly applies to these installations. We recommend that the definition be modified by the insertion of the words "*and/or as part of a residential combined heat and power system*" after the words "hot water". This is similar to the change to related provisions 76 FR 80616 that we proposed in our Major Source comments of February 21, 2012.¹⁰

A residential boiler would be defined in 40 CFR 63.11237 as:

"* * * a boiler used to provide heat and/or hot water *and/or as part of a residential combined heat and power system* used by the owner or occupant of dwelling designed for and used for not more than four family units. This definition includes boilers used primarily to provide heat and/or hot water for a dwelling containing four or fewer families located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm)."¹¹

40 CFR 63.11195 Add new definition of "residential boiler"

USCHPA– See our recommendations above at the discussion on 4. Residential Unit Exemption (75 FR 80539). Insert the clause "and/or as part of a residential combined heat and power system" after the first appearance of the words "hot water."

¹⁰ *Residential boiler* means a boiler, used in a dwelling containing four or fewer family units, to provide heat and/ or hot water **and/or as part of a residential combined heat and power system**. This definition includes boilers used primarily to provide heat and/or hot water for a dwelling containing four or fewer families located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/ industrial facility (e.g., farm). Major Source Proposed Rule 76 FR 80616. See comment filed by the USCHPA.

¹¹ 76 FR 80539

Response: The EPA acknowledges the advances in and installation of residential combined heat and power systems. We agree with the USCHPA's suggested modifications to the definition of residential boiler and have revised the definition of residential boiler in 40 CFR 63.11237.

Rule Language Corrections: Other Definitions

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 4

Comment: Startup/Shutdown: while it is probably useful to more clearly delineate the meaning of startup and shutdown, in practice these processes are not as regular, repeatable and consistent across boiler operating scenarios, as other aspects of boiler operation, and therefore their definition and scope should be crafted with care. With regard to the particular definition proposed in the revised Subpart JJJJJ rule, while the criteria adopted for delineating the startup interval (i.e. < 25% load) seems generally reasonable, it should be recognized that backup or standby boilers may be kept in stable operation at minimum load for extended periods, and this load may could be < 25% of full load. For this type of operation, the specification in Table 2 that startup periods be minimized could result in such boilers having to raise their loads, and increase their emissions, just to move out of the lower 25% of load range, which does not seem appropriate. The definition of startup therefore should include some flexibility or allowance for situations when the "25% of load" criteria does not apply.

Response: The EPA received a number of comments indicating that the proposed load specifications (i.e., 25% load) within the definitions of "startup" and "shutdown" were inconsistent with either safe or normal (proper) operation of the various types of boilers encountered within the source category. As the basis for defining periods of startup and shutdown, a number of commenters suggested alternative load specifications based on the specific considerations of their boilers; other commenters suggested the achievement of various steady-state conditions.

We have reviewed these comments and believe adjustments are appropriate in the definitions of "startup" and "shutdown." These adjustments are tailored for industrial boilers and are consistent with the definitions of "startup" and "shutdown" contained in the 40 CFR Part 63, Subpart A General Provisions. We believe these revised definitions address the comments and are rational based on the fact that industrial boilers function to provide steam or, in the case of cogeneration units, electricity. The definitions of "startup" and "shutdown" have been revised in the final rule as follows:

Startup means either the first-ever firing of fuel in a boiler for the purpose of supplying steam or heat for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam or heat from the boiler is supplied for heating and/or producing electricity, or for any other purpose.

Shutdown means the cessation of operation of a boiler for any purpose. Shutdown begins either when none of the steam or heat from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or at the point of no fuel being fired in the

boiler, whichever is earlier. Shutdown ends when there is no steam and heat being supplied and no fuel being fired in the boiler.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 5

Comment: Revise the definition of “boiler system” in §63.11237 so that it only includes the boilers and those components directly connected and serving “energy consuming systems.” *Boiler system means the boiler and associated components, such as, the feed water system, the combustion air system, the ~~boiler~~-fuel system (including burners), blowdown system, and combustion control systems directly connected and serving the ~~and~~ energy ~~consuming use~~ systems.*

Response: The EPA has reviewed and agrees with the commenter's suggested revisions to the definition of boiler system in 40 CFR 63.11237. See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 7, for additional revisions to the definition of boiler system.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 2

Comment: For some existing major and area sources, the EPA has proposed requiring an “energy assessment” to identify “a list of energy conservation measures.” While the regulations do not require implementation of any of the energy conservation measures identified, they do define “cost effective energy conservation measures” as any measure with “a payback (return of investment) period of 2 years.”

The definition of “cost-effective measures” in the rule is fatally flawed statutorily and unjustified economically. If implementation of these measures is not required, there is arguably no need to define “cost-effective,” and thus no definition should be issued. But since implementation of these measures is cost-benefit justified and should be required (see *infra*, section III of these comments), properly defining “cost-effective energy conservation measures” becomes important. The proper definition for that term should be: any energy conservation measure whose net present benefits are greater than zero.

Response: The commenter is mistaken in stating that the regulations for area source boilers include a definition for “cost effective energy conservation measures.” The December 2011 proposed regulations do not include definitions for “cost effective energy conservation measures,” “cost-effective measures,” or “cost-effective.” The final rule also does not include these definitions.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 22

Comment: The EPA has proposed definitions of startup and shutdown that include a 25% load threshold as the end of startup and the beginning of shutdown. See 76 FR 80541. Some units have a minimum stable operating load that is higher than 25% (e.g., stable operation for a stoker or fluidized bed boiler may not be reached until 60% load). Likewise, liquid units may reach their minimum safe and stable operating load prior to reaching 25% of their maximum load. Therefore, the EPA should revise the startup and shutdown definitions to allow facilities to determine the minimum stable operating load on a unit-specific basis. Startup should end when combustion conditions are stable for a particular unit, which is not always at 25% load. In some cases, this may be when the unit begins sending steam to the process. Facilities could include a site specific definition of startup and shutdown and the proper procedures to follow during startup and shutdown in a site-specific plan.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 7

Comment: OCC supports the clarification that emission limitations and operating limits do not apply during periods of startup or shutdown. However, further clarification of these provisions is needed.

OCC supports the clarification that emission limitations and operating practices do not apply during periods of startup or shutdown, but further clarification allowances are needed with respect boilers that operate in standby mode. Industrial boilers operate over a wide range of range of load conditions and must be highly reliable in order to avoid upsets resulting in the loss of production, damage to equipment and the associated expenses and loss of revenue. To address these risks, many operators maintain back-up boilers in standby mode with significantly reduce load demand. Some boilers in standby mode are stable at operating loads of less than 25%, while others may not be. Consequently, an allowance must be made clear in the final rule for boilers and process heaters that operate in standby mode at low firing rates for extended periods of time. The currently proposed definition of startup uses a cold startup example in the definition, but does not expressly exclude boilers operating in standby mode. However, boilers operating in standby mode simply do not perform in the same manner as boilers sequencing through cold startups and shutdowns. Therefore, it is not practical or reasonable to impose the time limits and capacity minimums applicable to boiler startups and shutdowns on boilers in standby mode.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 59

Comment: In the reconsidered Area Source Boiler Rule, the EPA is proposing definitions for “startup” and “shutdown.”... The EPA indicates that the definitions should provide “clarity regarding which periods of operation are subject to the work practice standards rather than numeric emission limits and the associated requirements.” (76 FR 80615.) (reconsidered Boiler MACT Rule.) The EPA is soliciting comment on the proposed definitions.

The proposed revision attempts to place all boilers into the same basket in specifying a 25% load threshold. This is not technically correct or practical on many fronts. How boilers “behave” is a function of fuel type, furnace and boiler design (combustion method), and operating methodologies.... The EPA should revise the startup definition to allow facilities to determine the minimum stable operating load on a unit-specific basis and include the minimum stable operating load that defines startup and shutdown and the proper procedures to follow during startup and shutdown in a site-specific plan. Establishment of the minimum stable operating load on a site-specific basis is analogous to setting other boiler and control device operating parameter limits on a site-specific basis.

We believe the following types of concepts could be used as being indicative of a boiler reaching the end of a startup period (the beginning of a startup would occur with first introduction of fuel with combustion in the furnace):

- Boiler firing its primary fuel for a period of time adequate to provide stable and non-interrupted fuel flow, stable and controlled air flows, and adequate operating temperatures to allow proper fuel drying and air preheat as applicable.
- Emissions controls in service with operating parameters such as flow rates and temperatures being controlled and stable.
- Boiler supplying steam to a common header system or energy user(s) at normal operating conditions including pressure, temperature, and above minimum operational output flow rate, as applicable to the unit.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 60

Comment: In the reconsidered Area Source Boiler Rule, the EPA is proposing definitions for “startup” and “shutdown.”... We believe the following types of concepts could be used as being

indicative of a boiler beginning a shutdown period (the end of a shutdown would occur with the cessation of combustion of any fuel in the furnace):

- Cessation of introduction of the last remaining primary fuel to the furnace, whether or not a supplemental support fuel is being used.
- Cessation of emissions control system sorbent or other reagent injection.
- Lowering the fuel firing rate to the point that automatic control is no longer effective or possible.
- Lowering of operating rates to the point that emissions control systems no longer can be controlled or be effective due to low flow rates, low temperatures, or other issues.
- Lowering boiler output to the point that steam no longer meets operational required conditions of pressure, temperature, or flow.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 47

Comment: Startup and Shutdown Definitions

The EPA has proposed definitions for startup and shutdown that include a 25% load threshold for defining when startup ends and when shutdown begins. See 76 FR 80541. Some units have a minimum stable operating load that is higher than 25% (e.g., stable operation for a stoker boiler may not be reached until 60% load). Therefore, the EPA should revise the startup definition to allow facilities to determine the minimum stable operating load on a unit-specific basis and include the minimum stable operating load that defines startup and shutdown and the proper procedures to follow during startup and shutdown in a site-specific plan. Establishment of the minimum stable operating load on a site-specific basis is analogous to setting other boiler and control device operating parameter limits on a site-specific basis.

We believe that the following types of concepts could be used as being indicative of a boiler reaching the end of a startup period (the beginning of a startup would occur with first introduction of fuel with combustion in the furnace):

- Boiler firing its primary fuel for a period of time adequate to provide stable and non-interrupted fuel flow, stable and controlled air flows, and adequate operating temperatures to allow proper fuel drying and air preheat as applicable.
- Emissions controls in service with operating parameters such as flow rates and temperatures being controlled and stable.

- Boiler supplying steam to a common header system or energy user(s) at normal operating conditions including pressure, temperature, and above minimum operational output flow rate, as applicable to the unit.

Similarly, we believe that the following types of concepts could be used as being indicative of a boiler beginning a shutdown period (the end of a shutdown would occur with the cessation of combustion of any fuel in the furnace):

- Cessation of introduction of the last remaining primary fuel to the furnace, whether or not a supplemental support fuel is being used.
- Cessation of emissions control system sorbent or other reagent injection.
- Lowering the fuel firing rate to the point that automatic control is no longer effective or possible.
- Lowering of operating rates to the point that emissions control systems no longer can be controlled or be effective due to low flow rates, low temperatures, or other issues.
- Lowering boiler output to the point that steam no longer meets operational required conditions of pressure, temperature, or flow.

Boiler owners/operators should establish specific operating conditions and parameters defining startup and shutdown in standard operating procedures for each affected unit so that it is clear when each unit is in either startup or shutdown mode. Procedures should also be used to guide operations purposely through startup or shutdown periods so that protracted periods in startup or shutdown mode beyond that envisioned in the procedures are avoided. Each startup and shutdown should be documented relative to elapsed time and timing of actions prescribed in the procedure so that problems are effectively identified and corrected in a timely manner.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 8

Comment: The current re-proposal would create untenable and infeasible requirements by defining these periods with a single threshold of 25% operating load. As detailed in our trade group comments, this single threshold approach fails to account for the variety of equipment and circumstances that make startup and shutdown procedures unique to a facility and combustion unit. Site-specific plans and approaches must be allowed for safety, process and operational reasons.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 9

Comment: If it is lawful for the EPA to promulgate work practice standards in lieu of emissions limits for periods of startup and shutdown, it is arbitrary for the EPA to define these periods so broadly. The EPA proposes to define startup as ending when the unit operates at 25% capacity, and shutdown as beginning when the unit drops below 25%. By this definition, a unit that consistently operated below 25% capacity would evade emissions standards. The EPA must close this loophole.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 7

Comment: In response to EPA solicitation, we oppose any time limitation on shutdowns and startups. The duration of shutdowns and startups should be determined solely by the time required to complete in a safe and effective manner the scope of the work to be performed. Imposing time limitations will be disruptive to the already complex shutdown and startup procedures, and could even create unsafe conditions.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 61

Comment: Boiler owners/operators should establish specific operating conditions and parameters defining startup and shutdown in standard operating procedures for each affected unit so that it is clear when each unit is in either startup or shutdown mode. Procedures should also be used to guide operations purposely through startup or shutdown periods so that protracted periods in startup or shutdown mode beyond that envisioned in the procedures are avoided. Each startup and shutdown should be documented relative to elapsed time and timing of actions prescribed in the procedure so that problems are effectively identified and corrected in a timely manner.

The EPA should not include a maximum time in the startup and shutdown definitions. Sources covered by the rule are highly variable and the amount of time needed for startup and shutdown

are different depending on the specific unit. The EPA has adopted a source-specific approach in other programs, such as Part 75 (40 CFR Part 75 Appendix A 6.5.2.1). If the EPA does include definitions for startup and shutdown based on a load threshold, it would be appropriate to institute a source specific approach much like in Part 75.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 36

Comment: NACAA agrees that a definition limiting the period of "startup" is appropriate. We recommend that such a definition be based on a percentage of the normal operating load of the unit as some sources may operate for extended periods of time at far less than the full rated capacity of the unit.

Response: The EPA is revising the definitions of "startup" and "shutdown" such that they are tailored for industrial boilers and are consistent with the definitions of "startup" and "shutdown" in the 40 CFR Part 63, Subpart A General Provisions. The revised definitions reflect the fact that industrial boilers function to provide steam or, in the case of cogeneration units, electricity, and, thus, should be considered to be operating normally at all times steam of the proper pressure, temperature, and flow rate is being provided for use as process steam or for the cogeneration of electricity.

Commenter Name: Paul J. Allen

Commenter Affiliation: Constellation Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2477-A2

Comment Excerpt Number: 2

Comment: In lieu of creating new Startup and Shutdown definitions for the rule, the definitions for Startup and Shutdown currently defined in air quality operating permits should be utilized.

It is recommended that the EPA not create new startup and shutdown definitions for the rule but use the definitions that already are incorporated into a facility's air quality operating permit. Typically, these definitions are jointly established by the responsible air permitting authorities and individual facilities. Startup and shutdown periods are somewhat unique to each boiler design. It should be noted that for many categories of boilers, it is not possible to achieve "normal operating mode" (during which normal emissions are generated) at 25% boiler capacity as proposed, and thus the emissions might exceed normal operation limits. The pollution control equipment is designed to function efficiently after the boiler reaches approximately 100% capacity and steady state/complete combustion conditions exist. Additionally, approximately 100% capacity is when normal operation limits apply and can be met. Below this "normal operating mode" is when the startup and shutdown permit limits should apply.

For the facilities that do not have startup and shutdown defined in their air quality operation permits, the facility and their state and/or local permitting agencies can work together to develop site specific startup and shutdown definitions, based on manufacturers' specifications and operating procedures, for insertion into in their permits. Unfortunately, there is not a "one size fits all" for these definitions, so we recommend that the EPA not define startup and shutdown in the rule, but defer to the definitions contained in air quality operating permits issued by local and/or state air permitting agencies.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 4.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 1

Comment: The Clean Energy Group agrees with the need for a definition of startup and shutdown in light of the final rule's use of work practices for these periods. However, rather than 25% load, which may be inappropriate for many units, we recommend the EPA alter the definition of startup to reflect unit-specific considerations, such as defining the end of startup as when the unit reaches the minimum safe operating load or when compliance with Title V emission limits is reached.

Response: The EPA recognizes that the 25% load specification may not be appropriate for all units, and thus has altered the definitions of startup and shutdown to be consistent with the definitions in 40 CFR Part 63, Subpart A General Provisions. We believe these revised definitions are rational based on the fact that industrial boilers function to provide steam or, in the case of cogeneration units, electricity; therefore, industrial boilers should be considered to be operating normally at all times steam of the proper pressure, temperature, and flow rate is being provided to a common header system or energy user(s) for use as either process steam or for the cogeneration of electricity.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 2

Comment: The EPA could define shutdown as the period of time from when a unit reduces load with the intent to shut down and ends with the cessation of combustion of fuel. This would avoid defining as "shutdown" those circumstances where units may need to operate at a level below 25%, but above the minimum safe operating load.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 1.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1
Comment Excerpt Number: 3

Comment: Below the unit-specific "normal operating mode" is when startup and shutdown requirements should apply. We recommend that the EPA not numerically define startup and shutdown in the final rule, and instead defer to the definitions contained in currently active air quality operating permits issued by local and/or state air permitting agencies.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 1.

Commenter Name: Michael J. Bradley
Commenter Affiliation: The Clean Energy Group
Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1
Comment Excerpt Number: 4

Comment: The EPA proposed to require that new boilers with heat input capacity greater than 10 MMBtu/hr that are biomass-fired or oil-fired must comply with work practice standards to minimize the boiler's startup and shutdown periods following the manufacturer's recommendations, or the manufacturer's recommendations for a unit of similar design. As noted above, we recommend revising the definition of startup and shutdown to allow for individual unit variation.

Response: See the response to EPA-HQ-OAR-2006-0790-2448, excerpt 1.

Commenter Name: Russell A. Wozniak
Commenter Affiliation: Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1
Comment Excerpt Number: 8

Comment: The EPA should revise the definitions of "Startup" and "Shutdown".

In 63.11237, the EPA provides the following definitions:

Shutdown means the period that begins when the boiler last operates at 25 percent load and ending with a state of no fuel combustion in the boiler.

Startup means the period between the state of no combustion in the boiler to the period where the boiler first achieves 25 percent load (i.e., a cold start).

Dow suggests the following revisions to the proposed regulatory text and provides supporting rationale for these revisions below. New text is shown on the next page in bold underline text. Change/revised text is shown in strike-through font.

Shutdown means the period that begins when the boiler last operates **under stable low load conditions defined by the owner/operator (typically between 5 percent and 25 percent load)** ~~25 percent load~~ and ending with a state of no fuel combustion in the boiler.

Startup means the period between the state of no combustion in the boiler to the period where the boiler first achieves **stable load conditions defined by the owner/operator (typically between 5 percent and 25 percent load)**. ~~25 percent load (i.e., a cold start).~~

Dow requests that the EPA consider revising the startup/shutdown proposed rule definitions to address variability in combustion unit operational use. Dow operates some combustion units in a standby (operational readiness) mode for extended periods of time at less than 25% load. Operating some boilers in stand-by mode is necessary at petrochemical facilities and allows for expeditious ramping up of combustion units to provide process operating continuity. When standby mode is reached, combustion unit operating characteristics are stable (e.g. combustion zone flame/O₂ level) and the emissions are insignificant. Dow believes that a startup load criteria of 5% of maximum design heat input for these types of combustion units is practical and achievable, but that the criteria should be defined within a range of 5 to 25% load by the owner/operator.

Shutdown time of a combustion unit (e.g. the time between providing heat output and cutoff of fuel feeds) is typically short. Dow believes that it would be appropriate to set the shutdown load criteria at a range from 5% to 25% load as defined by the owner/operator.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 1.

Commenter Name: Mark R. Vickery

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A2

Comment Excerpt Number: 3

Comment: The definitions of *startup* and *shutdown* should be clarified to specify that the 25% load threshold refers to a percentage of normal operating load.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 1.

Commenter Name: Tangelia Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 14

Comment: The definitions of *startup* and *shutdown* should be clarified to specify that the 25% load threshold refers to a percentage of normal operating load.

Based on the EPA's proposed definition of *shutdown*, a shutdown period begins when a boiler last operates at 25% load. Similarly, the proposed definition of *startup* states that a startup period

ends when the boiler first achieves 25% load. The 25% load threshold used in both definitions might be interpreted as a percentage of the operating load or as a percentage of the design capacity load of the boiler. In some cases, particularly in smaller area sources, the boiler may be oversized for the demand and the boiler may rarely operate at or near full capacity. In some instances the normal operating load of a boiler may rarely or never exceed 25% of the design capacity. The EPA should revise the definitions of *startup* and *shutdown* to specify that the 25% threshold is based on the percentage of normal operating load of the boiler and provide a definition of what is considered normal operating load.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 1.

Commenter Name: Allison Watkins, Baker Botts

Commenter Affiliation: Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1

Comment Excerpt Number: 7

Comment: The Class of '85 recommends that the EPA revise the proposed definitions for "startup" and "shutdown" to provide for an "offline" period. The EPA proposes to define "startup" as the period between the state of no combustion in the boiler to the period where the boiler first achieves 25% load (i.e., a cold start) and "shutdown" as the period that begins when a boiler last operates at 25% load and ending with a state of no fuel combustion in the boiler.⁵ Thus, under the proposed definitions, facilities are either operating in startup or in shutdown. The Group is very concerned that the proposed definitions could be construed as requiring sources to comply with work practice standards while the unit is not operating and lead to frivolous litigation because compliance would not be feasible. Such a result is nonsensical and technically inappropriate. The EPA should modify the definitions to provide for an offline period in between shutdown and startup, to make clear that sources will not be in technical violation of regulations when they are offline.

Response: The EPA agrees with the commenter and is clarifying that the startup period begins either with the first-ever firing of fuel in a boiler or with the firing of fuel in a boiler after a shutdown event for any purpose. Shutdown ends when there is no steam and heat being supplied and no fuel being fired in the boiler.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 7

Comment: Integrys recommends that the EPA revise the proposed definitions for "startup" and "shutdown" to provide for an "offline" period. The EPA proposes to define "startup" as the period between the state of no combustion in the boiler to the period where the boiler first achieves 25% load (i.e., a cold start) and "shutdown" as the period that begins when a boiler last operates at 25% load and ending with a state of no fuel combustion in the boiler. (76 FR at 80541.) Thus, under the proposed definitions, facilities are either operating in startup or in

shutdown. We are very concerned that the proposed definitions could be construed as requiring sources to comply with work practice standards while the unit is not operating and lead to frivolous litigation because compliance would not be feasible. Such a result is nonsensical and technically inappropriate. The EPA should modify the definitions to provide for an offline period in between shutdown and startup, to make clear that sources will not be in technical violation of regulations when they are offline.

Response: See the response to EPA-HQ-OAR-2006-0790-2458-A1, excerpt 7.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 6

Comment: Several definitions in the Area Source Boiler Rule differ from the definitions in the Major Source Boiler Rule.

Some differences are appropriate due to the differences in the scope of the rules and the subcategories used. However, in many cases the definitions could and should be identical. The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule. In many cases these differences were caused by making corrections to definitions in one rule and not making conforming changes in the other rule.

Bag leak detection system means a group of instruments that ~~is~~ are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (-i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Response: The EPA agrees with the commenter's suggested change to the definition of "bag leak detection system" and has revised the definition in the final rule.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 7

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Boiler system means the boiler and associated components, such as, the feedwater system, the combustion air system, the ~~boiler~~-fuel system (including burners), blowdown system, combustion control system, steam system, and condensate return system.

Response: In addition to agreeing with the commenter's suggested revision to the definition of "boiler system" as described in the response to EPA-HQ-OAR-2006-0790-2418 excerpt 5, the EPA also agrees with the commenter's suggested revision to make the area source definition match the major source definition. The definition of "boiler system" has been amended in the final rule to read:

Boiler system means the boiler and associated components, such as, feedwater systems, combustion air systems, fuel systems (including burners), blowdown systems, combustion control systems, steam systems, and condensate return systems, directly connected to and serving the energy use systems.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 8

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Deviation.(1) ~~Deviation-M~~means any instance in which an affected source subject to this subpart, or an owner or operator of such a source: (i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or (ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; ~~or~~. (2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Response: The EPA agrees with the commenter's suggested changes to the definition of "deviation" such that it matches the Major Source Boiler Rule's definition and is revising the definition in the final rule.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 9

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field,

*collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is **usually** a dry control system; ~~except when it is operated with a wet scrubber.~~*

Response: The EPA agrees with the commenter's suggested changes to the definition of "electrostatic precipitator" such that it matches the Major Source Boiler Rule's definition and is revising the definition in the final rule.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 10

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

*Energy use system includes, but **is not limited to**, process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning ~~(HVAC)~~-systems; hot ~~heater~~water systems; building envelop; and lighting.*

Response: The EPA agrees with the commenter's suggested changes to the definition of "energy use system" such that it matches the Major Source Boiler Rule's definition and is revising the definition in the final rule. See the response to EPA-HQ-OAR-2006-0790-2443-A2, excerpt 12, for the full definition.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 11

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas or firebox. This definition includes oxygen trim systems. The source owner or operator ~~is responsible to~~must install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Response: We are amending the oxygen monitoring requirements to allow for the use of oxygen trim systems and have included oxygen trim systems in the definition of "oxygen analyzer system." We agree with the commenter's suggested text change but rather than including it in the

definition, have included it in paragraph (a) of §63.11224 “What are my monitoring, installation, operation, and maintenance requirements?”

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 12

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

Response: The EPA agrees with the commenter's suggested changes to the definition of "oxygen trim system" such that it matches the Major Source Boiler Rule's definition and is revising the definition in the final rule.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 14

Comment: The following are some definitions in the Area Source Boiler Rule that could be changed as shown to match the Major Source Boiler Rule.

Solid fossil fuel includes, but is not limited to, coal, coke, petroleum coke, and tire derived fuel.

Response: The EPA agrees with the commenter's suggested changes to the definition of "solid fossil fuel" such that it matches the Major Source Boiler Rule's definition and is revising the definition in the final rule.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 16

Comment: The Area Source Boiler Rule has separate definitions for commercial boiler and institutional boiler. The Major Source Boiler Rule has a single definition for

commercial/institutional boiler. It does not matter which approach is used, but these definitions could be the same in both rules. Currently the definitions in the Area Source Boiler Rule contain more examples of commercial and institutional establishments. At a minimum, the examples should be consistent and the combined definition in the Major Source Boiler Rule could be revised as follows.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, and governmental buildings, hotels, restaurants, and laundries to provide steam and/or hot water.

The EPA should consider a) replacing the combined definition in the Major Source Boiler Rule with the separate definitions used in the Area Source Boiler Rule, or b) replacing the separate definitions in the Area Source Boiler Rule with the revised version of the combined definition shown above. Other terms that differ with the potential to be made consistent include “gaseous fuel,” “hot water heater,” “industrial boiler,” “liquid fuel,” and “natural gas.” Recommended changes are not shown here as it is possible that some of the differences were made to address stakeholder concerns that are relevant to one rule but not the other.

Recommendation: Change the definitions identified in the discussion as appropriate.

Response: The final Area Source Boiler Rule retains the separate definitions for commercial boiler and institutional boiler. Any revisions to these definitions in the final Major Source Boiler Rule are discussed in that rule's response to this comment.

The EPA agrees with the commenter's suggested changes to the definition of "hot water heater", "industrial boiler" and "natural gas" such that they match the Major Source Boiler Rule's definitions and are revising the definitions in the final rule.

We believe that for purposes of clarity and/or applicability, the definitions of "gaseous fuel" and "liquid fuel" should not be revised to match the Major Source Boiler Rule's definition. Thus, the definitions have not been revised in the final rule.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 1

Comment: Recommendation: Modify several definitions.

Clarify the definition of *seasonal boiler* to clearly state that units used for heating purposes meet the definition. Removing the "due to seasonal market conditions" language may accomplish this.

Response: The EPA is not removing the “due to seasonal market conditions” language as suggested by the commenter but is revising the language to “due to seasonal conditions.” In the final rule, “seasonal boiler” is defined as a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

We believe that the definition makes clear that any biomass- or oil-fired boiler, including one used for heating purposes, that meets the definitional requirements of “seasonal boiler” will be considered a seasonal boiler.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 2

Comment: The proposed definition for *seasonally operated boilers* does not adequately address the different sources which are not in regular seasonal use through the year. One example, especially in northern climates, is space heating boilers (non-residential) which operate less than half of the year.

Response: See the response to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 1.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 11

Comment: There are at least two major problems with this definition of qualified energy assessor. First, as written, this definition requires a single person to have all of the capabilities and experience listed. Such a person likely does not exist. For instance, people who specialize in boiler combustion management will likely have no experience with condensate recovery or industry specific steam end use systems. If instead of a single person, the definition is meant to apply to a team (as most energy assessments require) that is not reflected in the time, burden or cost estimates used for this rule. Secondly, the definition requires expertise and experience that will not be needed. For instance, the definition requires process heater and process heat expertise, even though the area source proposal only applies to boilers and, therefore, only steam use. Similarly, most facilities do not have boiler-steam turbine cogeneration systems, yet they cannot employ an assessor who lacks that experience.

We recommend the definition be revised to the following: Qualified Energy Assessor or Assessors means a person or persons who have demonstrated capabilities to evaluate energy

savings opportunities for steam generation and major steam using systems, as applicable to the facility.

Response: We disagree that the definition of "Qualified energy assessor" is unclear and needs clarification. The definition that was proposed in December 2011 and is included in the final rule provides a minimum level of energy assessor expertise which will assure that facilities subject to the energy assessment requirement will receive similarly conducted assessments, which we consider appropriate.

We realize that every facility is different and that it is impractical to require a single person to have all of the capabilities and experience listed to conduct an assessment of a simple heating boiler system. The term "Someone" is not intent to mean a single person. For more complicated boiler/energy use systems or facilities with multiple boilers, a group, such as a consulting firm or a company's engineering staff, with the needed expertise could perform the required engineering assessment. The definition is intended to indicate that the "someone" a facility employs (or contracts with) to conduct the energy assessment should have the background, experience, and expertise to evaluate energy savings opportunities for the types of boiler/energy use systems located at the particular facility. The definition is not intended to imply that the any energy assessment, no matter how simple, can only be conducted by a person with expertise in all the issues listed in the definition. Basically, the definition is stating that a person (or combination of individuals) is qualified to conduct an energy assessment if they have the needed experience and background in conducting an energy assessment for a particular situation. For a particular boiler/energy system, a company employee may have the background, experience, and abilities to perform the assessment and prepare the report.

Commenter Name: Tangelia Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 17

Comment: The definition of *qualified energy assessor* should be substantially stream-lined and made more general. Some of the qualification criteria in the definition are more applicable to large industrial facilities, and the inclusion of these criteria in the definition may force small businesses to contract over-qualified and more expensive energy assessors to evaluate simple boiler applications.

The criteria that the EPA is proposing for a person to be considered a *qualified energy assessor* are overly specific and may force small businesses to incur additional costs to conduct the energy assessment. The EPA is attempting to create a definition of *qualified energy assessor* that encompasses a broad range of industrial and commercial applications by establishing specific criteria for capabilities and knowledge. However, the effect is that owners and operators of sources will be required to contract a person meeting all the criteria in the EPA's definition to perform an energy assessment regardless of the application, rather than have the assessment performed by a person with the most specific knowledge for the application. For example, a person does not require specific capability and knowledge of boiler-steam turbine cogeneration systems in order to perform an assessment of a small commercial boiler application. If the energy

assessment is retained in the final rule, the definition of *qualified energy assessor* should be made more general or revised such that the assessor is only required to have knowledge and capabilities specific to the processes at the site.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt number 11.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 3

Comment: Portions of the EPA's tune up procedure as proposed in the regulation are not applicable to biomass boilers. The EPA should use the boiler tune up definition provided in the Major Source Boiler MACT for biomass units. *"Tune-up", as defined in the proposed Major Source Boiler MACT rule, means "adjustments made to a boiler in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency."*

Response: The EPA is adding a definition of "tune-up" to the final rule. The definition references 40 CFR 63.11223 (How do I demonstrate continuous compliance with the work practice and management practice standards?) and reads as follows:

Tune-up means adjustments made to a boiler in accordance with the procedures outlined in §63.11223(b).

Commenter Name: Monica Lopes

Commenter Affiliation: NAES Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2469-A1

Comment Excerpt Number: 2

Comment: The revised definitions of boiler and waste heat boiler provided in 40 CFR 63.1237 seem to indicate that all waste heat boilers are excluded from the definition of boiler and therefore exempt from the rule whether they are fired or unfired. Please confirm it is the EPA's intention to exclude duct burners installed in combined cycle gas turbines from the Area Source Boiler Rule regardless of the type of fuel fired in the duct burners.

Response: The definition of "Waste heat boiler" in the final rule has been revised to be consistent with the major source definition. Duct burners, which are mounted in a duct or discharging into a duct, are sometimes used to increase the temperature of the hot exhaust gas from a combustion turbine to increase electricity output from a combined cycle gas turbine system. Duct burners typically use natural gas or other clean fuel, and provide a small fraction of the overall heat for the boiler system. Waste heat boilers, whether or not they have duct burners, are not considered to be boilers as defined in Subpart JJJJJ. The final rule clarifies that waste heat boilers are excluded from the definition of "Boiler."

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 12

Comment: PA DEP agrees with the clarifying revisions to the "Energy assessment" definition.

Response: The EPA thanks the commenter for their support.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 10

Comment: Each of the three paragraphs in the energy assessment definition call for evaluating "the boiler system and any energy use system" accounting for at least a specified percentage of the energy output. "Output" is a meaningless term related to consumers and that word should be changed to "production or consumption."

For example, to be clearer Paragraph 3 of the energy assessment definition should read as follows.

(3) In the Energy assessment for facilities with affected boilers and process heaters using greater than 1.0 trillion Btu per year, the boiler system and any ~~energysystem~~ use system accounting for at least 20 percent of the ~~energysystem output~~ production or consumption will be evaluated to identify ~~energysystem~~ savings opportunities.

Paragraphs 1 and 2 of the proposed definition should [also] be changed accordingly.

Response: In the final rule, we are making a series of changes to the energy assessment provisions and related definitions, including "energy assessment," to clarify terms used and better set the scope of the assessment. We are not omitting the word "energy" as suggested by the commenter but are instead providing examples of energy "(e.g., steam, hot water, or electricity)." We are replacing the word "output" with "production".

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 17

Comment: Item 3 of the energy assessment definition should be revised to read as follows.

(3) Energy assessment for facilities with affected boilers using greater than 1.0 TBtu per year, the boiler system(s) and any onsite ~~energysteam~~ use system accounting for at least 20 percent of the affected boiler(s) ~~energysteam output~~ production or consumption, as applicable, at the facility will be evaluated to identify ~~energysteam~~ savings opportunities.

Similar revisions to Items 1 and 2 of the energy assessment definition are also needed.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 10.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 15

Comment: The definition of energy assessment has three categories based on facility heat input, but then requires that the assessment address "energy use systems." There is no basis for expanding the assessment beyond producers and users of steam or heat provided by boilers and process heaters subject to this rule (e.g., electricity users, imported steam users) and therefore the term "energy system" should be replaced with "steam and process heat consumers."

Response: The EPA received a number of comments regarding the energy assessment requirements and in the final rule is making a series of changes to the energy assessment provisions and related definitions that clarify terms used and better set the scope of the assessment. We are amending the definition of "energy assessment" to clarify that the scope of the energy assessment does not encompass energy use systems located off-site or energy use systems using electricity purchased from an off-site source. The energy assessment is limited to only those energy use systems, located on-site, associated with the affected boilers. We are also clarifying that the scope of the assessment is based on energy use by discrete segments of a facility and not by a total aggregation of all individual energy using segments of a facility. In addition, we are amending the definition of "energy use system" to clarify that energy use systems are only those systems using energy clearly produced by affected boilers.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 16

Comment: Each of the three paragraphs in the energy assessment definition call for evaluating "the boiler system and any energy use system" accounting for at least a specified percentage of the energy output. As in the previous item, the term "energy" is unclear and should be changed to "steam." Additionally "output" is a meaningless term related to consumers and that word should be changed to "production or consumption." Finally, it should be clarified the percent is the percent of the facility total steam production or consumption, as applicable.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 10.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 15

Comment: The definition of energy assessment will be different in the Major and Area Source Boiler Rules if the terms “boilers” and “process heaters” are used and if the rule table references are included. The following shows how the definition in the area source rule should be changed for consistency.

This also reflects our conclusion that it is not necessary to limit the term to a table in the rule because the term is used throughout the rule.

Energy assessment means the following ~~only as this term is used in Table 2~~ for the emission units covered by this subpart:

(1) Energy assessment for facilities with affected boilers using less than 0.3 trillion Btu (TBtu) per year heat input will be 8 technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy output will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour energy assessment.

(2) Energy assessment for facilities with affected boilers using 0.3 to 1.0 TBtu/year will be 24 technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 33 percent of the affected boiler(s) energy output will be evaluated to identify energy savings opportunities, within the limit of performing a 24-hour energy assessment.

(3) Energy assessment for facilities with affected boilers using greater than 1.0 TBtu/year, the boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected boiler(s) energy output will be evaluated to identify energy savings opportunities.

Response: The EPA agrees with the commenter's suggested changes to the definition of "energy assessment" and has revised the definition in the final rule. Note that the final rule's definition also includes revisions resulting from other public comments.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 1

Comment: The following definitions for liquid fuel are inconsistent between the three rules:

1. In the proposed Area Source Boiler Rule, liquid fuel is defined as follows: *Liquid fuel* includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, on-spec used oil, liquid biofuels, biodiesel, and vegetable oil.

2. In the proposed Major Source Boiler Rule, liquid fuel is defined as follows: *Liquid fuel* includes, but is not limited to, distillate oil, residual oil, on-spec used oil, biodiesel and vegetable oil.

3. Under the CISWI and NHSM Rules, liquid fuel is classified under “traditional fuel” as follows (excerpted as noted): *Traditional fuels* means materials that are produced as fuels and are unused products that have not been discarded and therefore, are not solid wastes, including: (1) ... fossil fuels (e.g., coal, oil and natural gas)...; and (2) alternative fuels developed from virgin materials that can now be used as fuel products, including used oil which meets the specifications outlined in 40 CFR 279.11.... NESCAUM understands that all of these definitions are intended to encompass all non-waste liquid fuels that the EPA has deemed to be traditional fuels when burned in a combustion device and should be regulated under Section 112. NESCAUM recommends that the definitions be harmonized to all say the same thing (i.e., reference 40 CFR 279.11 for defining used oil).

Response: For purposes of clarity and applicability, the EPA is retaining the proposed area source boiler definition for "liquid fuel" in the final rule with two modifications. Those modifications include omitting "on-spec" prior to "used oil" and adding “and comparable fuels as defined under 40 CFR 261.38.”

Any revisions to the definition of "liquid fuel" in the Major Source Boiler Rule or the CISWI and NHSM Rules are discussed in those respective response to comment documents.

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 7

Comment: The EPA should remove the addition of the term "on-spec" to used oil in the definition of "Liquid fuel".

In §63.11237, the EPA provides the following definition: "*Liquid fuel* includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, on-spec used oil, liquid biofuels, biodiesel, and vegetable oil."

Dow suggests the following revisions to the proposed regulatory text and provides supporting rationale for these revisions below. New text is shown in bold underline text. Change/revised text is shown in strike-through font.

"Liquid fuel includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, ~~on-spec~~ used oil meeting the specification in 40 CFR 279.11, liquid biofuels, biodiesel, and vegetable oil."

The EPA added the term "on-spec" before "used oil" in this version of the rule without any justification for why the term was added. Additionally, no definition of the term "on-spec" is found in the Boiler GACT rule while a used oil specification exists in RCRA. Provisions for this kind of duplication are provided, for example, in §112(n)(7) of the CAA and §1006(b) of RCRA. In order to eliminate confusion, the EPA should delete the term "on-specification used oil" and use the term "used oil" under the terms of the "specification in RCRA at 40 CFR 279.11".

Response: The EPA agrees with the commenter's suggested changes to the definition of "liquid fuel" such that it deletes "on-spec" and references RCRA (40 CFR 279.11) with respect to the RCRA defined term "used oil," which is part of the definition of "liquid fuel," and is revising the definition in the final rule.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 48

Comment: The EPA should clarify the definition of liquid fuel.

The definition of "liquid fuel" at §63.11237 currently includes the words "on-spec used oil," but "on-spec used oil" is not defined in the Final Rule. Congress recognized that in establishing air standards to meet requirements in the CAA and RCRA, there may be regulatory overlaps between the two statutes. Congress therefore intended for the EPA to minimize, if not eliminate regulatory overlap to the maximum extent practicable and to harmonize requirements so that they are consistent. See, for example, §112(n)(7) of the CAA and §1006(b) of RCRA. Based on these Congressional directives, ACC believes that the EPA should delete the term "on-spec" used oil and replace it with the term "used oil" which is a defined term in RCRA at 40 CFR 279.11.

Response: See the response to EPA-HQ-OAR-2006-0790-2423-A1, excerpt 7.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 3

Comment: The NRA agrees with the EPA determination that processed fats are not solid waste, and are not considered to be included in the solid fuel (biomass) category under Subpart JJJJJ.

The addition of liquid biofuels was included in NESHAP Subpart JJJJJ liquid fuel definition previous to this reconsideration, per the comment submitted by Darling International Inc. (NRA member). However, the EPA clearly took an “easy way” out by throwing processed fats in with the liquid fuel definition in NESHAP Subpart JJJJJ that was unexpected and unintended by the NRA, without fully vetting the impact on the liquid fuel regulations, or the impact on processed fat-fired units. The EPA has acknowledged acting in haste to finalize these regulations by the Court-imposed deadline.

By grouping processed fats as a liquid biofuel in the definition of liquid fuels, any boiler located at an area HAP source is grouped in the oil subcategory defined in §63.11237... The NRA requests that the EPA evaluate the impact of this “grouping” and consider the pertinent information presented in this letter that demonstrates that it is both reasonable and technically necessary for the EPA to consider processed fats as a separate defined fuel that is wholly distinct from traditional petroleum-based oils and liquid biofuels. The NRA did not have an opportunity to provide comments to the EPA concerning the liquid biofuels addition to the definition of liquid fuel under §63.11237, as this change was incorporated directly into the final version of NESHAP Subpart JJJJJ, and was not in the proposal. Since the rule is now being reconsidered by the EPA, the NRA is submitting the requested addition of the processed fats fired boiler definition.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. We note the proposal for exclusion from the category is incomplete in many respects. The commenter does not provide a basis for distinguishing a boiler capable of burning processed fats-derived fuel from a boiler that otherwise burns petroleum-based liquid fuels. The contemplated subcategory would only be distinguishable based on what fuel is sold to the liquid-fueled boiler. Sources would be capable of switching between subcategories with relative ease, thereby posing compliance assurance difficulties. The EPA is not in a position to adopt the suggested subcategorization as a logical outgrowth of the proposed reconsideration. We also note that the commenter provided comments on the 2010 proposed rule, which belies its claim that it was not on notice of processed fat fuels being potentially subject to the provisions of this rule. In addition, Nebraska Department of Environmental Quality (DEQ) provided comments on the 2010 proposed rule regarding boilers that combust tallow, white/yellow grease, and vegetable oils. Specifically, Nebraska DEQ commented that because those fuels have similar emission characteristics as biodiesel fuels, and are cleaner than diesel in most respects, they should be included within the liquid fuel definition and regulated similarly to boilers combusting biodiesel fuels. Thus, Nebraska DEQ understood that boilers combusting processed fats based fuel would be subject to Subpart JJJJJ and supported those boilers’ inclusion in the oil subcategory.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 5

Comment: Processed fats are obtained from the recycling of animal (livestock) and plant (crop) related byproducts from the food processing industry. Processed fats fuels are utilized in the same liquid fuel-fired boilers that burn petroleum-based liquid fuels. No special designed burners are required for the burning of processed fats in liquid fuel-fired boilers. As identified in this letter, the urban HAPs content of processed fats are insignificant and similar to gaseous fuels and not petroleum-based liquid fuels. The NRA requests that the following two definitions be added to §63.11237 for NESHAP Subpart JJJJJ.

Processed fats fuel means, but is not limited to, yellow grease, poultry grease, brown grease, tallow oil, and any form of liquid fuel derived from animal and vegetable fats, with less than 0.2% by volume petroleum-based fuel content added for alternative fuel blending requirements.

Processed fats-fired boiler includes any boiler that burns any processed fats fuel and is not in the oil, biomass, or coal subcategories, and burns traditional liquid fuel only during periods not to exceed 48 hours during any calendar year

Response: See the response to EPA-HQ-OAR-2006-0790-2427-A1, excerpt 3.

Commenter Name: Allison Watkins, Baker Botts

Commenter Affiliation: Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1

Comment Excerpt Number: 6

Comment: The Class of '85 supports the EPA's proposed clarification of the definition of biomass in the proposed reconsideration of the NSPS and emission guidelines for CISWI units,⁴ which would establish how bio-based fuels are treated under Area Source Boiler Rule. The clarification will remove a barrier to expanding the use of several promising biomass fuel sources.

⁴ 76 FR 89452, 80474 (Dec. 23, 2011).

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert E Hunzinger, General Manager

Commenter Affiliation: Gainesville Regional Utilities (GRU)

Document Control Number: EPA-HQ-OAR-2006-0790-2425-A1

Comment Excerpt Number: 3

Comment: Clarification of Criteria for Biomass or Bio-based Fuels and Non-hazardous Solid Waste

The treatment of biomass found in the three final NESHAP rules created uncertainty whether urban biomass would be treated as a biomass fuel or a solid waste subject to the CISWI Rule. While this clarification is found in the CISWI reconsideration rule, the applicability to the Area Source and Major Source Boiler Reconsideration Rules are understood. GRU supports the

clarification and believes that the clarification will remove a barrier to expanding the use of several promising biomass fuel sources.¹

¹ FR Vol. 76. No. 247, p. 80474 December 23, 2011 *"Specifically, we are proposing to make the following revisions and additions to the definition: (1) Explicitly acknowledge that the list of biomass materials is not exclusive by adding the phrase, "including, but not limited to"; (2) revise the category "forest-derived biomass" to include "agricultural biomass", (3) add hogged fuel, wood pellets, and untreated wood pallets as examples of forest-derived biomass; (4) add the category of "urban wood" and provide examples, including tree trimmings, stumps, and related forest-derived biomass from urban settings)*

Response: The definition of "biomass" in the Area Source Boiler Rule includes biomass-based solid fuels that are not solid waste, but does not attempt to define solid waste. The definition of solid waste is addressed in the NHSM Rule. The EPA thanks the commenter for their support of the changes made to the NHSM definition of solid waste.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 3

Comment: Important biomass materials such as paper recycling residuals, pulping sludge, wood construction debris and railway ties are still not listed as fuels, which creates great uncertainty for the businesses that rely on them. The failure to list such materials as fuels means that the boilers burning such fuels could be regulated under the onerous and stigmatizing incinerator standards. Alternatively, those materials could end up being sent to landfills, rather than being used to produce energy—a bad result for jobs and the environment.

Response: The definition of "biomass" in the Area Source Boiler Rule includes biomass-based solid fuels that are not solid waste, but does not attempt to define solid waste. The definition of solid waste is addressed in the NHSM Rule.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480--A2

Comment Excerpt Number: 4

Comment: We note that the Area Source Boiler Rule and the definition of biomass (which will now encompass a great deal of material that would ordinarily be considered "waste") are interlinked in an important way. As the EPA loosens restrictions on what can be defined as "biomass" instead of "waste", there will be an increasing number of large facilities burning potentially contaminated material, but since many are considered "area" sources, they will only be regulated for PM, not other pollutants that are regulated under the major source MACT rule.

Response: As an initial matter, our requirements for biomass boilers at area sources represent GACT controls. It is incorrect to suggest that emissions of these pollutants are unregulated. The GACT controls will reduce HAP emissions by limiting the amount of fuel that needs to be combusted (thus reducing fuel-bound HAP) and by ensuring good combustion (thus reducing HAP produced by incomplete combustion).

Additionally, we note that the determination of what material is “waste” and what material is a product fuel is set forth in the NHSM Rule and outside the scope of this rulemaking. “Clean biomass” may be burned under §112 as a “traditional” fuel. Clean biomass consists of residuals that are “akin to traditional cellulosic biomass.” It would include materials such as forest thinnings, corn stover energy cane, bagasse, peanut shells, and various other wood materials. See 40 CFR 241.2; 76 FR 15477-78, 15532, 15550. Moreover, clean biomass is material with contaminants that would not exceed those normally associated with virgin biomass materials. Id. Therefore, even an increase in the burning of biomass under the NHSM Rule will not impact the HAP emitted by area source boilers.

The commenter expresses concern that large biomass-fired boilers at area sources will only be subject to PM controls. The commenter provides information on controls at facilities in the biomass-combusting energy sector (See comment EPA-HQ-OAR-2006-0790-2480; 2480--A2, excerpts 5, 6 and 7), principally HCl and CO, which we use as a surrogate for control of POM for the coal-fired portion of this category. These pollutants are not required to be subject to MACT because HCl is not on the CAA §112(c)(6) list and the biomass subcategory is not subject to the CAA §112(c)(6) MACT requirement for POM.

The information provided by the commenter on recent permits for new construction in the biomass-combusting energy sector facilities does not establish that these controls are generally available for portions of the biomass subcategory that are not in the energy production business. A review of recent permits such as that performed by the commenter will only capture sources that have been required to obtain permits, such as these energy producing facilities, and not other types of area sources. The commenter notes that the new facilities now being permitted around the country are mostly large, standalone electricity-producing plants (see comment EPA-HQ-OAR-2006-0790-2480; 2480--A2, excerpt 2). Regulation of only PM for new large biomass combusting boilers at area sources would be GACT for the subcategory taken as a whole.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 6

Comment: The EPA has proposed an amendment to the definition of *hot water heater* in order to clarify that hot water boilers are included in the definition and are therefore not subject to Subpart JJJJJ. The EHSCP supports this clarification and would like to raise a related issue. Since this clarification has been made after area sources covered by the rule were required to submit initial notifications (by September 2011), notifications may have been submitted for sources that will not be covered by the rule if this clarification is finalized. Therefore, the

EHSCP recommends that the EPA provide guidance regarding the process to follow to rescind notifications for sources that are no longer required due to the change in definition.

Response: The EPA does not typically require owners or operators to rescind notifications that no longer apply. As far as a process for those owners or operators that want to rescind, they could send a letter to the same delegated authority that they sent the notice to, but the EPA does not require or encourage them to do that. From an enforcement standpoint, they would not be out of compliance since they have been exempted by the definition. Also, it's likely the Agency would be able to tell from the information submitted in the notice that they would be exempted by the definitional change.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 2

Comment: Heat Input Threshold Included in the Definition of Hot Water Heater

Under the reconsidered Area Source Boiler Rule, the EPA proposes to change the definition of hot water heaters (76 FR 80547), which are exempted from the area source rule requirements. The proposal creates a clear line to define hot water heaters exempt from the rule as units with heat input capacity below 1.6 MMBtu/hr. NESCAUM supports the change in definition with regard to the 1.6 MMBtu/hr heat input threshold.

Response: The EPA thanks the commenter for their support.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance (NORA)

Document Control Number: EPA-HQ-OAR-2006-0790-2417

Comment Excerpt Number: 1

Comment: We would like to draw the EPA's attention to the exclusion of steam from the small boiler/water heating exemption. Steam boilers have a limited market in the small residential market, but are still utilized. Additionally, they are also used to provide domestic hot water for the home. First, in evaluating the small residential exemption, we feel it may not cover many small properties in the northeast and in urban areas. For example, many houses have been subdivided into multiple unit buildings, and may easily exceed the four units described in the rule. Many of these are older buildings, and thus may use steam for heating. Thus, we would encourage the EPA to reexamine the exclusion of steam from the definition of hot water heaters.

Response: The EPA intended to omit steam from the definition of "hot water heater." If steam were included in the definition of "hot water heater," the term would no longer truly define a hot water heater. Thus, the definition of "hot water heater" in the final rule has not been revised to include steam. See the response to EPA-HQ-OAR-2006-0790-2454-A1, excerpt 10, regarding single unit residence buildings that have been converted or subdivided into multiple units. We

also note that the residential boiler exclusion should address the concerns of the small residential market that uses steam boilers discussed in the comment.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance (NORA)

Document Control Number: EPA-HQ-OAR-2006-0790-2417

Comment Excerpt Number: 2

Comment: We would encourage the EPA to reexamine the exclusion of steam from the definition of hot water heaters. While a conversion to a hot water boiler that meets the exception to the rule may be an option, it may not always be an appropriate option. The piping system and the radiators may need to be reconfigured to allow the use of hot water. This may be because there is inadequate radiation if there is a conversion from steam to hot water. Additionally, the steam system is designed with two pipes, and where it connects to the radiator may be different than with a hot water system. Further, when steam travels through a radiation system it has very low volumes of water, it is being done under low pressure, and it is not fully charged in the system at all times. Thus, if water is substituted, there is a potential that a leak will be discovered. First, a small leak under low pressure with very little water content is unlikely to cause serious water damage. However, if the leak is under pressure, and is water instead of steam, there may be actual damage. Therefore we would encourage the EPA in its reexamination to consider eliminating the parenthetical "i.e. generating steam"

Response: See the response to EPA-HQ-OAR-2006-0790-2417, excerpt 1.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 3

Comment: The nature of the *hot water heater* definition seems to be sufficient in its scope without limiting the fuel to gas or liquid. For this reason, we would support the addition of biomass or more simply the deletion of the specific fuels, since coal is highly unlikely to be prevalent in such small hot water heaters.

Response: The EPA agrees with the commenter that the definition should include firing of biomass fuels and is amending the definition accordingly.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 18

Comment: In the proposed definition of hot water heaters, the EPA lists "gaseous or liquid fuel" but not biomass. NESCAUM suggests that the definition also include biomass-fueled units.

Without that exclusion, some very small units in the Northeast will fail to be exempted from the rule despite their negligible impact on HAP emissions. NESCAUM recommends the following revision to the definition:

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition.

Response: See the response to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 3.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 7

Comment: If the EPA retains the hot water heater exemption, the EPA should include biomass in the definition as follows, "hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (i.e. not generating steam) combustion gaseous, liquid fuel, or biomass with a heat input capacity of less than 1.6 million Btu per hour are included in this definition."

Response: See the response to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 3.

Commenter Name: Tangelia Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 15

Comment: The definition of *hot water heater* should be expanded to include tankless water heaters and needs to be clarified regarding the 1.6 MMBtu/hr heat input threshold and 120 gallon capacity threshold.

Tankless water heaters should be included in the proposed revised definition of *hot water heater* in §63.11237. The EPA included tankless water heaters in the definition of *hot water heater* in 40 CFR 63, Subpart DDDDD, §63.7575, for the NESHAP rule for ICI boilers and process heaters at major sources (76 FR 80652), which expands the exemption for hot water heaters to tankless units. Tankless water heaters used at areas sources should also be provided the same exemption.

Response: The EPA agrees with the commenter that the proposed definition of "hot water heater" should be revised to include tankless water heaters and is revising the definition accordingly in the final rule.

Commenter Name: Mark R. Vickery
Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)
Document Control Number: EPA-HQ-OAR-2006-0790-2464-A2
Comment Excerpt Number: 4

Comment: The definition of *hot water heater* should be expanded to include tankless water heaters and needs to be clarified regarding the 1.6 MMBtu/hr heat input threshold and 120 gallon capacity threshold.

Response: See the response to EPA-HQ-OAR-2006-0790-2464-A3, excerpt 15.

Commenter Name: Tangelia Niemann
Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)
Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3
Comment Excerpt Number: 16

Comment: The EPA needs to clarify whether the requirement that hot water boilers must be less than 1.6 MMBtu/hr heat input capacity threshold to qualify as a hot water heater is considered independent of the 120 gallon capacity threshold.

Response: The EPA is clarifying in the final rule definition of "hot water heater": that the 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 MMBtu/hr heat input capacity threshold for hot water boilers.

Rule Language Corrections: Tables 1 through 7

Commenter Name: Marcie Kimball
Commenter Affiliation: Louisiana Department of Environmental Quality
Document Control Number: EPA-HQ-OAR-2006-0790-2414-A1
Comment Excerpt Number: 3

Comment: In Table 3, Item 6 should refer to 40 CFR 63.11211(c), not (b).

Response: The EPA appreciates the commenter pointing out the error and the final rule incorporates this revision.

Commenter Name: Paul Noe
Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.
Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1
Comment Excerpt Number: 18

Comment: Section 63.11224(a)(7) states the following: "(7) You must operate the oxygen analyzer system with the oxygen level set at the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 4 to this subpart."

The above paragraph references Table 4, but we believe the correct reference is Table 6, since this table contains requirements for establishing operating limits, including O₂ as the operating limit for CO (#3 in Table 6). The wording of §63.11224(a)(7) is more restrictive than the wording of the requirement for “continuous oxygen monitoring” in Table 3, #8, which is as follows:

“8. Continuous Oxygen Monitor ... Maintain the 30-day rolling average oxygen level at or above the lowest 1-hour average oxygen level measured during the most recent CO performance stack test.”

The Table 3 requirement allows operation with the 30-day rolling average O₂ level at or above the lowest 1-hour average O₂ level measured in the most recent performance test, whereas §63.11224(a)(7) requires operation at the minimum O₂ percent established during the prior test. Inherent boiler operating characteristics require operation with higher excess air (higher O₂) at lower operating rates simply due to their lower fuel and air velocities, degraded mixing of fuel and air as those flow rates decrease, and lower furnace temperatures. Therefore, it is necessary for the actual O₂ trim system set point to vary with load level, with the lowest set point typically occurring at or near full load operation. The Table 3, #8 requirements account for the variability of actual boiler operations; therefore, §63.11224(a)(7) should be revised to account for this variability as well.

Response: The EPA agrees with the commenter that 40 CFR 63.11224(a)(7) should reference to Table 6 rather than Table 4. We also agree that 40 CFR 63.11224(a)(7) should be revised to allow operation with the 30-day rolling average O₂ level at *or above* the lowest 1-hour average O₂ level measured in the most recent performance test. The final rule incorporates these revisions to 40 CFR 63.11224(a)(7).

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 23

Comment: The wording of §63.11224(a)(7) is more restrictive than the wording of the requirement for “continuous oxygen monitoring” in Table 3, #8, which is as follows:

“8. Continuous Oxygen Monitor ... Maintain the 30-day rolling average oxygen level at or above the lowest 1-hour average oxygen level measured during the most recent CO performance stack test.”

The Table 3 requirement allows operation with the 30-day rolling average O₂ level at or above the lowest 1-hour average O₂ level measured in the most recent performance test, whereas §63.11224(a)(7) requires operation at the minimum O₂ percent established during the prior test. Inherent boiler operating characteristics require operation with higher excess air (higher O₂) at lower operating rates simply due to their lower fuel and air velocities, degraded mixing of fuel and air as those flow rates decrease, and lower furnace temperatures. Therefore, it is necessary for the actual O₂ trim system set point to vary with load level, with the lowest set point typically

occurring at or near full load operation. The Table 3, #8 requirements account for the variability of actual boiler operations; therefore, §63.11224(a)(7) should be revised to account for this variability as well.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 18.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 22

Comment: Section 63.11224(a)(7) states the following:

“(7) You must operate the oxygen analyzer system with the oxygen level set at the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 4 to this subpart.”

The above paragraph references Table 4, but we believe the correct reference is Table 6, since this table contains requirements for establishing operating limits, including O₂ as the operating limit for CO (#3 in Table 6).

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 18.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 9

Comment: *Oxygen trim system set point*

Paragraph 7 of the Reconsideration Proposal §63.11224(a) states the following:

You must operate the oxygen analyzer system with the oxygen level set at the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 4 to this subpart.

The above paragraph references Table 4, but ACC believes that the correct reference is Table 6, as that is the table containing requirements for establishing operating limits, including O₂ as the operating limit for CO (#3 in Table 6).

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 18.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 10

Comment: The wording of §63.11224(a)(7) is more restrictive than the wording of the requirement for "continuous oxygen monitoring" in Table 3, #8, which is as follows:

"Maintain the 30-day rolling average oxygen level at or above the lowest 1-hour average oxygen level measured during the most recent CO performance stack test."

The requirement in Table 3 allows operation with the 30-day rolling average O₂ level at or above (no lower than) the lowest 1-hour average O₂ level measured in the most recent performance test, whereas §63.11224(a)(7) requires operation at the minimum O₂ percent established during the prior test. Inherent boiler operating characteristics require operation with higher excess air (higher O₂) at lower operating rates simply due to their lower fuel and air velocities, degraded mixing of fuel and air as those flow rates decrease, and lower furnace temperatures. Therefore, it is necessary for the actual O₂ trim system set point to vary with load level, with the lowest set point typically occurring at or near full load operation. The Table 3, #8 requirements account for the variability of actual boiler operations; therefore, §63.11224(a)(7) should be revised to account for this variability as well.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 18.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 24

Comment: The EPA has clarified that the emission limits in Table 1 do not apply during periods of startup and shutdown. The EPA should clarify that the operating limits set forth in Table 3 do not apply during startup and shutdown. The right column header of Table 3 currently reads "You must meet these operating limits..." Please revise this to read "You must meet these operating limits, except during startup and shutdown..."

Response: The EPA agrees with the commenter that Table 3 should be revised to clarify that the operating limits do not apply during startup and shutdown. The final rule includes the clarification.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 8

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

Clarification that the emission limits in Table 1 do not apply during periods of startup and shutdown; the EPA should, however, clarify that the operating limits set forth in Table 3 do not apply during startup and shutdown as well.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 24.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 46

Comment: The EPA has clarified that the emission limits in Table 1 do not apply during periods of startup and shutdown. The EPA also should clarify that the operating limits set forth in Table 3 do not apply during startup and shutdown. The right column header of Table 3 currently reads "You must meet these operating limits..." Please revise this to read "You must meet these operating limits, **except during startup and shutdown...**"

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 24.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 25

Comment: For 40 CFR 63.11224, the preamble Table 1 shows that there will be changes to paragraph (b), but these are not in the rule language. The rule language also included changes to paragraph (a), which was not discussed in the preamble Table 1.

Response: Table 1 in the preamble to the proposed rule at 76 FR 80539 incorrectly listed 40 CFR 63.11224(b) as one of the technical corrections. The reference for the listed change is 40 CFR 63.11225(b) which was included in Table 1 of the preamble to the December 2011 proposal as a technical correction. Specifically, 40 CFR 63.11225(b) of the final rule specifies when compliance certification reports are required to be submitted and what certifications of compliance must be submitted.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 50

Comment: There are discrepancies between preamble Table 1 and the rule.

For 40 CFR 63.11224, the preamble Table 1 at 76 FR 80539 shows that there will be changes to paragraph (b), but these are not in the reconsideration proposal language. The reconsideration

proposal language also included changes to paragraph (a), which were not discussed in the preamble for Table 1.

Response: Table 1 in the preamble to the proposed rule at 76 FR 80539 incorrectly listed 40 CFR 63.11224(b) as one of the technical corrections. See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 25. The revisions to 40 CFR 63.11224(a) were described in a separate preamble section IV.E. "Monitoring Carbon Monoxide Emissions" at 76 FR 80536. The revisions to paragraph (a) allow sources subject to a CO emission limit the option to install, operate, and maintain CO and O₂ CEMS.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 12

Comment: If the energy assessment requirement is finalized, the Table 2 Item 10 allowance for use of past energy assessments, must be amended to waive energy assessor approval and qualifications requirements.

Proposed Item 10 of Table 2 lists the elements that must be addressed in the energy assessment. In the introductory paragraph it states "An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement." However, to be acceptable an energy assessment must have been performed by an assessor approved by the Administrator and that assessor or team of assessors must have met all of the requirements in the proposed qualified energy assessor definition. As discussed in the previous comment, the energy assessor definition is unreasonably restrictive and it is virtually impossible that an existing assessment was done by a team that met all those specific requirements. Further, the assessor or assessors for a past assessment certainly were not approved by the Administrator. Thus, the allowance to use existing assessments, which we requested and fully support, is not usable in practice. A sentence needs to be added to Table 2 Item 10 that waives the energy assessor definition and approval where an existing assessment is being used to meet the energy assessment requirement.

Response: The EPA agrees with the commenter's suggested clarification regarding waiving energy assessor approval and qualification requirements in instances where past energy assessments that meet or have been amended to meet the energy assessment requirements are used to comply with those requirements. Item 16 of Table 2 in the final rule (proposed Item 10 of Table 2), which specifies the energy assessment requirements, includes this revision.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 3

Comment: Some of the wording differs in the Major and Area Source Boiler Rules. Some differences are intentional due to the different scope of the rules but other differences that are not necessary should be more consistent. In addition, the numbering format should be the same in both rules to help readers realize that energy assessments on area sources have one fewer requirement than major HAP sources.

Recommendation: Revise the energy assessment requirement in the “*You must meet the following...*” column of Table 2 to Subpart JJJJJ as follows. Most of the changes shown in ~~strikeout~~ are to make the requirements more consistent with the Major Source Boiler Rule. The changes shown in ~~bold~~ ~~strikeout~~ will further clarify the intended scope of the energy assessments since the term “*facility*” could be interpreted much broader than the affected units.

Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. The energy assessment must include:

- (1) A visual inspection of the boiler system~~;~~*
- (2) An evaluation of operating characteristics of the ~~facility boiler systems~~, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints~~;~~*
- (3) ~~An~~ ~~Inventory~~ of major ~~energy use~~ systems consuming energy from affected boiler(s) and which are under the control of the boiler owner/operator~~;~~*
- (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage~~;~~*
- (5) A list of major energy conservation measures that are within the facility’s control~~;~~*
- (6) A list of the energy savings potential of the energy conservation measures identified~~;~~ and*
- (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.*

Response: The EPA agrees with the commenter's suggested clarifications to the energy assessment requirements, which are now Item 16 of Table 2, and the final rule includes these revisions.

Rule Language Corrections: Rule language

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small

Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 9

Comment: The rule appears to be silent regarding the compliance deadline to complete tune-ups and energy assessments for existing dual fuel (gas/oil) capable boilers. Ideally, these dual fuel boilers would not be required to do anything as long as they fire gas only except under the three exemption criteria for burning oil. If economic or other conditions change such that the facility chooses to fire oil outside of the exemption criteria, they would have to file an initial notification as an existing source and comply with the requirements as if the boiler were an existing source that had been shutdown.

If that is not possible, then the facilities should at least be allowed to file their initial notifications as oil-fired boilers but without having to follow the tune-up and energy assessment (if applicable) requirements until and unless they begin to fire oil outside the exemption criteria. Tune-ups should be completed within one week after this, in keeping with the requirement for units that are not operating. Energy assessments should be completed within 180 days after switching, in keeping with §63.7 (a). This would essentially grandfather the boiler in as an existing source and provide the flexibility to use a fuel for which the boiler was designed to operate.

Response: As explained in the response to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8, the final rule amends the provisions regarding boilers that fuel switch after June 4, 2010, in 40 CFR 63.11194. In the final rule, an existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in 40 CFR 63.11237, that meets the applicability requirements of Subpart JJJJJ after June 4, 2010, due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under the subpart as long as the boiler was designed to accommodate the alternate fuel.

The final rule also amends 40 CFR 63.11210 to clarify that affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJ or the boiler becoming subject to subpart JJJJJ, or that take a permit limit that results in the boiler being subject to subpart JJJJJ, the owner or operator must demonstrate compliance within 180 days of the effective date of the fuel switch, the physical change, or the permit limit.

Commenter Name: Marcie Kimball

Commenter Affiliation: Louisiana Department of Environmental Quality (LDEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2414-A1

Comment Excerpt Number: 1

Comment: 40 CFR 63.11224(f)(7) should read “do not duct all compartments or cells”, instead of “do not duct all compartments of cells”.

Response: The EPA appreciates the commenter pointing out the error and 40 CFR 63.11224(f)(7) of the final rule includes this revision.

Commenter Name: Marcie Kimball

Commenter Affiliation: Louisiana Department of Environmental Quality (LDEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2414-A1

Comment Excerpt Number: 2

Comment: For 40 CFR 63.11225(e), I think the correct URL for the Electronic Reporting Tool is <http://www.epa.gov/ttn/chief/ert/index.html>, not <http://www.epa.gov/ttn/chief/ert/erttool.html>

Response: The EPA appreciates the commenter pointing out the error in the URL for the electronic reporting tool. The final rule references the correct URL.

Commenter Name: Marcie Kimball

Commenter Affiliation: Louisiana Department of Environmental Quality (LDEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2415-A1

Comment Excerpt Number: 4

Comment: The revised regulation for 40 CFR 63.11210(e) states that new and reconstructed boilers that only have applicable work practice standards (i.e. boilers with a heat input capacity <10 MMBtu/hr) do not have to complete initial performance tune-ups. 40 CFR 63.11210(e) does not state, but implies, a reference to the initial performance tune-ups that are in 40 CFR 63.11214. The revised Table 2 has new references to 40 CFR 63.11214. Specifically, it states that existing boilers must comply with the initial tune-ups specified in 40 CFR 63.11214. New boilers, however, are not shown as needing to comply with the initial tune-ups in 40 CFR 63.11214. 40 CFR 63.11214, itself, has not been revised in reference to these changes. 40 CFR 63.11214 still mentions both existing and new boilers as needing to perform initial tune-ups. Should 40 CFR 63.11214 be updated to reflect the other changes, i.e. should the references to new boilers needing initial tune-ups be removed? Or maybe Table 2 should show that new biomass-fired and oil-fired boilers with a heat input capacity =>10 MMBtu/hr need to comply with 40 CFR 63.11214 (in addition to other changes to correct the apparent contradictions)?

Response: The EPA has ensured that the final rule is clear with respect to the tune-up requirements for existing versus new and reconstructed boilers.

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 1

Comment: Initial Tune-Up Exemption: New and Reconstructed Boilers – Section 63.11196(e)

The language in §63.11196(e) that exempts new and reconstructed boilers from having to conduct an initial tune-up is confusing. The first sentence in §63.11196(e) discusses compliance dates that "are applicable to boilers that are "only subject to work practice standards". By placing the initial tune-up exemption in this same provision, the rule seems to suggest that this exemption is limited to boilers that are "only subject to work practice standards". However the

preamble indicates that this initial tune-up exemption should be applicable to all new and reconstructed boilers, including both those that are: (a) subject to emission limits and work practice standards; and (b) those that are only subject to work practice standards

To avoid confusion, it is suggested that this initial tune-up exemption for new and reconstructed boilers be placed in a separate dedicated provision (say 63.11196(f)), in which it is indicated that "notwithstanding provisions (d) and (e) above, "You are not required to complete an initial performance tune-up for a new or reconstructed affected source, but you are required to complete the applicable biennial or five-year tune-up as specified in §63.11223(b), (c), and (d) no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source. "

Response: The EPA has ensured that the final rule is clear with respect to the tune-up requirements for existing versus new and reconstructed boilers. Regulatory text regarding initial compliance and continuous compliance with the tune-up requirements has been clarified.

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 6

Comment: The EPA should clarify fuel requirements for tune-ups.

In §63.11223(b)(5), the EPA states "...You must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up."

Dow suggests the following revisions to the proposed regulatory text and provides supporting rationale for these revisions below. New text is shown in bold underline text. Change/revised text is shown in strike-through font.

You must conduct the tune-up while burning the type of fuel **(or fuels in the case of units that routinely burn two types of fuels at the same time)** that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

There are sources that burn a liquid fuel and natural gas support fuel at a nearly 1:1 ratio making it difficult to determine which fuel provides the majority of the heat input. Additionally, burning just one of the fuels, even if that fuel is barely in the majority, does not represent the conditions the unit normally operates under defeating the purpose of the tune-up. Therefore, the rule text should be revised to allow the tune-up to proceed during times when the boiler is combusting two types of fuels at the same time such as a mixture of natural gas and liquid fuel.

Response: We agree with the commenter and 40 CFR 63.11223(a) of the final rule includes the suggested revision.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 26

Comment: A startup and shutdown period exception must be added to the definitions of “30-day average” and “daily block average” added to §63.11237 because sources are exempt from meeting emission standards and operating parameter limits during startup and shutdown.

Response: The EPA agrees with the commenter and in the final rule includes revised definitions of "30-day rolling average" and "daily block average" that clarify that periods of startup and shutdown are excluded from the calculations. The newly added definition of “10-day rolling average” also clarifies that periods of startup and shutdown are excluded from the calculations.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 3

Comment: The EPA is proposing to amend 40 CFR 63.11223(b)(6)(iii) to specify that the type and amount of fuel need only be included on the biennial report if the unit was physically and legally capable of using more than one type of fuel during that period. This clarification serves to resolve some of the confusion posed by the 2011 final rule. Therefore, the EHSCP supports this proposed clarification.

Response: The EPA thanks the commenter for their support.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 7

Comment: The EPA has proposed defining seasonal boilers as a new subcategory of boiler. The EHSCP supports this proposal, but does request clarification on one issue. In TABLE 1-MISCELLANEOUS TECHNICAL CORRECTIONS TO 40 CFR PART 63, SUBPART JJJJJ¹ the description for the proposed change to 40 CFR 63.11223(c) mentions a triennial tune-up for seasonal boilers. Elsewhere in the preamble and in the proposed amendments to the regulatory text, the timeframe mentioned is every 5 years after the initial tune-up. We presume that the preamble reference to triennial was made in error. Please ensure all references to the requirement for tune-ups for seasonal boilers specify the 5-year timeframe.

¹ 76 FR 80539

Response: The commenter is correct in that the reference to triennial tune-ups for seasonal boilers in Table 1 of the preamble to the proposed amendments is an error. The EPA appreciates

the commenter pointing out this error and the final rule correctly references the 5-year tune-up requirement for seasonal boilers.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 8

Comment: The EPA has proposed defining seasonal boilers as a new subcategory of boiler. The EHSCP supports this proposal, but does request clarification on one issue. In TABLE1-MISCELLANEOUS TECHNICAL CORRECTIONS TO 40 CFR PART 63, SUBPARTJJJJJ the description for the proposed change to 40 CFR 63.11223(c) mentions a triennial tune-up for seasonal boilers. Elsewhere in the preamble and in the proposed amendments to the regulatory text, the time frame mentioned is every 5 years after the initial tune-up. We presume that the preamble reference to triennial was made in error. Please ensure all references to the requirement for tune-ups for seasonal boilers specify the 5-year timeframe.

Response: See the response to EPA-HQ-OAR-2006-0790-2432-A1, excerpt 7.

Commenter Name: Michael G. Dowd

Commenter Affiliation: Virginia Department of Environmental Quality (VADEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2434-A1

Comment Excerpt Number: 4

Comment: VADEQ requests that the EPA clarify the tune-up requirements for units that fall into the oil-fired category but burn natural gas as their primary fuel. 40 CFR 63.11223(b)(5) specifies that boiler tune-ups must be conducted while burning the type of fuel that provided the majority of the heat input to the boiler over the previous 12 months. Would a boiler classified as an oil-fired boiler that primarily burns natural gas during the previous 12 month period conduct the tune-up while firing natural gas?

Response: The commenter is correct that a boiler classified as an oil-fired boiler but that primarily burns natural gas during the previous 12-month period would be required to conduct their tune-up while firing natural gas.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 12

Comment: Furthermore, it is noted that Table 2, Subcategory 4, item (3) is worded differently than in the DDDD- "Inventory of major systems consuming energy from affected boiler(s)," so that the inventory is limited to boiler energy output. But item (2) of that section requires an evaluation of specifications of energy using systems. (76 FR 15602.) Therefore, there are

inconsistencies within various provisions of JJJJJ. Because the Energy use system definition was changed in the final rule relative to the proposed rule, the EPA should reconsider these issues.

Response: The energy assessment requirements in Table 2 to subpart JJJJJ of the final rule are consistent with the definition of "energy use system." The definition of "energy use system" is as follows:

Energy use system includes the following systems located on the site of the affected boiler that use energy provided by the boiler: (i) process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning systems; hot water systems; building envelop; and lighting; or (ii) other systems that use steam, hot water, process heat, or electricity, provided by the affected boiler.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 6

Comment: If §63.11210(g) is intended to include synthetic area sources, we recommend the EPA revise the language of §63.11210(g) to clarify (1) that permit limits are included, and (2) the 180 days to demonstrate compliance includes units that switch from the major source rule to the area source rule. For example, the text could read (**bold** denotes additions and strikethroughs deletions):

(g) For affected boilers that switch fuels, or-make a physical modification to the boiler, **or take a permit limit** that results in the applicability of a different subcategory **or boiler NESHAP(e.g., a boiler that was previously subject to the major source rule at Subpart DDDDD)**, you must demonstrate compliance within 180 days of the effective date of the fuel switch, **OF** physical modification, **or permit limit** consistent with §63.11225(g).

However, if §63.11210(g) is not intended to include area sources created through permit conditions, we recommend that §63.11210(g) clarify that the shorter timeline in §63.9(b)(2) governs these sources. For example,

(g) For affected boilers that switch fuels or make a physical modification to the boiler that results in the applicability of a different subcategory, you must demonstrate compliance within 180 days of the effective date of the fuel switch or physical modification consistent with §63.11225(g). **However, if you become newly-subject to Subpart JJJJJ as the result of a permit condition (e.g., as a synthetic area source), you must comply with the requirements of §63.9(b)(2).**

Response: We are adding a new paragraph (i) to 40 CFR 63.11210 to clarify the initial compliance requirements for boilers located at existing major sources of HAP that become area sources on a timely basis. Any such existing boiler at the existing source must demonstrate compliance with Subpart JJJJJ within 180 days of the later of March 21, 2014 or upon the

existing major source commencing operation as an area source. Any new or reconstructed boiler at the existing source must demonstrate compliance with Subpart JJJJJ within 180 days of the later of March 21, 2011 or startup. Notification of such changes must be submitted according to 40 CFR 63.11225(g).

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 5

Comment: We expect that many sources will seek to qualify as area sources if they are able, including through permit limitations. For example, an oil-fired unit that is currently a major source may reduce permitted potential to emit (PTE) through a permit limit on quantity of oil combusted. Particularly during the upcoming time period when existing area source units are subject to requirements, while major source units are not, clarification on the timing of notification and compliance demonstration requirements is necessary. In the Area Source Boiler Rule, §63.11225(a)(2) states that "As specified in §63.9(b)(2), you must submit the Initial Notification no later than 120 calendar days after May 20, 2011 or within 120 days after the source becomes subject to the standard." However, the EPA proposes to amend §63.11210(g) to clarify the compliance demonstration requirements for units that switch subcategories as the result of a physical modification or fuel switch. We request clarification as to which requirement governs newly-limited synthetic area sources, and specifically when notification requirements are due.

Response: See the response to EPA-HQ-OAR-2006-0790-2448-A1, excerpt 6.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 14

Comment: Proposed §63.11214(c) must also be revised to clarify that the facility is only certifying to the accuracy of the information used in the assessment as a snapshot. Since the assessment is a one-time requirement, the certification should indicate that it is only an accurate depiction of the facility at the time of the assessment, thereby removing any suggestion that a new assessment is needed if the facility changes.

Response: The intent of the requirement to perform an energy assessment is to identify energy conservation measures that can be implemented to reduce the facility energy demand which would result in reduced fuel use and a corresponding reduction in emissions. A certification that an energy assessment was conducted must be submitted with the NOCS. We do not believe it is necessary to clarify in the final rule that facilities are only certifying to the accuracy of the assessment as of the time it is conducted. We disagree with the commenter's assertion that a new assessment would not be necessary if the facility changes. In the event that a facility undergoes

major changes that would require a new NOCS to be submitted, the facility would need to re-certify that an energy assessment was conducted and is an accurate depiction of the facility.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 18

Comment: §63.11196(d) of this proposal states:

(d) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.11195(b) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the switch from waste to fuel.

"Effective date" is unclear in this context and should be clarified by specifically referencing the provisions of the CISWI rules that identify this effective date as being the date identified by the source for the transition from the CISWI rule to the area source rule and not the date the source ceases to burn solid waste or the effective date of the part 63 subpart JJJJJ rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2 excerpt 20.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 19

Comment: Proposed §63.11196(d) deals with compliance timing for boilers and process heaters that have been subject to the CISWI rule, but stop firing solid waste and thus become subject to this major source rule instead. The language of this paragraph needs to be clear that this transition only occurs if the unit is stopping solid waste burning permanently. As currently worded, a temporary stoppage (which happens frequently at CISWI) units would appear to make this rule applicable rather than CISWI.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2 excerpt 20.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 20

Comment: Citing process heaters in proposed §63.11196(d) is incorrect since the Area Source NESHAP only applies to boilers.

To address these issues (1 through 3) we suggest the following revision to §63.11196(d).

(d) If you own or operate an industrial, commercial, or institutional boiler and would be subject to this subpart except for the exemption in § 63.11195(b) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you intend to permanently cease combusting solid waste, you must be in compliance with this subpart on the effective date of the switch ~~from waste to fuel~~ part 60 subparts CCCC or DDDD to this subpart as identified under the provisions of §§60.2145(a)(2) and (3), or §§60.2710(a)(2) and (3).

Response: We agree with the commenter and 40 CFR 63.11196(d) of the final rule references the appropriate sections of the CISWI NSPS and Emission Guidelines (part 60 subparts CCCC and DDDD).

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 31

Comment: Regardless of the fuel capability identified in an initial notification, the distinction between a new source and an existing source should only be made based upon a source's capability to burn a particular fuel as of the effective date of the rule. Many facilities have boilers that can burn either gas or liquid. Because the price of gas is currently lower than the price of most liquid fuels, they likely are currently firing gas during normal operation, with liquid being fired only during periods of curtailment. Therefore, many of these facilities did not submit an initial notification for the area source rule, since gaseous fuel fired boilers that only burn liquid during periods of curtailment are not covered by the area source rule. In the future, the price of liquid fuel may be lower than the price of gaseous fuel, and facilities may want to preferentially burn liquid fuel over gas fuel. A change in the fuel from the initial notification should not in and of itself, reclassify a source as a new source for purposes of 40 CFR 63 Subpart JJJJJ. This interpretation is comparable to the fuel switching provisions in the NSPS and PSD regulations.

Response: See the responses to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8, and EPA-HQ-OAR-2006-0790-2459-A2, excerpt 9.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 32

Comment: Many boilers which have capability to burn fuel oil, for instance, as back-up for natural gas, may not have filed the initial notice of applicability. The EPA has provided guidance

stating that if a source fails to file an initial notification and then plans to burn oil in the future; it would be considered to be a new source.

This guidance appears to be contrary to the regulatory text which states at §63.11194 (c): An affected source is a new source if you commenced construction or reconstruction of the affected source after June 4, 2010 and you meet the applicability criteria at the time you commence construction.

If a source already has oil or alternate fuel capability, then that source would not be commencing construction or making a modification to the source. The text of the rule also states at §63.11194 (d):

A boiler is a new affected source if you commenced fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel after June 4, 2010. CIBO suggests that the following sentence be added to the text of §63.11194(d) after the above sentence to clarify that to become a new source you must modify that source to be capable of accommodating the new fuel, so that new sources are not created simply by failing to submit an initial notification or a notice of fuel switching, for a unit that is already capable of accommodating that fuel:

Notwithstanding these definitions, a source that submits notification to fuel switch, but which was capable of accommodating the new fuel on or before June 4, 2010 shall not become a new affected unit.

Response: See the responses to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8, and EPA-HQ-OAR-2006-0790-2459-A2, excerpt 9.

Commenter Name: Russell A. Wozniak
Commenter Affiliation: Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1
Comment Excerpt Number: 9

Comment: The EPA should remove the requirement for a 30-day prior notice in §63.11225(g).

In §63.11225(g), the EPA provides the following language:

If you intend to switch fuels or make a physical change to the boiler, and this fuel switch or change may result in the applicability of a different subcategory or a switch out of subpart JJJJJ due to a switch to 100 percent natural gas, you must provide 30 days prior notice of the date upon which you will switch fuels. The notification must identify:

- (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will switch fuels or be physically modified, and the date of the notice.
- (2) The date upon which you will commence the fuel switch or modification.

Dow suggests the following revisions to the proposed regulatory text below. New text is shown in underline text. Change/revised text is shown in strike-through font.

(g) If you ~~intend to have~~ switched fuels or made a physical change to the boiler, and this fuel switch or change ~~may result~~ resulted in the applicability of a different subcategory or a switch out of subpart JJJJJ due to a switch to 100 percent natural gas, you must ~~provide 30 days prior~~ notice of the date upon which you switched fuels within 30 days of the change. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that ~~will have~~ switched fuels or ~~be physically~~ were modified, and the date of the notice.

(2) The date upon which ~~you will commence~~ the fuel switch occurred.

The EPA's reconsideration proposal still requires a 30-day prior notice when an owner/operator plans to switch out of Subpart JJJJJ due to a switch to 100% natural gas. This advance notification requirement delays such a change if the owner/operator decides in a rapid fashion to cease combustion of other fuels. For example, if the owner/operator decides on March 1st to switch to 100% natural gas, the owner/operator must first provide 30 days advance notice of such change, thus delaying this type of change until early April. Instead of delaying the switch to combustion of 100% natural gas, which is the cleanest burning fossil fuel, we suggest that the owner/operator be allowed to make notification of this type of change within 30 days after the change has occurred. This type of notice will still alert the EPA or state/local agencies that the source is no longer subject to 40 CFR 63 Subpart JJJJJ in a timely manner.

Response: The EPA agrees with the commenter's suggested revision regarding the notification requirement for an owner/operator switching fuels or making a physical change to a boiler where the fuel switch or physical change results in the applicability of a different subcategory within Subpart JJJJJ or a switch out of subpart JJJJJ. The revision to the notification requirement also includes owners/operators switching fuels or making a physical change where the fuel switch or physical change results in the applicability of Subpart JJJJJ and owners/operators that take a permit limit that results in the applicability of a different subcategory within Subpart JJJJJ, a switch out of Subpart JJJJJ, or the applicability of Subpart JJJJJ. The final rule requires that the owner/operator make notification of these types of changes within 30 days after the change occurs.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 49

Comment: EPA SHOULD NOT REQUIRE 30 DAYS ADVANCE NOTICE FOR FUEL SWITCHING TO NATURAL GAS

The EPA has reworded §63.11225(f) from the final rule (re-numbering resulted in this requirement being §63.11225(g) in the reconsideration proposal), which contains the requirement for 30 days prior notice before a unit can become a gaseous fuel-fired unit and switch out of Subpart JJJJJ applicability. This advance notification requirement delays such a change if the owner/operator decides in a rapid fashion to cease combustion of other fuels. For example, if the owner/operator decides on March 1st to switch to 100% natural gas, the owner/operator must first provide 30 days advance notice of such change, thus delaying this type of change until early April. Instead of delaying the switch to combustion of 100% natural gas, which is the cleanest burning fossil fuel, we suggest that the owner/operator be allowed to make notification of this type of change within 30 days after the change has occurred. This type of notice will still alert the EPA or state/local agencies in a timely manner that the source is no longer subject to 40 CFR 63 Subpart JJJJJ.

We recommend the following revisions to the proposed regulatory text below

(g) If you ~~intend to~~ have switched fuels or made a physical change to the boiler, and this fuel switch or change ~~may result~~ resulted in the applicability of a different subcategory or a switch out of subpart JJJJJ due to a switch to 100 percent natural gas, you must provide ~~30 days prior~~ notice of the date upon which you switched fuels within 30 days of the change. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels or were modified, and the date of the notice.

(4) The date upon which the fuel switch occurred.

There is no need for prior notice of this type of change since the boiler would no longer be subject to the Subpart JJJJJ regulation and the owner/operator could have to delay such a change pending this notification requirement. This 30-day advance notice is a potential curtailment of flexibility in our manufacturing operations.

Response: See the response to EPA-HQ-OAR-2006-0790-2423-A1, excerpt 9.

Rule Language Corrections: Out of Scope

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 3

Comment: There is no need for the EPA to look to the Energy Policy and Conservation Act (EPCA) to define “cost-effective” under the CAA, and there are important differences between the statutes. The definition of “achievable” under §112(d) (and thus the subsidiary definition of “cost-effective” if the Agency is to require implementation of “cost-effective energy

conservation measures” should be based on the statutory text and purposes of the CAA and not on any part of the EPCA.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nonetheless, neither “cost-effective” nor “cost-effective energy conservation measure” are referenced or defined in the final rule.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 4

Comment: The Agency maintains that its definition of cost-effective—“a payback period of two years”—is based on section 325(o)(2)(B)(iii) of the EPCA of 1975. The originally proposed rules’ preamble explains that under this section “there is a presumption that an energy conservation standard is economically justified if the increased installed cost for a measure is less than three times the value of the first-year energy savings resulting from the measure.” First, it is not clear how the Agency justifies reading the phrase “three times the value of the first year energy savings” under the EPCA to indicate a 2-year payback period. These calculations are distinct in obvious ways.

Response: See the response to EPA-HQ-OAR-2006-0790-2419-A1, excerpt 3.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 5

Comment: This interpretation of EPCA omits crucial parts of the EPCA’s statutory scheme. The full text of the cited clause from the EPCA is as follows: If the Secretary [of Energy] finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy, and as applicable, water, savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure, there shall be a rebuttable presumption that such standard level is economically justified. A determination by the Secretary that such criterion is not met shall not be taken into consideration in the Secretary’s determination of whether a standard is economically justified.

The final sentence of this clause indicates that a finding that a standard does not meet the criterion cannot even be taken into consideration for whether the standard is “economically justified.” Thus, the definition chosen by the EPA for “cost-effective” is inappropriate even within the context of the clause they cite to support it.

Response: See the response to EPA-HQ-OAR-2006-0790-2419-A1, excerpt 3.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 6

Comment: The cited clause only makes sense in the context of EPCA’s §325(o)(2)(A):

Any new or amended energy conservation standard prescribed by the Secretary under this section for any type (or class) of covered product shall be designed to achieve the maximum improvement in energy efficiency . . . which the Secretary determines is technologically feasible and economically justified.

In this context, it is clear that the section cited by the EPA as justification for the definition of “cost-effective” explicitly sets a *floor* for the Secretary of Energy’s determination of “technologically feasible and economically justified,” and is not a reasonable definition of “economically justified” or “cost-effective” by itself. More generally, Congress intended “economically justified” to mean cost benefit justified, because the statute requires the Secretary of Energy to “determine whether the benefits of the standard exceed its burdens.”

Response: See the response to EPA-HQ-OAR-2006-0790-2419-A1, excerpt 3.

Commenter Name: Jason A Schwartz

Commenter Affiliation: Institute for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2419-A1

Comment Excerpt Number: 7

Comment: The proposed definition of “cost-effective energy conservation measure” is “measure that is implemented to improve the energy efficiency of the boiler or facility that has a payback (return of investment) period of two years or less.” By implicitly limiting the criteria to the private costs and benefits for regulated parties, this definition clearly falls short of the authority the EPA has under the best interpretation of the statute. Because the EPA has authority to consider a fuller range of social costs and benefits in determining which beyond-the-floor regulations are “achievable” under §112(d), the definition of “cost-effective” could include social costs and benefits. However, as a practical matter, the EPA will likely continue to exercise its statutory authority to stay focused on private costs and benefits in defining “cost-effective” for these purposes. All benefits and costs from a project should be considered, and a firm should undertake all investments where the net present value of all costs and benefits is higher than zero.

There are two important practical elements in determining the net present value of private investments: the timeframe of the analysis, and the discount rate for future costs and benefits.

Response: See the response to EPA-HQ-OAR-2006-0790-2419-A1, excerpt 3.

Testing/Monitoring: Rationale for 30-day rolling average for parameter monitoring

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 24

Comment: While the EPA may have used the 99th percentile UPL in one recent NSPS, in other NSPS rulemakings, such as the Hg limits under the Utility NSPS 40 CFR Part 60, Subpart Da,²¹ it has employed a 90th percentile statistical test (t-test) coupled with the same test for the fuel-sampling compliance demonstration.

The EPA has proposed that owners and operators use parametric monitoring (i.e., pH, pressure drop, scrubbing flow rate, etc.) based on stack testing to demonstrate continuous compliance with applicable emission limits. The averaging period used for the parametric monitoring in the original Boiler MACT finalized in March 2011 was a 12-hour average. In the currently proposed amendments, the EPA is requiring proposing that owners and operators instead use a 30-day rolling average. This creates an averaging period for parametric monitoring that is grossly inconsistent with the emission standard set through initial performance test (stack testing). The averaging period for a stack test for an emission standard, such as particulate, is typically determined from the average of three stack test runs, which would be only 1- to 2-hour long runs. Where the emission standard is based on the average of three, 1-hour stack tests, parametric monitoring with a 30-day rolling average (or even a 12-hour average) will not ensure compliance as the affected unit could be operated outside of the range (and presumably above its 3-hour emission limit) for half the month. We do not object to the use of long-term averages per se, as such averages can be a solution to the variability issue. However, there is then no technical justification for the very large variability factors adopted by the EPA (based on 1-hour test runs) in a system that permits 30-day averages to be used for compliance.

²¹ See, Memorandum from Robert Wayland, OAQPS, to William Maxwell, OAQPS, "Revised new source performance standard (NSPS) statistical analysis for mercury emissions" (sic), May 31, 2006.

Response: The EPA chose to address variability using a 99% confidence interval in order to maintain a consistent methodology with the development of the MACT floors for other pollutants, and because optional CO CEMS-based limits allow sources additional flexibility in meeting the rule requirements.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 14

Comment: We support the EPA's determination that a 30-day rolling average for parameter monitoring and compliance with operating limits is appropriate for this rule. A longer averaging time for operating parameters is appropriate, because the standards apply over-all operating conditions, and operating conditions of industrial boilers can be highly variable, especially when fuel mix and load change. The operating parameter ranges will be established using test data obtained at one steady-state operating condition, so a 30-day averaging period allows for some fluctuations that will occur over the range of operating conditions. The EPA is correct in pointing out that variability outside the operator's control such as fuel content, seasonal factors, load cycling, and infrequent hours of needed operation give cause to use a longer averaging period. (76 FR 80536.)

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 13

Comment: OCC supports the use of 30-day averaging times in place of the 12-hour block averaging times. Having consistent and longer averaging times for emission limits and parametric monitoring specified in the rule helps to mitigate short term operational variability.

Response: The EPA thanks the commenter for their support.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 4

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

Revised averaging time from 12-hour average times to 30 days in order to address variability;

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 26

Comment: CIBO supports the proposed use of 30-day rolling averages for parameter monitoring and compliance with operating limits. As explained in the preamble, variables outside the operator's control such as fuel content, seasonal factors, fuel, load cycling, and fewer operating hours support the use of longer averaging periods to determine operating compliance. Longer

averaging periods will have a “variability of about half of that represented by the results of short term testing.” Moreover, with longer averaging periods, problematic control system variability will result in deviations from a 30-day average on a comparable rate as those for a shorter term average. (76 FR 80536.) CIBO further notes that utilizing 30-day rolling averages for all the data used to comply with the standards in this rule greatly reduces considerable administrative burden and risk of error. Further efficiencies will be realized and potential errors will be reduced by this 30-day rolling average standardization.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 12

Comment: ACC supports the EPA’s determination that a 30-day rolling average for parameter monitoring and compliance with operating limits is appropriate for this rule. The EPA is correct in pointing out that variability outside the operator’s control such as fuel content, seasonal factors, load cycling and infrequent hours of needed operation provides a basis for using a longer averaging period. (76 FR 80536.) Operating conditions for industrial boilers are especially variable when changes to fuel mixes and loads occur. Since the operating parameter ranges will be established using test data obtained at one steady state operating condition, a 30-day averaging period would account for fluctuations that may occur over the range of operating conditions.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 7

Comment: PA DEP agrees that a 30-day rolling average for parameter monitoring is an appropriate averaging period, which ensures that emission limits will be "practically enforceable."

Response: The EPA thanks the commenter for their support.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 2

Comment: The EPA has determined that the 30-day rolling average for parameter monitoring and demonstration of continuous compliance with operating limits is appropriate for this rule.

From review of studies the EPA expects that variability of long term emissions averaging will be about half that represented by the short term testing proposed in the final rule (12-hour block). We agree that using the 30-day rolling average will reduce overall variability.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 13

Comment: [We support EPA's proposed revisions to compliance monitoring, including] A 30-day rolling average for parameter monitoring and demonstrating compliance with operating limits.

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 15

Comment: We also request that the EPA add a 30-day averaging period to the operating load requirement in Table 3 of the rule. Table 3 requires operators to maintain the operating load of each unit such that it does not exceed 110% of the average operating load recorded during the most recent performance test. For the same reasons provided above for the other operating parameters, the EPA should allow a 30-day averaging period for operating load so short term high load periods that are more than 10% above the tested load do not result in deviations. Facilities make every attempt to schedule stack tests during periods of high utilization, but sometimes need to operate at more than 100% of the load achieved during the stack test for short periods of time in order to meet operational demands. The way the requirement is currently written implies that the 110% load limitation is instantaneous. We note that in Table 7, the load monitoring requirement does have a 30-day averaging period specified.

Response: We disagree with the commenter. We understand that actual maximum normal operating load for a particular facility may be dependent on local conditions, but we expect it will generally be between 90 and 100% of design capacity and that performance testing can be scheduled during such periods of operation. We do not believe there is a need to amend the rule. Source operators are not required to conduct source testing at maximum loads, but they must conduct testing at representative operating loads. If a source operator conducts a performance test at load levels more than 10% below the level where they need to operate, the source operator must re-test at a higher load level. Should seasonal load variability require operation at a substantially higher load than where the unit was originally tested, the source operator must re-test at the higher lower. The rationale for requiring re-testing is that the performance test sets the operating parameter limits for the unit and control device. If the unit is operated at a substantially

higher load than where it was tested, there is not reasonable assurance that the unit will meet the emission limitations of the rule with the same operating parameters.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 13

Comment: ACC recommends a 30-day averaging period for Table 3 operating load requirements.

ACC recommends that the EPA also add a 30-day averaging period for the operating load requirement in Table 3 to be consistent with the load monitoring requirement in Table 7 of the rule. Table 3 requires operators to maintain the operating load of each unit such that it does not exceed 110% of the average operating load recorded during the most recent performance test. For the same reasons provided above for the other operating parameters, the EPA should allow a 30-day averaging period for operating load so that short term high load periods that are more than 10% above the tested load, either individually or in combination, do not result in deviations. Facilities make every attempt to schedule stack tests during periods of high utilization, but sometimes need to operate at more than 100% of the load achieved during the stack test for short periods of time in order to meet operational demands. The provisions in the current requirement imply that the 110% load limitation is for an instantaneous event; however, lesser events in total could exceed the load limitation due to normal variability over time.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 15.

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 2

Comment: Calculation of 30-Day Rolling Averages: The definition of "30-Day Rolling Average", and the description of the 30-Day Rolling Average calculation process in §63.11224, should be revised, so that the 30-Day Rolling Average is calculated as the average of all valid data hours over the last 30 operating days, NOT the average of Daily Average values over the last 30 operating days. This is a very critical distinction, as using the latter approach (averaging daily average values) substantially overweights startup and shutdown hours, which occur on partial operating days, and does not produce a representative 30-day average. All hours in the averaging period should count equally in determining the overall 30-operating day rolling average.

For example, if a source should startup at say 10 PM on 15 of its last 30-operating days. For those 15 days, the daily average will consist of 2 startup hours, when operating parameter values are typically not in compliance with applicable limits. If the boiler operates continuously on the other 15 days, and these hourly values are within compliance with a 10 or 20% margin, they may

still not compensate (offset) the atypical values that occurred during the brief operating period on the other 15 days, if the 30-day average is determined as the average of daily averages. In other words, if instead of determining compliance as the average 390 data points (15 days x 24 hours + 15 days x 2), compliance is determined as the average of 30 daily averages (15 for continuous operating days and 15 for startup days), the result is substantially skewed, is not representative of actual emissions released to the environment, and could result in an inappropriate compliance deviation.

All valid data hours in the 30-operating day look back should be weighted equally in determining compliance.

Response: We are amending the final rule to clarify that the average is based on all valid hourly averages during each 30-day rolling average period. Hourly averages are not summed to a daily average as an intermediate data value for purposes of determining each 30 boiler operating day average.

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 3

Comment: CO/O₂ Monitoring System Averaging Period - 63.11224(a)(5) and Table 7: The rule establishes a 30-operating day data averaging period for all operating parameters, except CO/O₂, for which the data averaging period has been set at 10 operating days. As discussed in the preamble, CO can be very variable during non-steady state operating conditions, and since averaging includes all operating periods, including startup and shutdown, it would seem appropriate that CO/O₂ be assigned the same averaging period as other operating parameters, i.e. 30-rolling days.

Response: The EPA has established a 30-day rolling average compliance period where available data supports our decision. Where we did not have substantial data to support a 30-day rolling average period, we established shorter compliance periods. We are retaining the 10-day rolling average requirement for CO in the final rule.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 52

Comment: CIBO opposes the EPA's decision not to include emissions averaging as a potential compliance method in the proposed reconsideration Area Source Boiler Rule. (76 FR 80532.) A 30-day averaging period will have significant benefits. The EPA has previously noted that the Small Business Administration Panel "recommended that EPA carefully weigh the potential burden of compliance requirements and consider for small entities options such as, emission averaging within facility. . ." (75 FR 31919.) The EPA has further acknowledged in the context

of the Major Source Boiler Rule, that "emissions averaging represents an equivalent, more flexible and less costly alternative to controlling certain emission points to MACT levels" and its application "would not lessen the stringency of the MACT floor limits and would provide flexibility in compliance, cost and energy savings to owners and operators." (75 FR 32034.) The same rationale applies equally to area sources.

Response: The logic for including certain provisions in the Major Source Boiler Rule does not apply to the Area Source Boiler Rule. For example, multiple large solid fuel boilers are more typical of major source facilities than of area source facilities. In general, major source boilers are located at different types of facilities than those where area source boilers are located (e.g., large industrial facilities versus small commercial and institutional facilities). The commenter cites emissions averaging as an appropriate small entity compliance option and asserts that the same rationale for allowing emissions averaging at major source facilities applies equally to area source facilities. The commenter, however, does not cite any small entity area source facilities or any area source facilities, for that matter, where the owner or operator of those facilities asserts that emissions averaging provisions would provide a less burdensome compliance method.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 53

Comment: If the EPA were to include emissions averaging as a compliance method, CIBO urges it not to apply a 10% reduction on emissions limits. In the final rule, the EPA includes a restriction on emissions averaging that requires facilities using that option to meet a standard that is 10% stricter than the otherwise applicable limits. (76 FR 15670.) The EPA should not include this 10% penalty for using emissions averaging because it is arbitrary, unnecessary for environmental protection and reduces the flexibility that averaging provides.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 52.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 19

Comment: The EPA included emissions averaging as a compliance option in the final Major Source Boiler Rule, and this should be a compliance option for area sources as well. The EPA has previously noted that the Small Business Administration Panel "recommended that EPA carefully weigh the potential burden of compliance requirements and consider for small entities options such as, emission averaging within facility. . . ." (75 FR 31919.) Although the EPA asserts that it "proposed provisions consistent with each of the Panel's recommendations regarding area source facilities," the EPA did not include in the final Area Source Boiler Rule an emission averaging compliance alternative for area sources. The EPA has further acknowledged that "emissions averaging represents an equivalent, more flexible and less costly alternative to

controlling certain emission points to MACT levels" and its application "would not lessen the stringency of the MACT floor limits and would provide flexibility in compliance, cost and energy savings to owners and operators." (75 FR 32034.) During the reconsideration process, the EPA should adopt this flexible compliance alternative for area sources.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 52.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 8

Comment: CIBO notes that there are other issues related to the O₂ provisions of the final Area Source Boiler Rule. Specifically, O₂ compliance basis for O₂ CEMS is given as 30-day rolling average. This appears to be an error since it is a 12-hour block average that is required in the rule. See Table 7, 76 FR 15596. However, the word "block" is missing in Table 7 item 7 for O₂ and item 6c for ESP secondary amperage and voltage. Id. These two should be clarified to be block averages if that is the EPA's intent.

Response: We are amending 40 CFR 63.11224(d) in the final rule to agree with Table 7. It was our intention to change the block averages to 30-day rolling averages.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 14

Comment: The EPA should provide for variable operating parameter limits because of variable operating conditions.

ACC also recommends that the EPA allow for operating parameter limits to vary with unit load fraction as applicable to the operating parameter and specific affected source, and recognize that those operating parameters do not necessarily vary in a linear relationship with load, e.g., pressure drop typically varies with the (flow).² In Table 6, the EPA only allows for operating parameter limit variation due to boiler load fraction to be applied to activated carbon injection rates. However, variations with load and other operating conditions also occur for the other operating parameters- wet scrubber pressure drop and liquid flow rate, ESP secondary power. Flue gas flow rate and characteristics vary over load and with other operating variables such as fuel quality, to the extent that the single hourly average value determined during the high load steady state performance test will not apply to other conditions if overall performance is optimized.

Response: We allow for operating parameter limit variation due to boiler load fraction for activated carbon injection rates because there is a straightforward, linear relationship between boiler load, carbon injection rate, and emission rate. The same cannot be said for other operating parameters. However, we are aware that relationships between boiler load, operating parameters,

and emission rates may exist outside of carbon injection rates (either linear or non-linear). If a source is able to prove such a relationship exists, the source may submit a request for alternative monitoring to implement such a scheme. Additionally, the permitting authority may allow the unit to operate under different operating scenarios (e.g., low load, mid load, high load) consisting of different operating parameters (with each operating scenario tested), if such a scheme falls within the scope of the regulation.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 27

Comment: In Table 6, the EPA only allows for operating parameter limit variation due to boiler load fraction to be applied to activated carbon injection rates. However, variations with load and other operating conditions also occur for the other operating parameters- wet scrubber pressure drop and liquid flow rate, ESP secondary power. Flue gas flow rate and characteristics vary over load and with other operating variables such as fuel quality, to the extent that the single hourly average value determined during the high load steady state performance test will not apply to other conditions if overall performance is optimized. The EPA should provide an allowance for any operating parameters to vary with unit load fraction as applicable to the operating parameter and specific affected source, and recognize that those operating parameters do not necessarily vary in a linear relationship with load, e.g., pressure drop typically varies with the (flow).

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 14.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 16

Comment: The EPA proposes to allow sources to demonstrate compliance with emissions limits by averaging emissions data over a longer time period. Specifically, the EPA proposes to permit compliance determinations to be made on the basis of a 30-day rolling average. Although rolling averages are better than block averages, which allow polluters to comply based on the entirely fortuitous circumstance of a new block period beginning between elevated test runs, the EPA has failed to adjust the applicable emissions limits to account for a 30-day averaging period. As a result, the EPA's proposed standards will not require units to control emissions to the level of the best performers. This is true in at least two respects. First, the EPA calculated the emissions limits based on the highest 1-hour emissions tests of the best sources (adjusting upwards for assumed variability). Thus, the numerical limits reflect peak emissions, not average emissions. By definition, an average emission level is lower than an emissions peak. *See* 76 FR at 80536/2. Yet the EPA now proposes to allow all sources to emit *on average* at the same level that the best sources emit *at peak times*. Second, the EPA selected the best performers on the basis of 1-hour test runs, not 30-day averages. Units not selected as the best performers may actually have yielded lower 30-day average emissions limits than those selected. To comply with the

requirement to set the MACT floor based on the best performers, the EPA must use the same methodology both in selecting the best performers and then in calculating the limits. For both of these reasons, the EPA's failure to adjust its emissions limits in accordance with the switch to 30-day average compliance determinations is contrary to CAA §112(d)(3) and arbitrary.

Response: The commenter is incorrect in stating that the EPA proposed to allow sources to demonstrate compliance with emissions limits by averaging emissions data on the basis of a 30-day rolling average. Neither the proposed reconsideration action, nor this final rule, allows sources to demonstrate compliance with emission limits on a 30-day rolling average basis. As explained in the December 23, 2011 proposal (76 FR 80536), compliance with the emissions limit is determined based on a performance stack test. Continuous compliance is demonstrated by maintaining operating parameters within limits established during the performance stack test. Compliance with the operating parameter limits is determined based on 30-day rolling averages. Compliance with emissions limits is established using the average of the three 1-hour emissions tests. For the CO limit, if a CEMS is installed, compliance is demonstrated using a 10-day rolling average. The EPA contends compliance with the CO limits measured continuously, even if measured over a 10-day rolling average, is equally stringent a continuous compliance demonstration as continuous parameter measurements over a 30-day rolling average. Any instance in which an affected source fails to meet an operating limit is considered a deviation, and all deviations must be reported.

The commenter is incorrect in stating that the EPA calculated the emissions limits based on the highest 1-hour emissions tests of the best sources (adjusting upwards for assumed variability). Emissions limits were calculated on the basis of the average of three 1-hour test runs of the best sources adjusted for variability, not on the highest 1-hour emissions tests as asserted by the commenter. The numerical limits reflect the average emissions of the best sources adjusted for variability, not the peak emissions.

Commenter Name: Monica Lopes

Commenter Affiliation: NAES Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2469-A1

Comment Excerpt Number: 1

Comment: Under 40 CFR 63.11223(b) the EPA is proposing to allow facilities to conduct boiler tune-ups while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Please clarify if this would also be acceptable if the fuel that provided the majority of the heat input was natural gas but the boiler meets the definition of oil-fired boiler provided in the rule.

Response: The EPA agrees that if the boiler is a dual-fuel unit, and the fuel that provided the majority of the heat input over the 12 months prior to the tune-up was natural gas, the tune-up should be conducted while the boiler is operating on natural gas.

Testing/Monitoring: CO CEMS-Appropriate compliance alternative

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 6

Comment: The Department feels establishing a CO CEMS based emission limitation from limited data or data from sources different from the identified 12% best performing sources is problematic. We believe the EPA can allow sources to use the previously suggested CO/O₂ CMS trim system as a parametric monitoring alternative in place of meeting a continuous CO CEMS emission limitation. Under this approach the source periodically (biennial suggested) demonstrates compliance with the primary stack test based emission limit. A correlation is determined of stack test CO to the CO measured using the CO/O₂ CMS system over normal load ranges. The CMS CO concentration then becomes the value to be monitored on a continuous basis. The EPA proposed this same type of approach using a PM CMS in place of a PM CEMS for continuous compliance. The parametric CO correlation can also show a source is in compliance with the stack test emission limit at full load but can also show that a source operating under good combustion at lower loads may emit at higher CO levels.

Response: We agree with the commenter and we have selected two different paths for source operators to achieve compliance; either using a certified CO CEMS with a 10-day rolling average or by conducting annual emissions testing and using an O₂ CEMS or O₂ trim system as a parametric monitor.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 6

Comment: In addition to units required to use CO CEMS, there may also be units that would prefer to install CO CEMS, so that an alternative CO limit based on use of CEMS is needed. It would be much more appropriate and cost effective for regulated facilities and regulatory authorities if the EPA would provide alternative CO limits and their basis for facilities to utilize CO CEMS instead of O₂ CEMS, rather than requiring individual facilities to petition for alternative monitoring practices.

Response: See the response to EPA-HQ-OAR-2006-0790-2453-A1, excerpt 6.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 7

Comment: In order to allow for use of CO CEMS with O₂ correction, the EPA needs to establish CO emission limits on an appropriate basis using emission data on the same basis, i.e CEMS data. Since the final rule provides work practices for startup/shutdown periods, an appropriate basis for a CO limit using a CO CEMS would be a 30-day rolling average based on actual CO readings over the appropriate operating range.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 3.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 20

Comment: The EPA is proposing to amend the monitoring requirements in 40 CFR 63.11224(a) to allow sources subject to a CO emission limit the option to install, operate and maintain a CO and O₂ CEMS. (76 FR 80536, Dec. 23, 2011). This will allow facilities to choose between compliance using CO CEMS or compliance using an O₂ CEMS in combination with CO stack testing. We support the EPA's decision to allow more flexibility in the CO monitoring requirements and allow facilities that already have CO CEMS to use their existing systems.

Response: The EPA thanks the commenter for their support.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 4

Comment: OCC supports the proposed increased flexibility in the compliance monitoring requirements. In particular, where numerical limits must be measured, we support the EPA's option to allow either CEMS equipment or stack testing procedures to demonstrate compliance. For example, this includes the proposed CO limits that are based on either stack testing or continuous monitoring. This monitoring flexibility also includes the use of O₂ measuring systems in lieu of continuous CO monitoring systems. We support this as it will certainly lower the economic burden to the affected facilities. However, it will still be possible to use a CO CEMS instead of using an O₂ monitor and conducting stack sampling.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 25

Comment: The EPA is proposing to amend the monitoring requirements in §63.11224(a) to allow sources subject to a CO emission limit the option to install, operate and maintain a CO and

O₂ CEMS. (76 FR 80536, Dec. 23, 2011.) This will allow facilities to choose between compliance using CO CEMS and compliance using an O₂ CEMS in combination with CO stack testing. We support the EPA's decision to allow this flexibility in the CO monitoring requirements and allow facilities that already have CO CEMS to use their existing systems.

Response: The EPA thanks the commenter for their support.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 6

Comment: PA DEP supports the EPA's proposed amendment to allow an alternative to the installation of CO and O₂ CEMS. The EPA's proposed alternative compliance option provides flexibility in demonstrating compliance with a CO emission limit in a defensible manner.

Response: The EPA thanks the commenter for their support.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 7

Comment: We propose that a source with a CO/O₂ CMS trim system be allowed to determine an alternative CO emission limitation at full load, if appropriate.

Response: The EPA has provided two paths for compliance with the rule; either using a CO CEMS and a 10-day rolling average limit or using an annual stack test and O₂ correlation; the latter of which is normally conducted at full load. Alternative compliance conditions may be approved by an administrator on a case-by-case basis.

Testing/Monitoring: CO CEMS-Specifications/operations

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 6

Comment: Monitoring System Activities Resulting in Data Loss that do not Constitute Deviations: Preventive/Routine Maintenance: Section 63.11221 (d) provides an enumeration of the types of monitoring system activities (QA, QC, repairs associated with malfunctions) that do not constitute monitoring system "Deviations", even if they should cause data loss.

One additional activity that should be included in the list of allowed monitoring system activities that may result in data loss without triggering the need to report a deviation is "Preventive/Routine Maintenance" of a monitoring system, which is an activity critical for reliable system performance, but may incur a few hours of data interruption/loss. As an alternative, the rule might include a definition of Quality Control (QC) that explicitly specifies Preventive/Routine Maintenance as a QC activity.

It is also suggested that the word "required" be removed as a qualifier before the phrase quality assurance (QA) or QC. Calibration gas span checks may be performed as a diagnostic or verification tool, and re-calibrations may be performed to improve system performance without being "required." Having to distinguish whether a QA or QC activity is required before undertaking it is an unnecessary and unwarranted burden on plant maintenance personnel.

Response: The EPA disagrees with the commenter. Source operators will define required monitoring system QA/QC activities in their monitoring plans and identification of such activities should not place an undue burden on plant maintenance personnel. Monitoring plan activities, including such as those the commenter mentioned, are excepted by 40 CFR 63.11221(d).

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 7

Comment: Monitoring System Deviations: Section 63.11221(d) indicates the following CEMS data loss periods are not considered monitoring system "Deviations": "periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments".

The types of monitoring system data loss incidents that represent "Deviations" do not appear to be specified in a consistent manner between and §§63.11221(d) and 63.11224(a)(6).

However, §63.11224(a)(6) only explicitly excludes periods of CEMS data loss due to "required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments)" from being designated as monitoring system "Deviations"

Section 63.11224(a)(6) should be revised to be consistent with §63.11221(d), i.e. the types of monitoring system activities which may result in data loss periods (e.g. QA, QC, repairs associated with malfunctions), but do not constitute "Deviations" enumerated in §63.11221(d) should be fully repeated in §63.11224(a)(6) for clarity. Also as indicated in Comment 3 above, the performance of monitoring system "preventive/routine maintenance" should be added to the list of activities that do not constitute a monitoring system Deviation, should they cause data loss.

Response: The EPA agrees with the commenter and is modifying the final rule to point 40 CFR 63.11224(a)(6) to 40 CFR 63.11221(d).

Testing/Monitoring: Oxygen Monitors-Appropriateness and location

Commenter Name: Bob Machaver

Commenter Affiliation: Public Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2416

Comment Excerpt Number: 5

Comment: CO/O₂ Monitoring Location – 63.11224(a): Section 63.11224(a) indicates that CO and/or O₂ must be monitored at the "outlet of the boiler". Typically, the sampling probe for a CO CEMS is located on the stack, and it is not clear if the such a sampling location would be considered part of the "outlet of the boiler" for purposes of Subpart JJJJJ monitoring. It should be noted that since O₂ must be measured in conjunction with CO, the exact location of the sampling probe along the boiler flue gas exhaust system is not critical, since any leakage into the boiler upstream of the sampling point will be adjusted for thru an O₂ correction.

It is suggested that the language "outlet of the boiler" be replaced by "representative sampling location within the boiler, the boiler exhaust system or stack". It should also be noted that the preamble to this proposed rule revision indicates that the phrase "outlet to the boiler" would be removed from the rule.

Response: The EPA agrees with the commenter and is modifying the rule language to reflect that CO CEMS be located at the outlet of the boiler, after any add-on controls or flue gas recirculation system and before release to the atmosphere, and that O₂ monitors and O₂ trim systems be installed to monitor O₂ in the boiler flue gas, boiler firebox, or other appropriate intermediate location.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 2

Comment: The final Area Source Boiler Rule imposes a CO emission limit on coal-fired subcategories with compliance proven by a triennial Method 10 CO emission test, in combination with an O₂ operating limit proven with an O₂ CEMS. (76 FR 15594.) While CIBO agrees that CO CEMS should not be required for units under Subpart DDDDD or Subpart JJJJJ, the O₂ monitoring requirements as finalized are not appropriate or workable in some cases and additional flexibility is required.

Response: See the response to EPA-HQ-OAR-2006-0790-2416, excerpt 5.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 17

Comment: The optimum location of the sensor or sampling point is dependent on the specific boiler design. In different applications, that location might be at the furnace exit, in the convection pass, at the boiler outlet or at another downstream location. We recommend that this definition be modified as follows to accommodate the boiler-specific location of the sensing point:

Oxygen analyzer system means all equipment required to determine the O₂ content of a gas stream and used to monitor O₂ in the boiler flue gas, boiler or firebox, or other appropriate intermediate location.

Response: The EPA agrees with the commenter and is modifying the definition of an O₂ analyzer system in the final rule.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 8

Comment: ACC recommends the following changes to the regulatory language to enhance clarity and ensure no negative impact to operations.

Oxygen sensing location

The Oxygen analyzer system is defined in §63.11237 of the Reconsideration Proposal in part as follows:

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas or firebox.

The optimum location of the sensor or sampling point is dependent on the specific boiler design. In different applications, that location might be at the furnace exit, in the convection pass, at the boiler outlet or at another downstream location. ACC recommends that this definition be modified as follows to accommodate the boiler-specific location of the sensing point: *Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler or firebox, or other appropriate intermediate location.*

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 21

Comment: The Oxygen analyzer system is defined in §63.11237 in part as follows:

“Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas or firebox. ...”

The optimum location of the sensor or sampling point is dependent on the specific boiler design. In different applications, that location might be at the furnace exit, in the convection pass, at the boiler outlet or at another downstream location. We recommend that this definition be modified as follows to accommodate the boiler-specific location of the sensing point:

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler or firebox, or other appropriate intermediate location.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 20

Comment: As set forth in comments on the CIBO’s Petition for Reconsideration of the final Area Source Boiler Rule, the EPA’s proposed O₂ monitoring requirements are appropriate. This approach is technically sound, adds flexibility and is less costly and burdensome than the continuous O₂ monitoring requirements utilizing CEMS.

Many existing boilers already utilize O₂ analyzers for indication, alarm, and O₂ trim control, where the fuel/air ratio is automatically controlled for optimum combustion conditions. The sensing location for existing O₂ monitors is typically in the optimum location to sense gas composition as reliably as possible, because sensing of O₂ in these cases maintains proper excess air levels and helps prevent unsafe operating conditions. For units equipped with existing O₂ sensors and O₂ trim control systems, flue gas composition is already used for combustion tuning and control characterization. Therefore, if O₂ monitoring is desired for continuous compliance under the Area Source Boiler Rule, sensing O₂ at the current location prior to the stack would be logical and proper from a technical perspective. The O₂ analyzers utilized for these existing purposes are not compliance CEMS meeting PS-3 requirements relative to positioning or other QA/QC requirements. They are, however, calibrated and maintained to provide reliable and safe service for combustion unit operation

Response: The EPA thanks the commenter for their support of the use of O₂ monitoring systems. For response to monitor location, see the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 3, 4

Comment: While CIBO agrees that CO CEMS are not an appropriate mandatory monitoring requirement for a CO limit based on stack test data obtained at full load conditions, monitoring O₂ levels in the stack or ductwork leading to the stack to ensure continuous compliance is not appropriate for all units. Many existing boilers already utilize flue gas O₂ analyzers for indication, alarm, and O₂ trim control, where the fuel/air ratio is automatically controlled for optimum combustion conditions.

The sensing location for existing O₂ monitors is typically in the optimum location to sense flue gas composition as reliably as possible, because sensing of O₂ in these cases maintains proper excess air levels and helps prevent unsafe operating conditions. For many types of combustion units, that location is near the boiler or process heater furnace outlet in a position upstream of any potential air in-leakage points to avoid erroneous excess air indications. This location is also upstream of air preheaters where utilized, thus avoiding the erroneous (high O₂) indications due to inherent leakage across regenerative air preheater seals or potential tube leakage in recuperative air preheaters.

Response: See response to EPA-HQ-OAR-2006-0790-2453-A1, excerpt 6, for a response to CO compliance alternatives. The EPA thanks the commenter for their support of the use of O₂ monitoring systems. For response to monitor location, see the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 7

Comment: ACC supports the EPA's proposed changes to O₂ monitoring requirements. In the final rule, the EPA included continuous O₂ monitoring with a CEMS as the compliance method for sources with a CO limit, instead of mandating the use of CO CEMS. In the reconsideration proposal, the EPA is proposing to amend the O₂ monitoring requirements to allow use of continuous O₂ trim analyzer systems instead of O₂ CEMS. (76 FR 80536.) The EPA also proposes to remove the requirement that the O₂ monitor be located at the outlet of the boiler, so that it can be located at a more representative location, i.e., either within the combustion zone or at the outlet as a flue gas O₂ monitor. ACC supports these proposed changes because they allow facilities to utilize existing O₂ trim systems rather than having to install CEMS. This approach is technically sound, adds flexibility and is less costly and burdensome than the continuous O₂ monitoring requirements using CEMS.

Many existing boilers already utilize flue gas O₂ analyzers for indication, alarm, and O₂ trim control, where the fuel/air ratio is automatically controlled for optimum combustion conditions. The sensing location for existing O₂ monitors is typically in the optimum location to sense flue

gas composition as reliably as possible, because sensing of O₂ in these cases maintains proper excess air levels and helps prevent unsafe operating conditions. For many types of combustion units, that location is near the boiler furnace outlet in a position upstream of any potential air in leakage points to avoid erroneous excess air indications which would drive controls in an erroneous direction. This location is also upstream of air preheaters where utilized, thus avoiding the erroneous (high O₂) indications due to inherent leakage across regenerative air preheater seals or potential tube leakage in recuperative air preheaters. For those units equipped with existing O₂ sensors and O₂ trim control systems, flue gas composition at those locations would already be used for combustion tuning and control characterization. Therefore, if O₂ monitoring is desired for continuous compliance under this rule, sensing O₂ at that current location would be technologically sound.

Response: The EPA thanks the commenter for their support of the use of O₂ monitoring systems. For response to monitor location, see the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 5

Comment: The most cost effective approach for utilization of O₂ CEMS would be to allow the option of continued use of existing O₂ analyzers and use of new O₂ analyzers of appropriate design for the application to be located in optimum positions for the particular unit involved. Requiring periodic sensor calibration would be a way to ensure accurate O₂ monitoring. If new O₂ sensors are required in all cases in the breeching or stack to meet PS-3 requirements, it would be an unjustified additional capital and ongoing O&M expense that will not provide any constructive compliance information. There are some units where locating O₂ sensors in the breeching or stack is appropriate, so options should be provided to allow optimum monitoring.

Response: The EPA thanks the commenter for their support of the use of O₂ monitoring systems. For response to monitor location, see the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 17.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 12

Comment: We support the EPA's proposed revisions to compliance monitoring, including the use of CO CEMS.

Response: The EPA thanks the commenter for their support.

Testing/Monitoring: Oxygen Monitors-Specifications/Operations

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 16

Comment: We support the EPA's proposal to add flexibility and reduce the cost and burden of the continuous O₂ monitoring requirements, as these changes allow facilities to utilize existing O₂ trim systems rather than installing CEMS.

Response: The EPA thanks the commenter for their support.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 19

Comment: Section 63.11224(a)(7) should be modified to incorporate a safety component associated with the operation of O₂ trim system. Coal-fired boilers subject to the CO limits in this rule may also be equipped to fire other fuels such as natural gas and fuel oil that may be lower emitting and able to operate at lower O₂ levels for improved boiler efficiency. Operators may also need to modify the O₂ set point or trim system to accommodate fuel quality issues. Oxygen trim systems not only provide a means for energy efficiency, but they also are integral to furnace combustion control and furnace safety. Therefore, while this system promotes energy efficiency and use of a 30-day rolling average basis does provide some operating flexibility, use of such systems should also consider safety. We recommend that the paragraph §63.11224(a)(7) be revised as follows:

(7) You must operate the oxygen analyzer system with the oxygen level set at or above the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 64 to this subpart when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim control systems to meet these requirements shall not be done in a manner which compromises furnace safety.

Response: The EPA agrees with the commenter and is incorporating safety language into the final rule.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 24

Comment: Section 63.11224(a)(7) should be modified to incorporate a safety component associated with the operation of O₂ trim system. Coal-fired boilers subject to the CO limits in

this rule may also be equipped to fire other fuels such as natural gas and fuel oil that may be lower emitting and able to operate at lower O₂ levels for improved boiler efficiency. Operators may also need to modify the O₂ set point or trim system to accommodate fuel quality issues.

Oxygen trim systems not only provide a means for energy efficiency, but they also are integral to furnace combustion control and furnace safety. Therefore, while this system promotes energy efficiency and use of a 30-day rolling average basis does provide some operating flexibility, use of such systems should also consider safety. We recommend that the paragraph §63.11224(a)(7) be revised as follows:

(7) You must operate the oxygen analyzer system with the oxygen level set at *or above* the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 6 to this subpart *when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim control systems to meet these requirements shall not be done in a manner which compromises furnace safety.*

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 19.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 11

Comment: In addition, §63.11224(a)(7) should be modified to incorporate a safety component associated with the operation of O₂ trim system. Coal-fired boilers subject to the CO limits in this rule may also be equipped to fire other fuels such as natural gas and fuel oil that may be lower emitting and able to operate at lower O₂ levels for improved boiler efficiency. Operators may also need to modify the O₂ set point or trim system to accommodate fuel quality issues. Oxygen trim systems not only provide a means for energy efficiency, but they also are integral to furnace combustion control and furnace safety. Therefore, while this system promotes energy efficiency and use of a 30-day rolling average basis for the system does provide some operating flexibility, use of such systems should also consider safety. ACC recommends that §63.11224(a)(7) be revised as follows:

You must operate the oxygen analyzer system with the oxygen level set at or above the minimum percent oxygen by volume that is established as the operating limit for oxygen according to Table 64 to this subpart when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim control systems to meet these requirements shall not be done in a manner which compromises furnace safety.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 19.

Testing/Monitoring: Out of Scope

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 28

Comment: CIBO's Petition for Reconsideration sought consistency in testing requirements for this rule and 5-year Title V permit review cycle. The EPA did not coordinate these provisions in the proposed reconsidered rule. The EPA did revise 40 CFR 63.11220 to clarify that performance testing will be triennial for all sources. (76 FR 80539.) While CIBO supports testing at this lower frequency of 3 years, triennial testing remains overly burdensome and the EPA should modify the finalized emission testing requirements so that they are consistent with the 5-year air permit review cycle. Annual compliance testing is extremely expensive and the benefits of conducting emission tests more frequently than every 5 years do not justify the costs. In addition, as noted in CIBO's Petition for Reconsideration, there is likely to be a shortage of testing and laboratory resources under the current emission testing schedule.

Response: In the December 2010 proposal, performance testing for PM, Hg, and CO was required on an annual basis. Performance stack tests for PM and Hg could be conducted less often if performance stack tests for at least 3 consecutive years showed that emissions were at or below 75% of the emission limit, and if there were no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In that case, a source did not have to conduct a performance test for that pollutant for the next 2 years. Reduced performance testing for CO was not allowed. In response to comments that the proposed testing frequency was overly burdensome, we reduced the required performance testing frequency to a triennial basis for PM, Hg, and CO. The reduced requirements specify performance testing every 3 years, but no longer require demonstration that emissions are at or below 75% of the emission limit for at least 3 consecutive years prior to being allowed to conduct testing every 3 years. We do not consider triennial testing to be overly burdensome and are retaining the requirement.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 42

Comment: NACAA agrees that sources may employ automated fuel-sampling equipment, but notes that the 90th percentile compliance obligation is inconsistent with the EPA's determination that MACT floors must be set at a 99th percentile level.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Donna Celia

Commenter Affiliation: HMH Consulting

Document Control Number: EPA-HQ-OAR-2006-0790-2413-A1

Comment Excerpt Number: 1

Comment: This comment pertains to § 63.11220(b): "If you demonstrate compliance with the mercury emission limit based on fuel analysis, you must conduct a fuel analysis according to §63.11213 for each type of fuel burned *monthly*."

Why monthly? For facilities in Alaska, fuel is delivered in bulk shipments. Depending upon the remoteness of the facility, some sources received their bulk fuel in only a few large shipments per year. I would presume that this is true in other parts of the country as well, possibly in Hawaii, Guam, other U.S. Territories, and maybe even in parts of the lower 48, or at specific facilities in the lower 48. If the facility performs a fuel analysis from a specific shipment of bulk fuel, wouldn't that test be representative of the entire bulk shipment? Why can't a facility perform the fuel analysis on each bulk shipment of fuel? As for commercial or institutional sources, wouldn't this be true of the local fuel supplier? So, if a hospital in Dutch Harbor has boilers (and I don't know if they do, it's just an example), would a single fuel sample at the bulk terminal for each load of fuel delivered sufficiently demonstrate the mercury content of the fuel used at the hospital? Wouldn't this same fuel sample be applicable to other fuel consumers who buy fuel from the local bulk fuel terminal?

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we point out that we are amending the fuel sampling requirements in 40 CFR 63.11220(c) because we realized that when performance stack testing requirements were revised in the March 2011 final rule we neglected to revise the fuel analysis requirements. In the final rule, we are specifying that the owner or operator does not need to conduct further fuel analysis sampling if, when demonstrating initial compliance with the Hg emission limit, the Hg constituents in the fuel or fuel mixture are measured to be equal to or less than half of the Hg emission limit. If, when demonstrating initial compliance, the Hg constituents in the fuel or fuel mixture are greater than half of the Hg emission limit, the owner or operator must conduct quarterly sampling.

Commenter Name: David L. Meeker

Commenter Affiliation: National Renderers Association (NRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2427-A1

Comment Excerpt Number: 13

Comment: The NRA requests that the EPA finds it is appropriate to include an option to demonstrate compliance directly with a TSM or individual non-Hg metal HAP emissions limitation via fuel sampling for new boilers firing solid or liquid fuels (reconsidered rule includes PM emission limitations) for NESHAP Subpart JJJJJ. This comment is specifically for the NRA

members and customers that will utilize a liquid fuel, not processed fats, as a back-up fuel source for boilers subject to NESHAP Subpart JJJJJ.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 3

Comment: NFIB suggests that to improve these rules further, the EPA should adopt the suggestions the small-entity representatives provided the Agency during the SBAR panel held in 2009. These recommendations include:

- Allowing facilities meeting the SBA definition of a small business to have reduced and less frequent monitoring, testing and reporting requirements.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 29

Comment: CIBO appreciates the change clarification in of the triennial frequency of performance testing from annually in the final rule to once every 3 years in the reconsideration rule. However, requiring a performance test once every 5 years, as is required in many air permit renewals, will still accomplish the same assurance of compliance at a reduced cost to the regulated source.

A significant amount of testing will be required by sources to determine the compliance status with respect to the rule and to evaluate and select available control strategies. Capital projects to install necessary control equipment cannot proceed until the testing and evaluation is complete.

Due to the high number of sources affected by the rule that have the same concerns, it is likely that availability of stack testing personnel and laboratory facilities to conduct tests will be limited, adding to the time required to complete this essential first step. As outlined below,

annual frequent compliance testing requiring multiple test runs for purposes of compliance will further reduce the availability of testing and laboratory resources.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 28.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 19

Comment: The EPA proposes to eliminate the requirement that sources subject to a CO emission limit monitor CO directly. Instead, sources would be permitted to show compliance with the CO standard based on the O₂ content of the outlet or the combustion zone, at the option of the owner or operator. The EPA must require monitoring that “provide[s] reasonable assurance of compliance with emission standards.” *Sierra Club v. EPA*, 353 F.3d 976, 990 (D.C. Cir. 2004) (quoting *Natural Resources Defense Council Inc. v. EPA*, 194 F.3d 130,136 (D.C. Cir. 1999)). Here, the EPA has not concluded that the O₂ monitoring requirements provide reasonable assurance of compliance with CO limits, let alone supported such a determination with record evidence. The EPA has not established that O₂ monitoring is a reliable proxy for CO, either at the outlet or in the combustion chamber. Moreover, the EPA does not show that a single performance test is sufficient to establish an O₂ content level that reliably corresponds to the CO emission limit.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. The suitability of monitoring O₂ concentration in order to demonstrate continuous compliance with the CO emissions limits was discussed in the response to comments for the final rule published in March 2011. This issue has not been reopened.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)

Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1

Comment Excerpt Number: 1

Comment: The requirement to measure CO and O₂ before and after each tune-up is the prime instance of unreasonable cost. Upon investigation, the OHH Caucus has learned that the market price for an independent laboratory to perform such measurements, assuming they were technically feasible at all, would be approximately \$5,000. The useful life of an ICI OHH is in the range of 15-20 years. Even at the low end of that range, the total lifetime cost of the CO/O₂ measurements for a new unit, therefore, would be on the order of \$40,000 (eight tune-ups times \$5,000 each). The current retail price of such a unit is approximately \$25,000. Installation costs \$2,500-10,000, depending on the circumstances of the particular ICI facility. Even at the high end of that range, the cost of just the CO/O₂ measurements would exceed the cost of purchasing

and installing a new unit by \$5,000(\$40,000 vs. \$35,000), effectively doubling the lifetime cost of an ICI OHH unit.

Such doubling, if justifiable at all, could only be justified by some large benefit. But none exists. One set of primary determinants of the combustion efficiency, and hence the HAP emissions, of an OHH unit includes the type of cordwood it burns, the moisture level of the cordwood, the airflow to the firebox, and the achievement of a relatively high temperature in the firebox. Another interrelated set includes maintenance and repair at the end of each season of operation, annually conforming the unit to its original design during the warm-weather period of downtime. Both sets of determinants carefully and systematically addressed by the typical OHH manufacturer's operation and maintenance manual - a market necessity given that sales depend on customer satisfaction and that satisfaction depends largely on combustion efficiency. Because each owner/operation gains savings by promoting optimum combustion efficiency, it is reasonable to assume that owner/operators in general will follow the manufacturer's recommendations, thereby making the current tune-up requirements, especially the CO/O₂ measurement requirement, superfluous. All the EPA need do, assuming it feels compelled by the CAA to reinforce those market incentives, is mandate in the rule that ICI OHH units must follow those recommendations.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio & Barbecue Association (HPBA)

Document Control Number: EPA-HQ-OAR-2006-0790-2438-A1

Comment Excerpt Number: 2

Comment: The CO/O₂ measurement requirement creates confusion and uncertainty, an extra burden of unknown dimension for which there is also no counterbalancing benefit. As the EPA acknowledged in the preamble to the final rule, the Agency failed to specify the instruments and methods for the mandated CO/O₂ measurements in question and therefore "allow[ed] owners and operators to choose the method of measurement." (76 FR at 15575 col.1.) While Table 4 of the rule mandates the use of certain EPA-adopted methodologies for measuring CO, Table 4 governs only testing aimed at showing compliance with numeric CO emission limits. Moreover, those methodologies do not appear to be applicable as a technical matter to ICI OHH units. For instance, the lynchpin method for selecting sampling port locations (*i.e.*, Method 1 in Appendix A-1 to 40 CFR Part 60) states that, while the method "is applicable to gas streams flowing in ducts, stacks, and flues," it "cannot be used when...the flow is cyclonic or swirling...." (§1.2.) Here, the conduit for exhaust from an ICI OHH unit is a simple vent that is so short and wide as to ensure that the flow is at least "swirling," thereby disqualifying Method 1 and the string of methods that depend on it.⁴ The result of the EPA's failure to specify a methodology, either directly in the rule or indirectly, is that owner/operators lack adequate notice of what the EPA and its delegate agencies would find acceptable in the event of enforcement investigations. The

creation of such uncertainty is not consonant with the principle inherent in the GACT concept of moderating costs, nor with principles of rationality.

⁴ Photographs and diagrams of an ICI OHH appear in Exhibit B. *See also* <http://www.heal-mor.com/commercial-models.php>.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 5

Comment: The proposed schedule of annual stack testing for sources subject to emission limitations, especially for smaller sources, is very intensive and costly. We encourage the EPA to consider opportunities for consolidating compliance and testing requirements through the use of a CO and O₂ continuous monitoring system with combustion trim (CO/O₂ CMS trim) — a non-CEMS analyzer based monitoring system. This approach should be allowed as an alternative to the primary defined compliance demonstration requirements.

This approach continuously minimizes emissions and we believe can be allowed under the rule to meet start-up work practices, dioxin/furan work practices, and CO and PM parametric monitoring needs. The EPA has acknowledged that an O₂ trim system alone is a better way to operate a boiler. The CO/O₂ CMS trim approach takes the next step in operating a boiler for combustion efficiency. We propose that this approach will allow for performance tests every 2 years and tune-ups every 4 years for sources. This is very important as Wisconsin sources are currently subject to biennial stack testing (as applicable). Going to this schedule and simplifying other requirements will significantly reduce the cost of this rule while resulting in the same or potentially better environmental improvement.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 16

Comment: During the reconsideration process, the EPA should revise the emission testing requirements so that frequency of testing is not more than every 5 years. The EPA acknowledges that the cost of testing small boilers and process heaters is prohibitive. While the cost of emissions testing larger units is less prohibitive, the EPA must consider these costs when establishing the frequency of testing. The benefits of testing more frequently than every 5 years do not justify the costs. HAP emissions change only when operating parameters change (e.g., firing rate, maximum contaminant input limits for chloride and Hg, type of fuel, combustion efficiency, O₂ content, etc.) or when design changes occur. Absent these changes to an affected source, operating parameters established by implementation of Area Source Boiler Rule are more than sufficient to ensure that emissions will not significantly change over time.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 17

Comment: The Area Source Boiler Rule provisions require owners and operators to install CEMS to measure real-time emissions (O₂ and PM), measure and monitor prescriptive operating limits, as well as monitor, measure, and keep records of each type of fuel on a continuous basis to verify compliance with limits established during the compliance test. The Area Source Boiler Rule regulations also stipulate that sources must perform testing under a representative operating load and require sources to maintain within 110% of the average operating load observed during testing. Based on these stringent monitoring requirements, the operating parameters established during testing are sufficient for a source to demonstrate compliance for a 5-year period. Modifications will be tested under the provisions for new and modified sources, and do not need to be considered in ongoing test requirements.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 18

Comment: Other regulations support a 5-year testing cycle. For example, 40 CFR Part 75 requires low mass emissions units to establish NO_x emissions curves based on testing conducted every 5 years. Several states require that testing be conducted upon each 5-year Title V permit renewal. All affected major sources subject to Boiler MACT are required to have Title V Permits.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

SSM: Affirmative defense provisions for malfunctions

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 21

Comment: The EPA's proposal to provide an affirmative defense for periods of malfunction is without merit. The EPA must instead establish work practices to address emissions during periods of malfunction. Comments recently submitted by the "SSM Coalition" on the EPA's proposed "Risk and Technology Review" rule for Mineral Wool and Wool Fiberglass Manufacturing explain in detail that: (1) EPA must take malfunctions into accounts when setting §112 emissions standards; (2) the proposed affirmative defense is not a permissible substitute for setting emissions standards for periods of malfunction; and (3) the proposed affirmative defense is unreasonable and impracticable.

Several of the undersigned associations also are members of the SSM Coalition. We incorporate these comments of the SSM Coalition by reference. For these reasons, the EPA should set aside the proposed affirmative defense for periods of malfunction and, instead, set a work practice standard for such periods.

Response: The affirmative defense criteria are not requirements that a source must meet. In an action to enforce a violation of a standard caused by a malfunction, a source can choose to assert an affirmative defense. The affirmative defense is not relevant to malfunctions that do not result in violations of emission standards.

The EPA disagrees with comments that criticize the affirmative defense criteria as being overly vague or unduly restrictive and complex. The EPA believes that courts are well equipped and often do evaluate and apply the type of criteria set forth in the affirmative defense. The EPA revised certain criteria of the affirmative defense provisions that may ease the burden for owners and operators. The EPA is eliminating both the immediate notification and 45-day malfunction report requirement.

The EPA has determined that CAA §112 does not require that emissions that occur during periods of malfunction be factored into development of CAA §112 standards. Malfunctions should not be viewed as a distinct operating mode and, therefore, any emissions that occur at such times do not need to be factored into development of CAA §112(d) standards, which, once promulgated, apply at all times. Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. As the EPA further explained, accounting for malfunctions would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. Setting work practice standards under §112 presents the same issues as setting numerical emission limits given the varied nature of malfunctions. Thus, the EPA does not agree with the commenter's suggestion that we apply work practices for malfunction events.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 62

Comment: Given that malfunctions are essentially the same as periods of startup and shutdown, work practice standards should also apply.

As CIBO points out in its Petition, the EPA recognizes in both the Boiler MACT and Area Source Boiler Rule, "that it is not feasible to require stack testing – in particular, to complete the multiple required test runs – during periods of startup and shutdown due to physical limitations and the short duration of startup and shutdown periods. Operating in startup and shutdown mode for sufficient time to conduct the required test runs could result in higher emissions than would otherwise occur." (76 FR 15577, 15642.) It is irrational to view malfunctions any different than startup/shutdown periods. As such, the EPA should establish work practice standards for malfunctions. The rule is unreasonable as it is and subjects sources to the risk of noncompliance especially given the fact that malfunctions are unavoidable and unpredictable.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 30

Comment: In keeping with the court's holding in *Sierra Club*, we strongly encourage the Agency to abandon its affirmative defense approach for malfunctions. We believe that the Agency instead should use its authority in either §112(d)(5) or §112(h) to establish a management practice, work practice or operational standard to address a malfunction event that may be experienced by an area source boiler.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 9

Comment: The EPA proposes to treat malfunction events as if emission standards established based on normal process conditions and control equipment should apply. The "Affirmative Defense" policy the EPA proposes to codify as potential protection when malfunctions lead to emissions that exceed standards does not adequately address the issue. On its own it is overly complex in its documentation and reporting requirements that would be difficult, if not impossible, to meet during extreme or catastrophic malfunction events. The legally defensible and feasible approach is to set work practice standards as the NESHAP during malfunction events, as detailed in our trade group comments.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 16

Comment: The EPA should establish work practices to address emissions during periods of malfunction. Given that the EPA's floor data does not consider malfunctions and that the statute requires that the MACT standard be "achievable," the EPA should set work practice requirements to address periods of malfunctions as well. CAA §112(h) allows the EPA to set work practice standards for situations where "it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard" Malfunctions fit with the situations described in the definition of "not feasible to prescribe or enforce an emission standard" as any situation where "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." Emission testing for malfunctions would be near impossible to conduct given the sporadic and unpredictable nature of the events. Section 112(h) work practice standards, therefore, are well-suited to address malfunction periods and the complexities and challenges surrounding collecting data and establishing numerical standards for those events.

The NAM disagrees with the EPA's proposal to provide an affirmative defense for periods of malfunction. As has been discussed in various comments in this rulemaking, as well as others where the EPA has proposed a similar affirmative defense, the proposed affirmative defense is not a permissible substitute for setting emissions standards for periods of malfunction, and it is unreasonable and impracticable.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 16

Comment: ACA believes that the EPA's approach to malfunction episodes including the proposed affirmative defense for violating an emissions standard during a malfunction episode is inconsistent with the CAA, and the EPA should address this issue by promulgating a separate standard for malfunction periods. In the proposed reconsideration the EPA plans to apply the emissions standards, which were calculated during periods of normal operation, at all times, including during a malfunction event. The EPA is seeking comment on an affirmative defense provision requiring the owner or operator of a boiler to meet a list of criteria during a malfunction episode, and failing to meet these criteria exposes the source to potential civil penalties for violating the emissions standards. This approach, including the proposed affirmative defense, is inappropriate for the following reasons.

The EPA fails to provide an adequate legal justification or explain why the emission standard that applies during normal operations should also apply during an unexpected malfunction period, even though the Agency did not consider malfunction periods when calculating and establishing the MACT requirements for this source category. Under CAA §112(d)(3), the EPA must calculate and promulgate emissions standards that are achievable by the best performing existing sources. When calculating this emissions level, however, the EPA did not consider the potential for malfunctions or how these events would affect achievable emissions levels. Therefore, during a malfunction episode, the Agency cannot expect affected sources to meet the emissions limits that were calculated during normal periods of operation. The Agency's approach in this regard is contrary to the CAA §112(d).

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 17

Comment: The affirmative defense is not an adequate replacement for standards during malfunction episodes and EPA should establish a separate standard for periods of malfunction. The affirmative defense provisions do not remedy the underlying problems with the Agency's approach to malfunction periods. Furthermore, it would likely be impractical for the Agency to recalculate the entire standard and account for malfunctions. Instead, EPA should break down the standard and establish different requirements for periods of malfunction. This approach realizes the limitations of control technology and its effect on emissions levels, and also satisfies the court's decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), by ensuring that standards (even though there may be multiple different standards) are in place at all times during periods of startup, shutdown, and malfunction.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 18

Comment: The EPA failed to present any rationale or justification for its decision to apply the same numeric emission standards established for normal operations for an abnormal event, i.e., a malfunction.

As highlighted above, the court in *Sierra Club* did not state that the EPA must apply the same standards it establishes for normal operations during periods of SSM. The court's holding is clear that "some" §112 standard must "govern" SSM events but it did not specify which §112 standard. In this rulemaking, the EPA concluded that the Hg and CO standards set for normal operations also must be attained during a malfunction event. However, the EPA has provided no explanation as to why it believes that area source boilers reasonably could be expected to meet the emissions standards applicable to steady-state operations during a malfunction event.

In failing to articulate the basis for its decision, the Agency also ignores the comments submitted by ACC and others encouraging the EPA to establish a work practice standard for malfunction events. This is not reasoned decision-making and we hope that the Agency's "reconsideration" of its affirmative defense approach will prompt the EPA to give reasonable consideration to the fact that a boiler that has a malfunction is not likely to be able to achieve the same level of emission reductions that it achieved and can achieve while operating at steady-state.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Matthew Todd
Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)
Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2
Comment Excerpt Number: 24

Comment: The EPA [does not] explain how the Weyerhaeuser decision (that they do not have to consider every type of malfunction) allows the EPA to ignore all types of malfunctions in establishing emission limits. The EPA fails to explain how it concluded under §112(d) that it is reasonable to ignore all malfunctions in setting emission limits. Even best performing sources have malfunctions and §112(d)(3) requires the EPA to understand the "emission control that is achieved in practice" by such sources.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Matthew Todd
Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 25

Comment: The EPA has not shown how it concluded it did not have to treat emission limits that do not consider malfunctions as "beyond the floor" limits, since the floor must include malfunctions, since such a standard is not achievable by the best performing sources when they malfunction. Rather than supporting the EPA's decision to ignore the fact that malfunction events can lead to higher emissions even at well-operated facilities with the best control equipment, the difficulty in measuring emissions during malfunctions should lead the EPA to conclude that malfunctions are not normal operations and that their authority under CAA §112(h) to prescribe alternative design, equipment, work practice, or operational standards where it is not feasible to set or enforce a numerical emission limit should be employed. The EPA cannot rationally defend its position that malfunctions are normal operations but then ignore those operations in defining the emission limits that are "achieved in practice" by the best performing sources.

If it is possible to gather sufficient representative data reflecting emissions during malfunctions, then the EPA is obligated to consider these data in its calculations of numerical emission limits for steady-state operating conditions (since the EPA asserts malfunctions are not a separate operating mode). If it is not possible to gather sufficient representative data reflecting emissions during malfunctions then the EPA is obligated to treat malfunctions as a separate operating mode. We note that at least for the proposed CO emission limits for most source categories, the EPA has adequate continuous monitoring data to develop alternative standards and thus may have data that includes malfunctions and thus may, as we discuss in Comment II.4.A, actually may be able to establish an emission limitation for CO that does consider malfunctions (i.e., establish the proposed alternative standard as the primary standard for CO for those subcategories.)

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 43

Comment: In order to use the affirmative defense, a source is required by proposed §63.7501(b) (and corresponding area rule language) to file a notice of that intent within 2 business days of the start of the event. For many events the information required to decide if there was an exceedance and if the source will claim the affirmative defense will not be available within 2 business days from the start of the event. In order not to forfeit their rights in light of this unreasonable deadline, sources must file an affirmative defense notice for every event whether or not there was an actual exceedance.

Many compliance requirements have long averaging times (30-day averages are commonly specified in this rule). Where the averaging times exceed 2 days, a source often will not even

know there was an exceedance in the 2 days after the start of the event. Even with a 1-day averaging time, sources would have to decide in less than 1 day if they plan to use the affirmative defense and make the notice that day. If this notice requirement is maintained the time period for the notice (and for meeting the other affirmative defense requirements) should start with the date that the site determined in accordance with rule requirements that there was an exceedance, rather than from the start of the event.

Under the Refinery Consent Decrees, such notices have typically not been required and lack of these notices does not appear to have had any impact on the use of the affirmative defense or caused any increase in emissions or lessened the response to the event. In fact, if anything, diverting resources from dealing with an event and making reports to authorities associated with immediate response to the event is more likely to have detrimental environmental impacts rather than positive impacts. These notices certainly serve no purpose for immediate response, since notices for those purposes are already required to be provided on a much shorter timeframe to the National Response Center and State and Local Authorities.

Response: The EPA has evaluated the affirmative defense criteria, and is revising both the immediate notification and 45-day malfunction report. Instead, the final rule allows owners or operators seeking to assert an affirmative defense to demonstrate, with all necessary supporting documentation (as was required under the proposed 45-day report), that it has met the affirmative defense criteria by submittal of the affirmative defense report in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. This change provides sources with sufficient time to demonstrate that they have met the required affirmative defense criteria.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 44

Comment: It is unclear how to handle this notice requirement for multiple exceedances associated with a single event. For instance, a single event could cause a 30-day rolling average to be exceeded for each of 30 days. Are 30 2-day notices required? If this requirement is maintained, the Agency should clarify that only one notice (and one follow-up demonstration letter) is required even if an individual event causes multiple excess emission exceedances.

For these reasons, we recommend the EPA delete the 2-day initial notification requirement as unnecessary, leaving in place only the written demonstration requirement. We believe there is no reason the notification of the decision to use the affirmative defense should be on a different schedule as the supporting information submittal. In fact, the EPA never explains what action

they will take as a result of this notice or why they need it, since they will not have any information on which they will evaluate the event and its response until the later submission.

Response: The EPA is removing the requirement to notify the EPA within 2 days of violation of a standard in order to be able to avail themselves to a claim for affirmative defense and instead requires that the affirmative defense report be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 10

Comment: OCC supports the elimination of the requirement to notify the EPA or the delegated state agency within 2 days of an incident if a party wants to claim an Affirmative Defense. It is not usually possible to conduct a thorough incident review and root cause analysis within 2 days of an incident to determine whether the incident qualifies for an affirmative defense. Therefore, an extended period beyond 2 days is necessary. We support an extension to 45 days, at a minimum, with a provision to request longer if an extended investigation period is needed.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 44, regarding 2-day malfunction notice and EPA-HQ-OAR-2006-0790-2482-A2, excerpt 43, regarding 45-day affirmative defense requirements.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 29

Comment: Turning to the 2-day notification requirement in §63.11226(b), ACC notes that the EPA recently proposed almost identical affirmative defense requirements in the 2-day notification. It is ACC's understanding that the Agency has been persuaded by comments submitted by ACC and others in industry that the 2-day notification requirement is onerous and burdensome. We also understand that the EPA may be revisiting some of the other requirements in the affirmative defense provisions in order to further reduce the burden on facilities. We therefore request that in its reconsideration the EPA abandon it in the final provisions for area source boilers.

Unlike the 2-day notification which is triggered by the "initial occurrence of the malfunction", the 45-day period for submitting a written report demonstrating that the party qualifies for the

affirmative defense commences on the date of "the initial occurrence of the exceedance of the standards." Complying with this timeframe presents several challenges, specifically because most of the content of the report may not be able to be created until the malfunction has ended, which in some cases could be a number of days.

While there is an allowance for requesting and obtaining an extension of the reporting deadline of up to 30 additional days, the owner/operator must comply with the original 45-day requirement unless and until he hears back from the EPA that the extension request is approved. However, there is no requirement for the EPA to act timely in granting or denying an extension request. At a minimum, the rule should provide a timeframe within which the EPA must act on a request and if it fails to do so, the request would be considered granted.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 44, regarding 2-day malfunction notice and EPA-HQ-OAR-2006-0790-2482-A2, excerpt 43, regarding 45-day affirmative defense requirements.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 18

Comment: The burden of proving all the requirements in the affirmative defense and notifying the Agency during a malfunction is excessively high; if the EPA intends to maintain an affirmative defense provision, however, the Agency should clarify the language in this provision and make it reasonably possible to meet these criteria. The affirmative defense provisions from the reconsideration require the owner or operator of a boiler to prove by a preponderance of the evidence that the source meets a list of criteria. As the list is currently written, affected entities will struggle to meet many of the criteria in the affirmative defense, effectively limiting or eliminating any practical use of this defense. For example, the fifth criterion requires a facility to demonstrate that "[a]ll possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health." (76 FR 80629.) This is a standardless condition and it would be extremely difficult, if not impossible, to demonstrate that all possible steps were taken to minimize the impact of a malfunction episode. A facility could always take one additional step to minimize the impact of a malfunction, and therefore, no facility could ever meet this criterion. If the EPA does intend to finalize the affirmative defense, the Agency should clarify these provisions to ensure that the requirements are realistically attainable.

Response: The EPA disagrees with comments that criticize the affirmative defense criteria as being overly vague or unduly restrictive and complex. The EPA believes that courts are well equipped and often do evaluate and apply the type of criteria set forth in the affirmative defense. The EPA recognizes that some of the criteria for establishing an affirmative defense may be redundant of the general duty, but does not agree that such redundancy is a problem. The EPA notes that the affirmative defense criteria and the general duty to minimize emissions do not operate in the same manner. The general duty is applicable to a source at all times. The affirmative defense criteria are only relevant if a source chooses to take advantage of the

affirmative defense. The EPA's view is that use of consistent terms in establishing affirmative defense regulations and policies across various CAA programs will promote consistent implementation of those rules and policies.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 32

Comment: Section 63.7501(a)(1)(ii) and (iii) [and corresponding area rule language] are vague, subjective and potentially impossible criteria to meet. Once an event occurs, you may learn enough to realize that you "could" have prevented it. In fact, that is the very basis for the later requirement to do a root cause analysis (RCA) – so a facility can identify the root cause and plan to prevent such events. Even being hit by a meteor would fail this test, since one theoretically could have planned for it, even if the chance of such an occurrence is infinitesimal. In short, these demonstration requirements are so vague and subjective as to make the affirmative defense potentially unavailable and applicable only at the whim of the interpreting regulator.

Section 63.7501(a)(1)(iv) [and corresponding area rule language] requires a demonstration that a malfunction is not a result of a recurring pattern indicative of "inadequate design, operation, or maintenance." This is another impossible to demonstrate criterion since a regulator could easily take the position that if an event recurs it has to have been due to some inadequate design, operation, or maintenance. That is certainly the assumption behind the requirement for an RCA analysis.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 33

Comment: Proposed §63.7501(a)(2) [and corresponding area rule language]:

Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

Proposed §63.7501(a)(2) imposes an unreasonable requirement and focuses on the wrong endpoint and should be deleted. The phrase "as expeditiously as possible" is ambiguous and potentially impossible to meet. "Possible" is yet another subjective and ill-defined concept. In addition, acting as "expeditiously as possible" may cause safety or other problems as opposed to minimizing emissions to the maximum extent practicable, as the (a)(3) paragraph requires.

Response: See the responses to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 34

Comment: Requiring the "repairs" to be done rapidly is not the correct focus because excess emissions may have ceased before repairs are complete or repairs may not be required. The correct focus should be on reducing the excess emissions as rapidly as practical, which is addressed in the proposed (a)(3) paragraph. Eliminating excess emissions may or may not involve repairs. For instance, the proper response to a particular event may require adjusting a control set point, bypassing a stuck control valve or other operator actions, shutting down the equipment or process, or routing the emissions to an alternate control. Requiring repairs, when no repair is needed is unreasonable and illogical.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 36

Comment: Section 63.7501(a)(2) (and corresponding area rule language) should not be finalized and proposed §63.7501(a)(3) (and corresponding area rule language) should remain as the basis for demonstrating an appropriate response to a malfunction, if these provisions remain in the final rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 39

Comment: Proposed §63.7501(a)(5) [and corresponding area rule language]:

All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

Proposed §63.7501(a)(5) [and corresponding area rule language] sets an impossible requirement that invalidates the possibility of using the affirmative defense and so should be deleted.

This provision is ambiguous at best and impossible to demonstrate at worst. A facility cannot necessarily know in real time what "impacts" or potential impacts emissions might have on air quality, the environment, and human health, nor can a facility do anything other than minimize emissions to minimize the potential environmental impact. In addition, it is impossible to demonstrate that "all possible steps" were taken to do anything. Paragraph (a)(3) already requires a source to minimize the excess emissions. We do not know what other steps the Agency expects or how we could demonstrate that the impacts of those already minimized emissions could be further minimized. This paragraph should be deleted.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 24

Comment: A number of the requirements are extremely subjective and fail to allow for consideration of reasonableness or cost-effectiveness. For example, §63.11226(a)(1)(ii) requires the owner/operator to show that the malfunction could not have been prevented through "careful planning", "proper design" or "better operation and maintenance practices". This subjective requirement leaves open the possibility that an enforcement official could always find actions that "could" have been taken without any consideration of costs, resources or feasibility. Moreover, it fails to consider that an owner/operator may have chosen to redesign a process or equipment configuration, or make other adjustments to achieve the emission reductions necessary to comply with the standard. In so doing, the owner/operator would have evaluated various options to determine which one was the most cost-effective approach to achieve the emission standard, keeping in mind that cost-effectiveness would include long-term safe and proper operation of the equipment or process. If a malfunction were to occur, it could be difficult if not impossible for the owner/operator to prove that the malfunction "could not have been prevented" if cost and resources were never an issue.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 27

Comment: Requirement §63.11226 (a)(5) demands a party to prove that: "All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health." Again, the subjectivity of "all possible steps" is problematic in that it establishes a potentially unattainable standard with no clear direction as to how a party is to meet it.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 15

Comment: The EPA's approach to malfunctions is not required by *Sierra Club v. EPA* and is contrary to the requirements of §112 of the CAA.

The EPA states that, "consistent with" the holding in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), cert. denied, 130 S. Ct. 1735 (2010) ("*Sierra Club*"), it has established emission standards that apply at all times, even during a period of malfunction. ACC believes that there are a number of flaws in this statement and in the EPA's approach to malfunctions experienced by area sources rendering it contrary to the requirements of §112 of the CAA. More specifically:

- EPA misinterprets the holding of *Sierra Club*;
- EPA failed to consider malfunctions in establishing MACT numeric emission standards for Hg and CO;
- EPA failed to present any rationale or justification for its decision to apply the same numeric emission standard established for normal operations during an abnormal event, i.e., a malfunction;
- EPA's inclusion of an affirmative defense is not a substitute for establishing a §112- compliant standard for malfunction events; and
- EPA's affirmative defense requirements are potentially unconstitutional, but certainly unreasonable and not consistent with §112.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21, regarding establishing work practice standards for malfunctions. Also, see response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 16

Comment: The EPA misinterprets the Holding in *Sierra Club*.

The final rule presents nothing more than a single sentence as justification for requiring that sources meet numeric emission standards established for normal operations during a malfunction event: "Consistent with *Sierra Club v. EPA*, the EPA has established standards in this rule that apply at all times."⁸ The D.C. Circuit's *Sierra Club* decision does not, however, compel or even support the EPA's position that the same numeric standards established for normal operations must also apply during a malfunction event.

The *Sierra Club* ruling vacated the exemption for excess emissions during periods of SSM contained in the General Provisions, 40 CFR Part 63 Subpart A, for emission standards for hazardous air pollutants regulated under CAA §112. At issue was the EPA's determination that excess emissions during periods of SSM experienced by major sources are not violations as long as the owner/operator has prepared a startup, shutdown and malfunction plan and complies with a "general duty" to minimize emissions. The court concluded that the "general duty" was not a "section 112-compliant standard". However, the court did not state nor even imply that the same emission limits that the EPA establishes for normal operations must apply during SSM events.

In fact, the court clearly indicated that §302(k)'s "inclusion of [the] broad phrase" "any requirement relating to the operation or maintenance of a source to assure continuous emission reduction" in the definition of "emission standard" suggests that the EPA can establish MACT standards consistent with CAA §112 "without necessarily continuously applying a single standard." The court accepted that "continuous" for purposes of §302(k) "does not mean unchanging..." *Id.* at 1027. The court also highlighted the fact that Congress recognized that it might not be feasible in all cases to prescribe or enforce a numeric emission standard. Congress therefore provided in §112(h) for the establishment of a "work practice" or "operational standard". *Id.* at 1028.

Turning to this area source rulemaking, the EPA has clear statutory authority to regulate emissions from area sources less stringently than emissions from major sources. In regulating HAP emissions from *area sources* the EPA may forgo establishing MACT standards pursuant to §112(d)(2) and instead "promulgate standards *or requirements* ... which provide for the use of generally available control technology *or management practices*...to reduce emissions of hazardous air pollutants". *See*, §112(d)(5) (emphasis added). However, in this rule the EPA used its authority under §112(d)(2) to establish MACT numeric emissions standards for Hg and CO.

The EPA is now soliciting comments on its determination in the final rule that area sources must meet the numeric emission standards established for steady-state operations at all times, including periods of malfunction, and that the only enforcement relief that may be available in the event of a malfunction is an "affirmative defense" to civil penalties. The EPA is completely silent on why it is not exercising the discretion and authority provided by Congress in §112(h) and §112(d)(5) to address area source malfunctions; in fact, it does not even mention these statutory authorities. If the EPA wants to act "consistent with" the court's decision in *Sierra Club*, it should promulgate standards for periods of malfunction pursuant to its §112(h) or §112(d)(5) authority. If the EPA chooses to reject the flexibility that Congress clearly intended the Agency to use when it is not feasible to prescribe or enforce a numeric emission standard, it needs to explain its legal authority for these affirmative defense requirements and why each of the requirements is reasonable and justified, taking into consideration alternative solutions.

⁸ *Id.* at 15565

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21, regarding establishing work practice standards for malfunctions. The EPA took comment on whether we were required to use MACT rather than GACT for portions of the source category listed under CAA §112(c)(6) in the 2010 proposal and the 2011 final rule. We were not required to raise this

issue under the §307(d)(7)(B) reconsideration process. While we solicited comments on our decision that biomass- and oil-fired boilers were not required to meet §112(c)(6) for POM and thus eligible for GACT, we did not reopen the legal interpretation that §112(c)(6) requires MACT for those portions of the category to which that provision applies. Therefore, the portions of the comment suggesting using GACT authority where we have used MACT is outside the scope of this action.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 19

Comment: The EPA's inclusion of an affirmative defense is not a substitute for establishing a §112-compliant standard for malfunction events.

ACC believes that the EPA should either revise the numeric standards for Hg and CO to account for malfunction events, or use its statutory authority to establish a §112 work practice or management standard applicable during a malfunction event. There is no language in §112 that authorizes the EPA to offer an owner/operator an "affirmative defense" to civil penalties to cure the fact that it has finalized numeric emission standards that do not represent the emission levels actually "achieved" by the best performing sources "at all times." Moreover, the EPA's offering of an affirmative defense does not bear a reasonable relationship to the purpose of §112 or its requirement to establish standards that consider and address the reality of a potential malfunction of technology. If the EPA chooses to reject the flexibility that Congress clearly intended the Agency to use when it is not feasible to prescribe or enforce a numeric emission standard, it needs to explain why its affirmative defense approach is a better alternative than using the statutory authority provided in §112(h) and §112(d)(5) to establish a work or management practice for a malfunction period.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21, regarding establishing work practice standards for malfunctions. Also, see the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 63

Comment: The EPA has inappropriately placed the burden on the source to prove that excess emissions were caused by a malfunction. As CIBO asserted in earlier comments, malfunctions are in all material respects the same as startup and shutdown and therefore clearly meet the CAA definition for when work practice standards are appropriate. (CAA §112(h).) The EPA should establish a work practice standard that requires pre-determined malfunction plans with practices and procedures for potential malfunctions; require reporting of any malfunctions; address any malfunctions not contemplated and add to the plan and address as appropriate.

Alternatively, if the EPA rejects such work practice standards and, instead, includes an affirmative defense for malfunctions, the terms of the defense need to be changed. First, a source should not have to prove it meets every criterion to successfully claim the affirmative defense. Rather, the different criteria should be factored in evaluating whether the excess emissions should be excused.

Response: The EPA believes that the burden of proof, if a violation of a standard occurs, appropriately lies with the owner/operator of a facility for the affirmative defense. The EPA also agrees that the conditions during a malfunction event must be taken into account and believes that the affirmative defense provisions will support this review. For malfunctions, the EPA is finalizing affirmative defense language for violations of the numerical emission limits that are caused by malfunctions. The EPA recognizes that even equipment that is properly designed and maintained can fail and that such failure can cause a violation of the relevant emission standard. The EPA is including an affirmative defense in the final rule as we have in other recent §111, §112, and §129 rules so as to balance the tension, inherent in many types of air regulation, to ensure adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission limits may be exceeded under circumstances beyond the control of the source. The EPA must establish emission standards that “limit the quantity, rate, or concentration of emissions of air pollutants on a continuous basis.” 42 U.S.C. § 7602(k)(defining “emission limitation and emission standard”). See generally *Sierra Club v. EPA*, 551 F.3d 1019, 1021 (D.C. Cir. 2008) (emissions limitations under must both continuously apply and meet minimum stringency requirements, even during periods of startup, shutdown and malfunction). Thus, the EPA is required to ensure that emissions limitations are continuous. The affirmative defense for malfunction events meets this requirement by ensuring that even where there is a malfunction, the emission limitation is still enforceable through injunctive relief. See generally, *Luminant Generation Co. v EPA*, 2012 U.S. App. LEXIS 15722 (5th Cir. 2012) (upholding EPA’s approval of affirmative defense provisions in a CAA State Implementation Plan).

While “continuous” limitations, on the one hand, are required, there is also case law indicating that in some situations it is appropriate for the EPA to account for the practical realities of technology. For example, in *Essex Chemical v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973), the D.C. Circuit acknowledged that in setting standards under CAA section 111 “variant provisions” such as provisions allowing for upsets during startup, shutdown and equipment malfunction “appear necessary to preserve the reasonableness of the standards as a whole and that the record does not support the ‘never to be exceeded’ standard currently in force.” See also, *Portland Cement Association v. Ruckelshaus*, 486 F.2d 375 (D.C.Cir. 1973). Though intervening caselaw such as *Sierra Club v. EPA* and the CAA 1977 amendments calls into question the relevance of these cases today, they support the EPA’s view that a system that incorporates some level of flexibility is reasonable. The affirmative defense simply provides for a defense to civil penalties for excess emissions that are proven to be beyond the control of the source. By incorporating an affirmative defense, the EPA has formalized its approach to upset events. In a Clean Water Act setting, the Ninth Circuit required this type of formalized approach when regulating “upsets beyond the control of the permit holder.” *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1272-73 (9th Cir. 1977). But see, *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1057-58 (D.C. Cir. 1978) (holding that an informal approach is adequate). The affirmative defense provisions give the EPA the flexibility to both ensure that its emission limitations are

“continuous” as required by 42 U.S.C. § 7602(k), and account for unplanned upsets and thus support the reasonableness of the standard as a whole.

Further, the EPA’s view is that the affirmative defense is consistent with CAA §§113(e) and 304. Section 304 gives district courts jurisdiction “to apply appropriate civil penalties.” Section 113(e)(1) identifies the factors that the Administrator or a court shall take into consideration in determining the amount of a penalty to be assessed only after it has been determined that a penalty is appropriate. The affirmative defense regulatory provision is not relevant to the amount of any penalty to be assessed under §113(e) because if a court determines that the affirmative defense elements have been established, then a penalty is not appropriate and penalty assessment pursuant to the §113(e)(1) factors does not occur.

In exercising its authority under §112 to establish emission standards (at a level that meets the stringency requirements of §112), the EPA necessarily defines conduct that constitutes a violation. The EPA’s view is that the affirmative defense can be viewed as defining two categories of violation. If there is a violation of the emission standard and the source demonstrates that all the elements of the affirmative defense are met, only injunctive relief is available. All other violations of the emission standard are subject to injunctive relief and penalties. The CAA does not require that all violations be treated equally.

The EPA’s judgment is that the affirmative defense criteria capture the appropriate considerations in determining whether penalties are appropriate when a violation occurs as the result of a malfunction. As noted above, the affirmative defense criteria overlap to some extent with the penalty assessment criteria set forth in §113(e), but are not identical. For example, size of business is one of the factors listed in §113(e), but is not reflected in the EPA’s affirmative defense. This reflects the EPA’s view that when a violation is caused by a malfunction, the size of the business is not relevant to whether penalties should be excused. If the violation was unavoidable and could not have been prevented, the EPA’s view is that it would be unfair to impose a penalty no matter the size of the business.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 26

Comment: The EPA acknowledges that the sources that will be subject to the proposal sometimes will be unable to comply with the standards because of malfunctions, even if their equipment is properly designed and maintained, through no fault of the source.⁴³ Rather than promulgate a standard of performance that eliminates that situation, so that the regulated emission sources will be subject to differentiated requirements including during malfunction events, the EPA offers instead an "affirmative defense." The proposed affirmative defense shifts the burden to the source to prove that a myriad number of criteria are met and actions were taken by the source (which criteria bear no direct relation to the statutory factors for standards of performance in the CAA or delineated in the definition of malfunction in §63.2), in order to avoid "civil penalties." Inclusion of the affirmative defense does not cure the EPA’s failure to set

emission standards that are achievable during malfunctions. The proposed standards, incorporating the affirmative defense, still do not represent emission limitations that have been achieved in practice by the best performers.

⁴³ 76 FR 15613 (March 21, 2011)

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63, regarding burden of proof. See also the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 28

Comment: Even if the proposed affirmative defense were not unreasonably vague and restrictive, as discussed in the following portion of these comments, being able to assert a defense obviously is not the same as complying with emission limitations that are properly set in accordance with CAA §112. Although a source believes it qualifies for the affirmative defense, it may be considered to have violated the standards—and may have to report violations, certify noncompliance, etc.—until there has been an enforcement proceeding and the source has successfully asserted the affirmative defense. The affirmative defense places the source in the position of proving its innocence, rather than EPA or another enforcement authority having to prove that the source violated the CAA.

Response: See the responses to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18, and EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 8

Comment: Ultimately, to assert the affirmative defense, the owner or operator of the source must prove by a preponderance of the evidence that excess emissions were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner.

PA DEP believes that the burden of proof rests on the owners or operators of the sources to show that the emission limit exceedances are beyond their control and that they took every step necessary to prevent such occurrences from taking place. However, the criteria specified in §63.11226 (a)(1)(ii) and §63.11226 (a)(1)(iii) are too subjective and may preclude owners and operators from using the affirmative defense provisions.

Response: See the response to EPA-HQ-OAR-2006-2443-A1, excerpt 63, regarding burden of proof. See also the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 31

Comment: Proposed §63.7501(a)(1) [and corresponding area rule language]:

The excess emissions:

(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

§63.7501(a)(1)(i) [and corresponding area rule language] reflects the key criteria from the definition of malfunction in §63.2.⁴⁸

However, the (ii) through (iv) paragraphs are unreasonable, arbitrary, and capricious restatements and expansions of the last sentence of the §63.2 malfunction definition and should be deleted and replaced with the language from the definition. The EPA has not explained in the rulemaking record their legal or logical basis for expanding and changing the malfunction criteria and, in particular, have not proposed changing the definition, either through proposing a revised definition in this rulemaking or proposing to amend §63.2. As explained below, these new malfunction criteria would not allow any event to be a malfunction, since the criteria, if interpreted literally, cannot be met. The phrases used in these paragraphs are subject to a wide range of interpretations, and on their face do not recognize any need for reasonableness or cost-effectiveness. The language used presumes guilt and imposes an unclear and apparently impossible level of proof for a source to defend itself. The proposed wording doesn't even track the language of the definition of "malfunction" by including an analysis of whether an event was due to poor maintenance or careless operation. Instead, the proposal focuses on whether "proper design" or "better operation and maintenance practices" could have prevented a malfunction. There are no objective criteria that can be used to determine what "could" have been and there is probably no situation where, in hindsight and without considering cost or likelihood, that an event could not have been prevented.

⁴⁸ *Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 21, regarding establishing work practice standards for malfunctions. Also, see the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18. See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63, regarding burden of proof.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 20

Comment: The EPA's affirmative defense requirements are unreasonable and not consistent with §112.

In the preamble to the final Area Source Boiler Rule, the EPA presents the affirmative defense as a potential "response" an owner/operator may take to "an action to enforce the standards set forth in 40 CFR 63.11201." See 76 FR 15554, 15565. The regulatory language in §63.11226 also opens with the words "*In response to an action to enforce* the standards set forth in..." and repeats this thought in paragraph (a) of the section: "To establish the affirmative defense *in any action to enforce* such a limit..." (emphasis added). This opening language leaves a regulated party to believe that *if* any action is taken against that party to enforce an emission limit exceeded during a malfunction, the party may avail itself of an affirmative defense if it meets various criteria. However, this is not the way the EPA's affirmative defense would play out.

In §63.11226 (b), the EPA establishes strict notification requirements that must be followed for the owner/operator to be able even to raise an affirmative defense if and when an enforcement action is brought. First, the owner/operator must notify the EPA by phone or FAX as soon as possible, but no later than 2 business days after the "initial occurrence of the malfunction." Then, within 45 days of the "initial occurrence of the exceedance of the standard", the owner/operator must submit a written report accompanied by all necessary supporting documentation to show that it has met each and every requirement set forth in paragraph (a) of §63.11226. Because of these short time frames, the reality is that the EPA is requiring the facility to present its entire detailed defense in writing to the EPA before the EPA has even decided whether to take any enforcement action. To require a party to lay out its entire defense to a *potential* future enforcement action *before* that action may be taken is wholly inappropriate and unacceptable.

The EPA has cited no legal authority for its use of affirmative defense requirements that inappropriately and unlawfully shift the burden to the facility to prove by a preponderance of the evidence that any excess emissions were caused by a true malfunction *and* that the facility meets all of the other specified factors in §63.11226. The EPA's affirmative defense places the facility

in the position of proving its innocence, rather than the EPA or other regulatory authority bearing the burden to prove that the facility violated the CAA.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 44, regarding 2-day malfunction notice and EPA-HQ-OAR-2006-0790-2482-A2, excerpt 43, regarding 45-day affirmative defense requirements. Also, see the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18. See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63, regarding burden of proof.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 27

Comment: It is unclear where the EPA finds the legal authority in the CAA to shift the burden to the regulated community of proving (or disproving) essential elements of an alleged violation. The statute is silent as to the issue and "the ordinary default rule [is] that plaintiffs bear the risk of failing to prove their claims." *Shaeffer v. Weast*, 546 U.S. 49 (2005), quoting *McCormick on Evidence* §337, at 412 ("The burdens of pleading and proof with regard to most facts have and should be assigned to the plaintiff who generally seeks to change the present state of affairs and who therefore naturally should be expected to bear the risk of failure or proof or persuasion"); C. Mueller & L. Kirkpatrick, *Evidence* § 3.1, p. 104 (3d ed. 2003) ("Perhaps the broadest and most accepted idea is that the person who seeks court action should justify the request, which means that the plaintiffs bear the burdens on the elements in their claims"). While the Supreme Court has recognized exceptions such as affirmative defenses, courts retain the authority to establish such rules unless Congress acts to delegate that authority. In this instance, the EPA has not provided any statutory authority, or any real justification, for requiring a source to prove its innocence; moreover, to fully demonstrate its innocence within 45 days of the event, without even being charged. Rather, if the EPA adopts an approach along the lines of the proposed affirmative defense, it should be stated instead in terms that, once a source has claimed that its excess emissions were related to a malfunction, it will not be considered to be in violation of the standards unless the enforcement authority demonstrates that the source is not entitled to claim the malfunction.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 44, regarding 2-day malfunction notice and EPA-HQ-OAR-2006-0790-2482-A2, excerpt 43, regarding 45-day affirmative defense requirements. Also, see the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18. See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63, regarding burden of proof.

Commenter Name: Allison Watkins, Baker Botts

Commenter Affiliation: Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1

Comment Excerpt Number: 2

Comment: The Class of '85 supports the EPA's addition of an affirmative defense to civil penalties for exceedences of emissions limits that are caused by malfunctions. The EPA is correct that even equipment that is properly designed and maintained can sometimes fail unexpectedly. Facilities that exceed emissions standards during such unforeseen events should not be penalized.

Response: The EPA thanks the commenter for their support.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 2

Comment: Integrys supports the EPA's addition of an affirmative defense to civil penalties for exceedences of emissions limits that are caused by malfunctions. The EPA is correct that even equipment that is properly designed and maintained can sometimes fail unexpectedly. Facilities that exceed emissions standards during such unforeseen events should not be penalized.

Response: The EPA thanks the commenter for their support.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 30

Comment: The affirmative defense is based on the presumption that all malfunctions are violations without providing for any due process. If the affirmative defense is finalized, the EPA should separate it from that presumption and make clear that a source's use of the affirmative defense is not an admission by the source that the malfunction was a violation.

Response: The affirmative defense criteria are not requirements that a source must meet. In an action to enforce a violation of a standard caused by a malfunction, a source can choose to assert an affirmative defense. The affirmative defense is not relevant to malfunctions that do not result in violations of emission standards.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 22

Comment: Section 63.11226 states: "The affirmative defense shall not be available for claims for injunctive relief." The preamble is silent as to why the affirmative defense would not apply to injunctive relief. If the facility meets the requirements of the affirmative defense provision, why

may it not be raised as a defense to a claim for injunctive relief? The EPA's assertion to the contrary is unsupported by any explanation.

Response: The affirmative defense applies to civil penalties, including civil administrative penalties and penalties under §120, but does not apply to injunctive relief. The EPA's view is that the affirmative defense can be viewed as defining two categories of violation. If there is a violation of the emission standard and the source demonstrates that all the elements of the affirmative defense are met, only injunctive relief is available. All other violations of the emission standard are subject to injunctive relief and penalties. The CAA does not require that all violations be treated equally. Further, a citizen suit claim under §304 allows citizens to commence a civil action against any person alleged to be in violation of "an emission standard or limitation under this chapter." The CAA, however, allows the EPA to establish such "enforceable emission limitations." Thus, the citizen suit provision clearly contemplates enforcement of the standards that are defined by the EPA. As a result, where the EPA defines its emissions limitations and enforcement measures to allow a source the opportunity to prove its entitlement to a lesser degree of violation (not subject to penalties) in narrow, specified circumstances, as the EPA did here, penalties are not "appropriate" under §304.

The EPA's view is that an affirmative defense to civil penalties for exceedances of applicable emission standards during periods of malfunction appropriately balances competing concerns. On the one hand, citizen enforcers are concerned about additional complications in their enforcement actions. On the other hand, industrial sources are concerned about being penalized for violations caused by malfunctions that could not have prevented and were otherwise appropriately handled (as reflected in the affirmative defense criteria). The EPA has utilized its §301(a)(1) authority to issue regulations necessary to carry out the CAA in a manner that appropriately balances these competing concerns.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 21

Comment: The EPA states that the affirmative defense may be raised to a "claim for civil penalties" but does not define "civil penalties". For example, are these meant to include a "civil administrative penalty" imposed by the EPA under §113(d) of the CAA? A "noncompliance" penalty sought under §120 of the CAA? A "civil penalty" imposed by a court?

It is also unclear how the affirmative defense would apply to enforcement actions by state and local governments, or to private citizen enforcement actions brought under §304 of the CAA. While in no way endorsing the EPA's affirmative defense provision, ACC believes that if retained by the Agency after reconsideration, the provisions should clearly state that it is applicable to any enforcement action.

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 22.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 29

Comment: It is unclear how the affirmative defense will apply to enforcement actions by state and local governments, or to private citizen enforcement actions under CAA §304. The March 21, 2011 final rule preamble speaks only in terms of application of the affirmative defense in an EPA enforcement action.⁴⁴ An affirmative defense should clearly state that it is applicable to enforcement actions by states or citizen-suit plaintiffs, as well.

The proposal states that: “The affirmative defense shall not be available for claims for injunctive relief.”⁴⁵ The preambles to this proposed rule or the March 21, 2011 final rule do not give any explanation for why the affirmative defense would not apply to injunctive relief. If in fact the excess emissions associated with the equipment or process failure are not reasonably preventable, then there is no apparent reason why injunctive relief should be available either. As a matter of law, injunctive relief may not be available in cases where a civil penalty cannot be imposed.⁴⁶

Maintaining liability for injunctive relief renders the affirmative defense particularly ineffective with respect to citizen suits. If the source is even potentially subject to injunctive relief, and therefore could be required to pay the citizen-plaintiff’s attorneys fees even if the source successfully demonstrated that it otherwise qualified for the affirmative defense, then the affirmative defense would not accomplish the EPA’s stated objective of providing relief in situations where the emission limitations cannot be met despite proper design and operation of process and control equipment.

At a minimum, the EPA should state that the affirmative defense applies to civil penalties, civil administrative penalties, noncompliance penalties, and injunctive relief, in an action brought by the EPA, a state, or a citizen-suit plaintiff. The EPA also should reword the “affirmative defense,” so that it states that a source “will not be deemed in violation of” the NESHAP for excess emissions or other deviations from the standards, associated with a malfunction event, unless the event, and the source’s response to the event, do not meet the criteria spelled out in the regulations.⁴⁷ Configured in that way, this provision should be called something other than an “affirmative defense,” such as an “alternative standard for SSM events.”

⁴⁴ Id.

⁴⁵ Proposed §63.705.

⁴⁶ See *Sierra Club v. Otter Tail Power Co.*, 615 F.3d 1008 (8th Cir. 2010) (under concurrent remedy doctrine, injunctive relief for a CAA violation is barred when civil penalty is barred by statute of limitations).

⁴⁷ Compare, e.g., 40 CFR §80.613 (stating that persons demonstrating specified defenses "will not be deemed in violation" and are not "deemed liable for a violation" of diesel fuel sulfur program regulations).

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 22.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 26

Comment: Requirement §63.11226 (a)(4) would disallow the affirmative defense if a malfunction involved bypassing control equipment or a process, and the bypass was not taken "to prevent loss of life, severe personal injury, or severe property damage." This language is both unyielding and subjective. It is unyielding in that it fails to allow any consideration of the fact that bypassing the control equipment or the process may have been an appropriate exercise of good air pollution control practices. For example, a bypass can constitute the best air pollution control practice in response to an upset in order to prevent excess emissions, e.g., to avoid fouling of pollution control equipment media that in turn would result in reduced pollution control equipment efficiency or increased pollution control equipment downtime. Additionally, in some cases the air emissions from a venting event are lower than if the facility had an uncontrolled shutdown to avoid venting. An uncontrolled shutdown could also impact other media, e.g., a wastewater dump from scrubbers, solid waste, etc. And, a shutdown would necessitate additional startup emissions. Arguably, venting for a short period due to malfunction could result in lower emission levels than a non-orderly shutdown and subsequent restart. Yet, as worded, this requirement would discourage an owner/operator from taking the less-impactful option because it would mean that he could not avail himself of an affirmative defense for the malfunction.

This requirement is subjective in its use of the word "severe." Reasonable minds could disagree on what constitutes "severe" property damage, or "severe" personal injury. Lastly, this requirement is not supported by any explanation as to why "bypassing" control equipment or a process is absolutely unacceptable except when an owner/operator is faced with these dire consequences.

Response: With regard to severe property damage, the EPA believes that a bypass of control equipment or a process, which results in a violation, should be an exception and not undertaken lightly, and has maintained the word "severe" in this criteria.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 37

Comment: When referring to affirmative defense requirements, the EPA should not be suggesting that they are only concerned with "severe" property damage. Nor is it clear how the Agency expects an operator, during an emergency, to decide whether the property damage that might occur due to a failure to act would be "severe." The word "severe" should be deleted from this proposed language. Any situation that presents a risk to property or equipment could be more or less "severe" in the end, but the level of potential damage cannot be precisely foreseen. In addition, there can be substantial room for disagreement about what constitutes "severe" property damage. The use of "severe" renders this requirement too subjective to be practically enforceable.

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 26.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 38

Comment: Potential "severity" is not the proper focus of affirmative defense requirements. Bypassing control equipment or the process in some cases might be an appropriate exercise of good air pollution control practices. For example, a bypass can be the appropriate response to an upset (e.g., in order to prevent fouling of the pollution control equipment media). Such a bypass could save the control device from damage and thus result in reduced control equipment downtime or increased pollutant removal.

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 26.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 42

Comment: Proposed §63.7501(a)(9) [and corresponding area rule language]:

A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

The EPA should clarify that the requirement to perform a RCA "to determine, correct, and eliminate the primary causes of the malfunction" does not require that identified corrective actions be completed within the demonstration period. Long- term corrective action can require

facility modifications that can take months to years to design and execute or procedural changes that can take weeks to months to safely implement.

Response: The EPA did not intend to prescribe a specific methodology, given that “root cause analysis” is not a defined term in the rule. The EPA believes it has provided clear criteria within the affirmative defense provisions to support the development of an affirmative defense report. The EPA believes that these provisions will result in a minor administrative burden, but will result in sources analyzing their violation emissions to reduce or avoid those emissions in the future, which is an environmental benefit. A root cause analysis is not mandatory and is only required if a source seeks to assert an affirmative defense. However, such an analysis is beneficial in resolving or preventing violations and excess emissions whether the source seeks to assert the affirmative defense or not. A root cause analysis is one example of what constitutes good air pollution control practices to minimize emissions. A root cause analysis is not required for every malfunction, it is *only required* for those malfunctions for which the source chooses to assert an affirmative defense.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 28

Comment: Requirement §63.11226 (a)(9) is problematic in that it requires a party to prepare a "written root cause analysis to determine, correct and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue." This directive assumes that any and all malfunctions can be determined, corrected and eliminated. If a malfunction by definition is unavoidable, unforeseeable, and not reasonably preventable, it may be that the first time it happens its primary cause cannot be determined. If the cause cannot be determined, it cannot be corrected. So unless a party can figure out why something malfunctioned, it cannot claim to have had a "malfunction." Not only is this nonsensical, it is a significant departure in EPA policy with no justification provided. For example, in the General Provisions applicable to NSPS, the EPA recognizes that the cause of a malfunction cannot always be known. *See* 40 CFR 60.7(b)(2) which requires that written reports of excess emissions include the "nature and cause of any malfunction, *if known*...." (Emphasis added.) Lastly, requiring a party to eliminate the primary causes of the malfunction, without regard to "taking into consideration the cost of achieving such" elimination and the "non-air quality health and environmental impacts and energy requirements" associated with its elimination is unreasonable and entirely inconsistent with the criteria for standards established under §112(d) of the CAA.¹⁰

¹⁰ For example, it might be theoretically possible to eliminate the excess emissions associated with the malfunction by installing totally redundant pollution control equipment, or pollution control equipment with far more capacity than needed for normal operations. But this would not reflect the performance of the best performers on which the MACT "floor" is to be based, nor would it appear to take cost and other factors into consideration as the statute requires for beyond-the-floor MACT standards. Moreover, the proposed requirement to eliminate "the primary causes of the malfunction" and not just to eliminate "the excess emissions resulting from

the malfunction event" lies entirely outside of EPA's authority under the CAA, which is limited to establishing and enforcing emission limitations, not dictating plant operations.

Response: See the response to EPA-HQ-OAR-2006-0790-2782-A2, excerpt 42, regarding root cause analysis.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 64

Comment: The proposed criteria in the reconsideration rule for establishing an affirmative defense are poorly defined and do not reflect on whether a malfunction actually occurred. For example, the requirement that sources rely on overtime workers to address the malfunction objectively proves nothing. (76 FR 15598.) The personnel onsite at the time of the malfunction event may not be the personnel with the expertise to resolve the malfunction, yet if they do not remain onsite as overtime personnel, under the EPA's structure, that source fails to meet one of the indicia of a malfunction. Moreover, the affirmative defense criteria in some cases impose draconian obligations on malfunctioning sources without any regard for their cost-effectiveness. For example, the source must show "[r]epairs were made as expeditiously as possible . . . excess emissions (including any bypass) were minimized to the maximum extent practicable . . . [a]ll possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health." (76 FR 15598-599 (emphasis added).) This could lead to the EPA or a court imposing extreme MACT regulations on sources during malfunctions.

Response: The final rule requires that to establish the affirmative defense the owner must prove by a preponderance of evidence that repairs were made as expeditiously as possible when a violation occurs. We have re-evaluated the language concerning the use of off-shift and overtime labor, to the extent practicable, to make the repairs and believe that the language is not necessary. Thus, the language has been eliminated from the final rule. When evaluating a party's claim of the affirmative defense, we may analyze the use of labor in the context of the event when evaluating whether the repairs have been made as expeditiously as practical. See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 42, regarding root cause analysis. See also the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 63.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 8

Comment: The EPA should review the exposure estimates to recognize that significant air emissions are likely to result from malfunctioning equipment as well. Although some malfunctions may be unpredictable and sudden, the EPA must account for the harmful emissions that occur during malfunctions when determining whether or not a facility is in compliance with emissions standards. The EPA needs to acknowledge that malfunctions are likely events which

must be factored into the exposure estimates. The EPA's language implies that these are rare events, but such is not the case, as recent reports have shown (EPA, 2011d). The historical industry evidence should provide more than adequate information on likely malfunctions and exposures.

Unfortunately, the proposed "affirmative defense" option creates a loophole that will not likely reduce the risk of malfunctions, providing facilities with a way to avoid penalties that could provide incentives to reduce malfunctions. The EPA needs to close this loophole as standards need to limit emissions during all phases of operation, including when equipment fails to work properly. Assessing compliance with emissions standards based on the "good faith efforts" of boiler and incinerator operators to minimize emissions during malfunctions are not a sufficient safeguard against harmful air pollution.

Response: The EPA recognizes that even equipment that is properly designed and maintained can fail and that such failure can cause an exceedance of the relevant emission standard. The EPA is including an affirmative defense in the final rule to ensure adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission limits may be exceeded under circumstances beyond the control of the source. The EPA must establish emission standards that "limit the quantity, rate, or concentration of emissions of air pollutants on a continuous basis." 42 U.S.C. §7602(k)(defining "emission limitation and emission standard"). See generally *Sierra Club v. EPA*, 551 F.3d 1019, 1021 (D.C. Cir. 2008) (emissions limitations under CAA §112 must both continuously apply and meet §112's minimum stringency requirements, even during periods of startup, shutdown and malfunction). Thus, the EPA is required to ensure that §112 emissions limitations are continuous. The affirmative defense for malfunction events meets this requirement by ensuring that even where there is a malfunction, the emission limitation is still enforceable through injunctive relief. The affirmative defense provisions give the EPA the flexibility to both ensure that its emission limitations are "continuous" as required by 42 U.S.C. §7602(k), and account for unplanned upsets and thus support the reasonableness of the standard as a whole.

To the extent the comment focuses on potential exposures and risks associated with malfunctions, we note that this rulemaking is under the technology-based provisions of CAA §112 and not under CAA §112(f).

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 23

Comment: The individual requirements in §63.11226(a)(1) through (9) that a facility must meet to be allowed to raise an affirmative defense, a number of these requirements are not relevant to whether a malfunction, as defined in §63.2 occurred.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an

applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Most of the conditions for establishing an affirmative defense in §63.11226 may be relevant to determining whether the facility undertook appropriate and necessary measures to mitigate any excess emissions resulting from the specific malfunction, but do not in any way inform a determination of whether a piece of equipment has met the definition of a malfunction. For example, §63.11226(a)(2) requires that "off-shift and overtime labor, to the extent practicable" were used to make the repairs needed. ACC fails to understand how this requirement relevant to determining whether a piece of equipment has "malfunctioned". See also (a)(3), (a)(5), (a)(6), (a)(7), (a)(8) and (a)(9).

Response: The affirmative defense criteria are not requirements that a source must meet. In an action to enforce a violation of a standard caused by a malfunction, a source can choose to assert an affirmative defense. The affirmative defense is not relevant to malfunctions that do not result in violations of emission standards. The final rule requires that to establish the affirmative defense the owner must prove by a preponderance of evidence that repairs were made as expeditiously as possible when a violation occurs. We have re-evaluated the language concerning the use of off-shift and overtime labor, to the extent practicable, to make the repairs and believe that the language is not necessary. Thus, the language has been eliminated from the final rule. When evaluating a party's claim of the affirmative defense, we may analyze the use of labor in the context of the event when evaluating whether the repairs have been made as expeditiously as practical.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 25

Comment: Another subjective and particularly problematic requirement is (a)(8) which requires that: "At all times, the *facility* was operated in a manner consistent with good practices for minimizing emissions." ACC strongly objects to the EPA reaching beyond the *equipment* that malfunctioned to require a party to prove by a preponderance of the evidence that "at all times, the *facility* was operated in a manner consistent with good practices for minimizing emissions." (Emphasis added.) First, the EPA does not define "facility" or "affected facility" in the final area source boiler rule, nor is it included in the definitions at 40 CFR 63.2; common usage of the term facility suggests that it means the entire plant.⁹ Second, and more importantly, the EPA is requiring a party to comply with a requirement that is ambiguous, highly subjective, and impossible. This is not reasoned decision-making. We note that in its proposed reconsideration of various provisions of the Chemical Manufacturing Area Source Rule ("CMAS"), the EPA has revised this requirement and changed the word "facility" to "affected source." (77 FR 4522 January 30, 2012.) If these affirmative defense provisions are included in the final reconsidered Area Source Boiler Rule, the EPA should follow what it has done in CMAS and change "facility" to "affected source."

⁹ The term “affected facility” is used in NSPS and is defined in the NSPS General Provisions at 40 CFR 60.2, but the MACT standards in Part 63 use the term “affected source,” and the definition of affected source in 40 CFR 63.2 states “Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively.” The EPA does define the “affected source” in §63.11194 (“the collection of all existing industrial, commercial, and institutional boilers within a subcategory” or “each new or reconstructed industrial, commercial, or institutional boiler within a subcategory”).

Response: We agree with the comment concerning the use of “affected facility” versus “affected source.” As a result, the EPA is changing “affected facility” to “affected source.”

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 41

Comment: Proposed §63.7501(a)(8) (and corresponding area rule language):

At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

Proposed §63.7501(a)(8) is a general requirement and serves no purpose in the affirmative defense provisions since §63.7501(a)(3) already requires that malfunction emissions be minimized. Furthermore, this paragraph deals with the entire facility not just the malfunctioning equipment or operation. Its inclusion in the affirmative defense provisions suggests that you cannot defend yourself for a particular malfunction event if there are excess emissions (e.g., from a startup or shutdown activity) anywhere else in the facility having nothing to do with the malfunctioning operation.

Response: See the response to EPA-HQ-OAR-2006-0790-2437-A1, excerpt 18. See also the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 25.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 35

Comment: The second sentence in proposed (a)(2), regarding the use of off-shift and overtime labor, is based on misperceptions that repairs are always needed and that using additional labor somehow indicates expediency. As mentioned previously, often the excess emissions have ceased prior to repair work occurring or do not require a repair to be made. Even where repairs are the critical path to minimizing emissions, work often may be managed adequately by shift personnel. In any given case, the enforcement authority may choose to question whether

appropriate steps were taken to minimize emissions, so a firm requirement to bring in off-shift or overtime personnel when they are not needed serves no enforcement purpose. As proposed, this language requires use of off-shift and overtime labor if a source wants to use the affirmative defense, even if the excess emissions were stopped before such personnel could be called or no repair is needed or all needed personnel were already available onsite.

Response: See the response to EPA-HQ-OAR-2006-0790-2444-A1, excerpt 23.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 40

Comment: Proposed §63.7501(a)(6) (and corresponding area rule language):

All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

Proposed §63.7501(a)(7):

All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

Proposed §63.7501(a)(7) (and corresponding area rule language) should be revised to reflect the use of current recordkeeping technology. The use of signed logs has declined with the use of various forms of electronic recordkeeping. Rather operators are directed to focus on optimizing operations, and responding to malfunctions, if necessary, not filling out paperwork. Records are maintained of the event characteristics (often electronically), the amount of excess emissions and the supporting calculations (generally done after the event ends and kept in an engineering file), and the steps taken to deal with the event and the excess emissions (sometimes electronically, sometimes on paper). In fact, most records are electronic and thus it may not even be possible to have them “signed”.

Thus, we recommend the following replace the proposed language.

Records are maintained documenting the event, including actions taken to minimize emissions.

Response: As an alternative, the EPA accepts electronically signed operating logs where the format and method of submission meet the regulatory criteria and are compatible with the EPA and the delegated authorities’ electronic submission systems. Any source submitting records electronically should exercise due diligence to assure receipt by the EPA and the delegated authority.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 22

Comment: The EPA says it "has determined that malfunctions should not be viewed as a distinct operating mode." Since, as defined in §63.2, a malfunction must result in "excess" emissions, and to be "excess" emissions must exceed the emissions that occur during normal operations, it is clear that an emission occurrence cannot be both a malfunction and normal operations. The EPA made this clear in the preamble to the original finalized Part 63 General Provisions where they stated "Excess emissions occur during [SSM] when air pollution is emitted in quantities greater than anticipated by the applicable standard. ... Excess emissions are typically direct indications of noncompliance with the emission standard and, therefore, are directly enforceable." Thus, the EPA has been clear that excess emissions, a malfunction criterion, can only occur when emissions exceed the emission limit for normal operations.

The natural outgrowth of the new position that malfunctions are normal operations is to consider malfunctions in developing the emission limit for normal operations. Yet, the EPA concludes the opposite but offers no explanation of its contradictory positions that malfunctions are normal operations, but should not be considered in developing the emission limitations applicable during normal operations. In fact, the EPA specifically draws the illogical conclusion that since malfunctions are normal operations "any emissions that occur at such times do not need to be factored into development of CAA §112(d) standards, which, once promulgated, apply at all times." Once again no explanation is provided for this nonsensical statement.

Response: The commenter appears to have misinterpreted EPA's explanation for its approach to malfunctions and to have confused several concepts. The EPA has determined that CAA §112 does not require that emissions that occur during periods of malfunction be factored into development of CAA §112 standards. The EPA's position is not that "malfunctions *are* normal operations" as commenter claims. During periods of malfunction, the otherwise applicable standard applies. Specifically, if a malfunction occurs during a period of startup or shutdown and the standard for startup or shutdown is different than the standard during normal operations, then the standard that applies during that malfunction is the startup or shutdown work practice standard.

Further, 40 CFR 63.2 defines malfunctions a type of failure of equipment or process which causes, or have the potential to cause, "the emissions limitations" in an applicable standard to be exceeded, and does not refer to the emission limit "for normal operations" as commenter suggests. The EPA included this limitation in the definition of malfunction to ensure that minor or routine events need not be addressed by SSM plans or reported to the agency. (68 FR 32592 (May 30, 2003).) Nothing in the definition of malfunction contradicts the EPA's rationale for its approach to malfunctions.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the

American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 23

Comment: (Page 57) The EPA further states:

In *Mossville Environmental Action Now v. EPA*, 370 F.3d 1232, 1242 (D.C. Cir. 2004), the court upheld as reasonable standards that had factored in variability of emissions under all operating conditions. However, nothing in CAA §112(d) or in case law requires that the EPA anticipate and account for the innumerable types of potential malfunction events in setting emission standards. *See, Weyerhaeuser v. Costle*, 590 F.2d 1011, 1058 (D.C. Cir. 1978) (“In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by ‘uncontrollable acts of third parties,’ such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.”)

Further, it is reasonable to interpret CAA §112(d) as not requiring the EPA to account for malfunctions in setting emissions standards. For example, we note that §112 uses the concept of “best performing” sources in defining MACT, the level of stringency that major source standards must meet. Applying the concept of “best performing” to a source that is malfunctioning presents significant difficulties. The goal of best performing sources is to operate in such a way as to avoid malfunctions of their units.

Again, however, the EPA fails to explain how the Mossville criterion is met for a reasonable standard of factoring in variability under all operating conditions, when no malfunction emission data is included in the database used to make the variability adjustment.

Response: See the response to EPA-HQ-OAR-2006-0790-2482-A2, excerpt 22.

SSM: Out of Scope

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 58

Comment: In the reconsidered Area Source Boiler Rule, the EPA determined that – consistent with the Agency’s decision in the 2011 Final Area Source Rule - it would maintain a work practice/management practice approach for SSM. (76 FR 80541.) (2012 Reconsidered Rule). CIBO supports this approach and the EPA’s rationale for establishing work practice standards during periods of startup and shutdown. *See* 76 FR 15576-77. (2011 Final Rule) Furthermore, CIBO contends that additional work practices are not necessary to reduce emissions during SSM periods.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Randal G. Oswald

Commenter Affiliation: Integrys Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2

Comment Excerpt Number: 1

Comment: Integrys supports the work practice/management practice approach for startup and shutdown. It is not technically feasible to conduct stack testing during periods of startup and shutdown because of physical limitations and the short duration of startup and shutdown periods. The EPA is correct that operating in startup and shutdown mode for sufficient time to conduct test runs to demonstrate compliance with a stack testing requirement could result in higher emissions than would otherwise occur.

Response: The EPA thanks the commenter for their support.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 8

Comment: The EPA requested comments on whether to include the use of specific fuels during shutdown and startup periods. We also oppose this provision as a standard requirement, since it would be impractical to implement in many occasions.

Response: The EPA did not request comments on this topic for this rulemaking. As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 7

Comment: We welcome the decision to address the startup and shutdown periods and ensure that boiler operators are trained in startup and shutdown procedures, particularly in procedures to minimize emissions. However, the proposal relies only on work practice standards during the startup and shutdown phases while not establishing numeric emission limits or other performance metrics for units for those phases. As suggested in the proposed reconsideration, we would support requiring the use of specific fuels during the startup and shutdown phases that would reduce harmful air emissions in the absence of emissions standards (EPA, 2011d).

Response: See the response to EPA-HQ-OAR-2006-0790-2478-A2, excerpt 8.

Commenter Name: Neil Gormley
Commenter Affiliation: Earthjustice et al.
Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2
Comment Excerpt Number: 8

Comment: The EPA has opted to promulgate work practice standards in lieu of emissions limits for periods of startup and shutdown. Section 112(h)(1) allows the Agency to do so only if it is “not feasible to prescribe or enforce an emission standard.” 42 U.S.C. §7412(h)(1). Section 112(h)(2) then defines that phrase, in relevant part, to mean that “the application of measurement methodology to a particular class of sources is not *practicable* due to technological or economic limitations.” 42 U.S.C. §7412(h)(2) (emphasis added). The EPA has not shown that it is impracticable for sources to monitor emissions during startup and shutdown. The EPA reasons that periods of startup and shutdown are too short to permit monitoring. But the EPA has not determined the typical duration of startup and shutdown for these units. Nor does the EPA’s definition of startup and shutdown require that these periods be limited to any particular length of time. It is therefore arbitrary for the EPA to conclude that enforcement of emissions limitations during these periods is impracticable. The EPA must, at a minimum, determine for which units emissions monitoring during these periods is truly impracticable and limit the work practice standard to those units.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Recordkeeping and Reporting Requirements: Energy Assessment Report

Commenter Name: Timothy Serie
Commenter Affiliation: American Coatings Association (ACA)
Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1
Comment Excerpt Number: 15

Comment: ACA generally supports the following proposed changes to the Area Source Boiler Rule:

EPA clarification that the assessment does not need to be submitted to the EPA but may be kept onsite.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1
Comment Excerpt Number: 48

Comment: CIBO supports protecting CBI to the fullest extent allowed. As CIBO stated in its Petition for Reconsideration of the final Area Source Boiler Rule, the EPA should provide CBI protection for area sources as it does for major sources.

Submission of energy assessments is not required under the final rule. CBI is equally an issue for companies operating area source boilers as it is for major source boilers and process heaters. As such, a similar approach in both rules is justified.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 50

Comment: The information collected to comply with the energy assessment requirement is not “emissions data.” 40 CFR §2.301(e). It is not “necessary” to determine emissions emitted by a source. *Id.* Rather, the energy assessment includes:

- An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
- An inventory of major energy consuming systems;
- A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
- A review of the facility’s energy management practices and recommendations for improvements;
- A list of major energy conservation measures and their energy savings potential;
- A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

76 FR 80549.

The foregoing information is commercially valuable because its release would potentially provide competitors with a window into the reporter’s current operations, operating costs, and expansion plans. For the EPA to require the public disclosure of information of this nature (including engineering plans or the costs of energy savings projects), ignores the competitiveness implications of such disclosure. A company that develops a method to significantly reduce its energy costs – whether through improved maintenance practices or new projects - will not want its competitors to be aware of such proprietary information. Similarly, that company would not want to make its competitors aware of any operating constraints that might highlight weaknesses within a facility. If energy assessments are made publically available, competitors that took a minimalist approach in conducting their own energy assessments could benefit from the disclosures of others without incurring the time and expense to independently develop those plans. *See Webb v. Dep’t of Health & Human Serv.*, 696 F.2d 101, 103 (D.C. Cir. 1982). As a result, reporters that prepare more comprehensive and detailed energy assessments would suffer irreparable harm. The EPA is not authorized under the CAA or its implementing regulations to

cause companies such injuries by mandating the disclosure of proprietary information. 42 U.S.C. §7414(c); 40 C.F.R. §2.301(b)(i).

The lapse of time would not diminish the sensitivity of disclosing this information. There is no time after which this information could be released that would avoid these potential competitive harms. Given these concerns, it would not be appropriate to impose a time limit on the confidentiality of the energy assessment information.

Response: The EPA agrees with the commenter that information in an energy assessment may contain sensitive information. The requirement at 40 CFR 63.11225(c) is being amended to remove the requirement for submitting, upon request, the energy assessment.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 49

Comment: The EPA does have broad authority under §114 of the CAA to request information from sources. However, the EPA cannot circumvent the procedural requirements that apply to information requests by bootstrapping an information request to an unrelated rule. Here, the EPA is exercising its authority under §112. *See, e.g.*, 76 FR 80533-34. As the EPA acknowledges, §112 directs the Agency “to develop NESHAP for area sources and which require existing and new major sources to control emissions of HAP using MACT based standards.” *Id.* An energy assessment is not an emission standard; therefore, if the EPA would like to collect this information for policy purposes or to inform other rulemaking efforts, it must comply with the procedural requirements to issue a §114 request.

To issue a valid §114 request, the EPA must comply with the Paperwork Reduction Act (PRA), which requires that the Agency receive approval from OMB before issuing similar §114 requests to ten (10) or more respondents collecting substantially similar information in any 12-month period. 5 CFR §1320.3(c). The OMB’s approval is in the form of an Information Collection Request (ICR), which must go through public notice and comment.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 50.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 51

Comment: CIBO objects to requiring sources to submit their energy assessments even if they are afforded CBI status because those protections are not necessarily complete or permanent. Such protections are insufficient because the EPA CBI determinations are subject to reevaluation. 40 CFR §2.205(h). The EPA has the discretion to modify prior CBI determinations

and conclude that CBI is no longer entitled to confidential treatment because of a change in applicable law or newly discovered or changed facts. *Id.*

For the foregoing reasons, entities should only be required to submit a certification that the energy assessment was conducted.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 50.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A2

Comment Excerpt Number: 9

Comment: It appears that in the final Area Source Boiler Rule, the EPA requires submission of the energy assessment report only upon request. This approach is contrary to the approach taken in the final Major Source Boiler Rule, where §63.7530(e) provides: [y]ou must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility. (76 FR 15675.) Considering the express text of the final regulations, submission of energy assessment reports is not required under the final Boiler rule. CBI is equally an issue for companies operating area source boilers as it is for major source boilers and process heaters. As such, a similar approach in both rules is justified. The EPA has provided no justification for requiring submission of the energy assessment reports for area sources while not requiring their submission for major sources. From a review of its response to comments it appears it was the EPA's intention to treat energy assessment reports for area sources similarly to their treatment for major sources. Specifically, in the Response to Comments Document, Vol.2, p.461, the EPA states:

In the final rule, the energy assessment is not required to be submitted to EPA or the permitting agency. The final rule requires that the permitting agency be notified that the energy assessment has been conducted according to the requirement in the final rule. The facility is required to keep records that the work practices and management practices were complied with.

It appears that the EPA did not fully incorporate its intentions with regard to the treatment of CBI in the final Area Source Boiler Rule. Considering this, CIBO recommends that the EPA reconsider revising the text of §63.11241(c) to read as follows: "If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of this subpart and is an accurate depiction of your facility ~~and submit, upon request, the energy assessment report.~~

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 50.

Recordkeeping and Reporting Requirements: Out of Scope

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 5

Comment: In addition, the EPA has proposed to amend 40 CFR 63.11225 (d) to allow records to be maintained at a central location provided they are readily accessible by computer or other means. We believe that this makes far more sense than requiring records to be maintained onsite. This is more cost-effective and we believe will allow for better records management. The EHSCP strongly supports the EPA's efforts to update record retention requirements to be consistent with current technology and allow the use of electronic document management thus providing regulated entities the flexibility to choose the record retention approach that is most appropriate for their operational and business conditions.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 6

Comment: The EPA has proposed to amend 40 CFR 63.11225(d) to allow records to be maintained at a central location provided they are readily accessible by computer or other means. We believe that this makes far more sense than requiring records to be maintained on site. This is more cost-effective and we believe will allow for better records management. The EHSCP strongly supports the EPA's efforts to update record retention requirements to be consistent with current technology and allow the use of electronic document management thus providing regulated entities the flexibility to choose the record retention approach that is most appropriate for their operational and business conditions.

Response: The EPA thanks the commenter for their response and additional justification.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 6

Comment: NESCAUM recommends that the EPA insert language requiring sources asserting exemptions from the Area and Major Source Boiler Rules to maintain records to support their exemption determination.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing

aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 4

Comment: The EPA has proposed to amend 40 CFR 63.11225 (c)(2) to specify that records of fuel usage and type are only required for boilers that are subject to numerical emissions limits. Requiring fuel records for units that are not subject to emissions limits would result in unnecessary administrative burdens without any corresponding environmental benefit. Therefore the EHSCP supports this proposal.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 5

Comment: The EPA has proposed to amend 40 CFR 63.11225(c)(2) to specify that records of fuel usage and type are only required for boilers that are subject to numerical emissions limits. Requiring fuel records for units that are not subject to emissions limits would result in unnecessary administrative burdens without any corresponding environmental benefit. Therefore the EHSCP supports this proposal.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 4

Comment: The EPA is proposing to amend 40 CFR 63.11223(b)(6)(iii) to specify that the type and amount of fuel need only be included on the biennial report if the unit was physically and legally capable of using more than one type of fuel during that period. This clarification serves to resolve some of the confusion posed by the 2011 final rule. Therefore, the EHSCP supports this proposed clarification.

Response: The EPA thanks the commenter for their comment and support.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 1

Comment: Wyoming DEQ has concerns regarding the overlap of requirements in the rules with those in the General Provisions, particularly recordkeeping and reporting. Complying with both the General Provisions and the requirements in the rule causes confusion for both the state and industry. This confusion often results in small companies, with limited resources, having to hire a third party contractor to ensure compliance. Wyoming DEQ recommends that the EPA add language that waives the recordkeeping and reporting general provisions when there are very specific, detailed requirements for recordkeeping and reporting within the rule.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that Table 8 of Subpart JJJJJ clarifies the relationship to the General Provisions and specifies where Subpart JJJJJ requirements apply in lieu of specific General Provision requirements, and that parties had an opportunity to comment on this issue in 2010.

Compliance: Initial compliance schedule for existing boilers subject to tune-ups

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 11

Comment: The EPA is proposing to amend 40 CFR 63.11196 to specify that all existing boilers subject to the tune-up requirement would have 2 years (by March 21, 2013) in which to demonstrate initial compliance, instead of 1 year to demonstrate initial compliance. The EPA requested comment on whether the initial compliance period for the tune-up requirement should be extended to 3 years. (76 FR 80535.)

For many of the same reasons discussed above, the NAM recommends that this compliance period should be extended to 3 years. *See* 76 FR 15579, Table 4 (identifying 183,000 existing area source boilers). Combining a potential shortage of environmental engineers with the long range planning required for testing and work at facilities, it will be difficult to schedule and complete the testing needed to comply with the tune-up requirements in time to meet a 2 year deadline, particularly for facilities with multiple boilers.

Response: The EPA acknowledges this commenter's concerns regarding the time allowed for existing boilers subject to the tune-up requirement to demonstrate initial compliance. Numerous

other commenters also recommended that the initial compliance period should be extended to 3 years. In the December 23, 2011 proposed reconsideration of final rule action, we specifically requested comment on whether the initial compliance period for the tune-up requirement should be extended to 3 years. The EPA has determined that it is appropriate to provide a 3-year initial compliance period. In the final rule, the EPA is amending 40 CFR 63.11196 to specify that all existing boilers subject to the tune-up requirement will have 3 years (by March 21, 2014) in which to demonstrate initial compliance, instead of 1 year as specified in the 2011 final rule (76 FR 15554, March 21, 2011) or 2 years as specified in the proposed reconsideration of final rule action (76 FR 80532, December 23, 2011). The extension to the initial compliance period should alleviate the industry's concerns regarding having the time to schedule and complete the tune-ups, especially for facilities with numerous affected boilers.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 4

Comment: Because the EPA has also proposed revisions to the NHSM Rule,⁵ many sources are uncertain as to how their secondary materials will be classified, and therefore whether the combustion unit will be regulated under the boiler area source rule or the CISWI Rule.⁶ Since resolving this issue will effectively amend the work practice standard by revising the scope of its applicability, ACC believes that there will be a substantial number of affected units for which the waste/fuel determination will need to be made and the work practice requirements completed. ACC urges the EPA to set the compliance deadline at 3 years from March 21, 2011, the promulgation date of the Final Rule.

⁵ 76 FR 80452

⁶ 76 FR 80452

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 35

Comment: The EPA has also requested public comment on whether the compliance date for boiler tune-ups for area sources should be extended to March 2013, as the EPA is currently proposing, or if the compliance date should be extended to March 2014. To be consistent with the initial compliance date for boiler tune-ups at major sources, the EPA should extend the compliance date for area sources to March 2014. Although the tune-up requirements do not appear overly burdensome, affected sources will still need sufficient time to determine what needs to be included in the tune-up protocol, when to schedule the initial tune-up, and to develop the reporting protocol that needs to be submitted to the EPA or to the delegated state or local agency. Further, there appears to be no reason why the smaller area sources should not have the

full 3 years to comply that is currently afforded to major sources. Extending the compliance date for tune-ups would also allow extra time for states to identify and provide outreach and compliance assistance to area source facilities. This assistance is very important, because many of these sources have had little prior experience in understanding and complying with complex air regulations. The EPA is not providing states additional funding to implement these new standards. Having sufficient time before the compliance deadline to assistance affected area sources will help ease the implementation burden for states and will almost certainly minimize violations after the compliance date.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 5

Comment: We agree with extending the compliance date for the initial tune-up for the reasons outlined below. The EPA should also clarify that §63.11223(b)(7), which provides the option to postpone a tune-up for non-operating units until up to 1 week following startup, applies to the required initial tune-up as well as the required ongoing tune-ups.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11, regarding the initial compliance date for existing boilers subject to the tune-up requirement.

The EPA does not believe it is necessary to clarify the regulatory language regarding postponement of the initial tune-up for non-operating boilers. Paragraphs (a) and (b) of 40 CFR 63.11214 specify that boilers subject to the tune-up requirements must conduct a performance tune-up according to 40 CFR 63.11223(b). By specifying 40 CFR 63.11223(b) in its entirety, paragraph (b)(7) is included.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 7

Comment: We support the EPA's proposal to extend the initial compliance period past 1 year. The EPA should extend the deadline for the initial tune-up to 3 years from promulgation of the March 2011 final rule in order to allow companies adequate time to complete the initial tune-ups and also to harmonize rule compliance dates for existing sources. The EPA did not provide an opportunity to comment on the early initial tune-up deadline as it was not raised in the proposed rule nor did the Agency provide adequate justification in the March 2011 final rule for shortening the compliance time for units required to conduct a tune-up. As the EPA has noted, there are companies (especially those with many boilers or boilers that operate only on certain schedules) that will not be able to meet the 1 year compliance time.

The EPA estimated that there are 183,000 existing area source boilers. (76 FR 15579, Table 4.) Affected sources will have to develop procedures and train personnel or engage contractors for the tune-ups required by this rule. Sites will be required to set up recordkeeping practices and compliance assurance procedures to meet the requirements of this rule. For many companies, 1 year is not enough time to complete the initial tune-up and associated compliance activities.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 5

Comment: We support the EPA's proposal to extend the initial compliance period past 1 year. The EPA should extend the deadline for the initial tune-up to 3 years from promulgation of the March 2011 final rule in order to allow companies adequate time to complete the initial tune-ups and also to harmonize rule compliance dates for existing sources. The EPA did not provide an opportunity to comment on the early initial tune-up deadline as it was not raised in the proposed rule nor did the Agency provide adequate justification in the March 2011 final rule for shortening the compliance time for units required to conduct a tune-up. As the EPA has noted, there are companies (especially those with many boilers or boilers that operate only on certain schedules) that will not be able to meet the 1 year compliance time. (76 FR 80535.)

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 3

Comment: ACC recommends that the EPA extend the initial tune-up compliance deadline to 3 years from March 21, 2011, the date of promulgation of the final rule. This extension would allow companies sufficient time to complete the initial tune-ups and to harmonize rule compliance dates for existing sources. The EPA did not provide adequate justification in the final rule for shortening the compliance time that it had originally proposed for units requiring a tune-up. As the EPA has noted in this reconsideration proposal, there are companies (especially those with many boilers or boilers that operate only on certain schedules) that will not be able to meet the 1 year compliance time.

The EPA estimated that there are 183,000 existing area source boilers. (76 FR 15579, Table 4.) Affected sources will have to develop procedures and train personnel or engage contractors for the tune-ups required by this rule, and will also be required to set up recordkeeping practices and compliance assurance. For many companies, one additional year would not be enough time to complete these initial compliance requirements.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 4

Comment: Section 112(i)(3)(A) of the CAA requires existing sources to demonstrate compliance as expeditiously as practicable but no later than 3 years after the effective date of such standard. While PA DEP believes that a 2-year period for the initial compliance demonstration for the tune up requirement should provide adequate time to complete tune-ups on existing sources, we believe that a 3-year compliance deadline for the tune-up requirements would be consistent with section §112(i) of the CAA.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 2

Comment: The EPA specifically requested comment on whether the initial tune up compliance date should be extended to 3 years following the effective date of the 2011 rule. Extending the compliance date to 3 years would provide consistency with the time frames allowed for existing boilers subject to work practices under the Major Source Boiler Rule. This extension would further provide industry more flexibility in order to comply with the tune-up requirement. The EHSCP supports this further extension.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 2

Comment: The original tune-up requirement could not have been completed within 1 year of the rule's promulgation by most area source facilities, and the 1-year deadline was therefore irrational. Many area sources are on the verge of not being able to meet that deadline for scheduling or fuel versus waste reasons identified below and will either shut down or face non-compliance actions despite the fact the EPA has proposed moving the deadline for valid reasons. There are also likely thousands of small sources that are not aware of the rule and its applicability to their units.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 3

Comment: In the proposed reconsideration rule, the EPA proposes to allow 2 years for initial compliance, requiring the tune-up by March 21, 2013. (76 FR 80535.) The EPA also seeks comment on whether 3 years is more appropriate, requiring the tune-up by around March 2014. (76 FR 80535.)

The timing of initial compliance should be resolved in favor of providing sources with ample time to meet the requirements of the tune-up. The tune-up on its face requires a significant amount of lead time. It includes, for example, stack testing for CO and O₂ per 40 CFR 63.11223(b)(5). The EPA estimated that there are 183,000 existing area source boilers (76 FR 15579, Table 4.) Affected sources will have to develop procedures and train personnel or engage contractors for the tune-ups required by this rule. Sites will be required to set up recordkeeping practices and compliance assurance procedures to meet the requirements of this rule. For many facilities, 1 year is not enough time to complete the initial tune-up and associated compliance activities, especially where a facility has multiple area sources on site.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 7

Comment: The proposed amended §63.11223(b)(5), which is applicable to both initial and continuous compliance demonstrations for work practices, requires that the tune-up be conducted “while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.” The facility also has to state in its Notification of Compliance Status that “No secondary materials that are solid waste were combusted in any affected unit.” [§63.11225(a)(4)(iv)]. Each of these leads to a timing concern that supports the 3-year compliance timeline for the initial tune-up requirement.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Jessica Bridges

Commenter Affiliation: U.S. Clean Heat & Power Association (USCHPA)

Document Control Number: EPA-HQ-OAR-2006-0790-2451-A1

Comment Excerpt Number: 1

Comment: The EPA now proposes that all existing boilers subject to the tune-up requirement would have 2 years (by March 21, 2013) in which to demonstrate initial compliance. The EPA is requesting comment whether this should be extended to 3 years. Consistent with USCHPA's

comments in the Major Source Docket filed today February 21, 2012 we support the extension to 3 years.

Response: See the response to EPA-HQ-OAR-2006-0790-2466-A1, excerpt 11.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 1

Comment: The 3-year initial compliance date originally provided by the proposed rule would have allowed for staggering of the tune-ups over 3 years, while the final rule required initial tune-ups be conducted within 1 year of the effective date of the 2011 final rule. Performance of the initial tune-up within 1 year is simply not practical for industries that have a large number of affected or seasonal boilers. The EHSCP supports the EPA's proposal to extend the time frame allowed to complete these initial tune-ups.

Additionally, the EPA specifically requested comment on whether the initial tune up compliance date should be extended to 3 years following the effective date of the 2011 rule. Extending the compliance date to 3 years would provide consistency with the timeframes allowed for existing boilers subject to work practices under the Major Source Boiler Rule. This extension would further provide industry more flexibility in order to comply with the tune-up requirement. The EHSCP supports this further extension.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Barbara Patton

Commenter Affiliation: AT&T Services, Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1

Comment Excerpt Number: 1

Comment: As the EPA noted, the 3-year initial compliance date originally provided by the proposed rule would have allowed for staggering of the tune-ups over 3 years, while the final rule required initial tune-ups be conducted within 1 year of the effective date of the 2011 final rule. Performance of the initial tune-up within 1 year is simply not practical for industries that have a large number of affected or seasonal boilers. The EHSCP supports the EPA's proposal to extend the time frame allowed to complete these initial tune-ups.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Michael G. Dowd

Commenter Affiliation: Virginia Department of Environmental Quality (VADEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2434-A1

Comment Excerpt Number: 3

Comment: VADEQ recommends that EPA allow the full 3 years originally provided in the proposed rule for initial compliance for tune-ups. Not only would the additional time allow facilities with many small boilers to schedule and complete the testing needed to comply with the tune-up requirements but would also give states additional time to provide outreach to facilities that may not be aware of the regulation.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 7

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provisions:

Extend the time for initial compliance for those boilers subject to the tune-up management practice;

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 7

Comment: Extend initial compliance schedule through 2014 at a minimum.

While we support the EPA's proposal to extend the tune-up requirements from 1 year to 2 in the rule, we believe businesses will need more than 2 years. For the majority of area sources affected by this rule, this is their first experience with environmental regulations. As technical assistance providers, we will need sufficient time to identify and notify the affected sources. In addition, vendors capacity to meet the needs of all affected sources in both major and area source rules will be challenged in the space of only 1 or 2 years.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 1

Comment: Maine DEP supports delaying the compliance date for this regulation until May 21, 2014. Maine DEP continues to receive several calls each month from sources just becoming

aware of this regulation. Most Maine boiler owners have informed us they already perform tune-ups to maximize their units' efficiency during Maine's cold winters, but not all tune-up technicians perform tune-ups as prescribed in the proposed rule. Several boiler owners had their boilers tuned this summer, but under the proposed rule would be required to do another costly tune up to fit the EPA prescribed method.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 4

Comment: Extension of Deadline to Complete Initial Tune-ups

We support the EPA's proposed 1-year extension (from March 21, 2012 to March 21, 2013) to complete initial tune-ups for boilers and process heaters subject to work practice standards.

Response: The EPA thanks the commenter for their support. We would like to point out, however, that process heaters are not one of the categories of sources being regulated under this area source action.

Commenter Name: Russell A. Wozniak

Commenter Affiliation: Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-2423-A1

Comment Excerpt Number: 2

Comment: Dow supports the extension of the initial compliance date for existing boilers subject to tune-up requirements at least to March 21, 2013.

Dow supports the EPA's proposal to extend the compliance date for completing tune-ups for existing boilers to March 21, 2013. Dow would also support extending the deadline for the initial tune-up to 3 years from promulgation of the March 2011 final rule (March 21, 2014) in order to harmonize these dates to some degree with the Boiler MACT Rule, which allows 3 years to complete all of the required tune-ups. This additional time will be used by sites to secure resources to complete the tune-ups and to establish internal work practices and procedures to manage the repetitive task of conducting tune-ups in the future.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Derek Grasso

Commenter Affiliation: Covanta Energy Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2430-A2

Comment Excerpt Number: 1

Comment: Covanta supports the proposed amendment to establish the initial tune-up compliance date as March 21, 2013. Tune-up of Covanta's boilers involves a facility outage, when the boiler is shut down for an extended period and required maintenance is conducted. These periods are scheduled months or even a year in advance and must be coordinated with the electric utility, fuel suppliers and maintenance contractors. Providing 2 years instead of 1 for the initial compliance period will allow Covanta to maintain its existing outage schedule and coordinate the required pre and post outage CO emissions testing.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 2

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule:

Proposal to require an initial tune-up by March 21, 2014 and revision to the requirement for subsequent tune-ups only for oil-fired boilers equal to or less than 5 MMBtu/hr to tune-up once every 5 years; however, the EPA should extend the deadline for the initial tune-up to 3 years from promulgation of the March 2011 final rule in order to allow companies adequate time to complete the initial tune-ups and also to harmonize rule compliance dates for existing sources

Response: The EPA thanks the commenter for their support.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 2

Comment: Alternatively, or in conjunction with a public statement regarding a deadline extension, the EPA could issue an enforcement discretion guidance letter publicly stating that it will not enforce against facilities missing the March 21, 2012, tune-up deadline while it is reconsidering the rule.

The EPA recently issued a comparable letter regarding its reconsideration of the NESHAP for Major Source Boilers and Process Heaters and NSPS/Emission Guidelines for CISWI. A similar letter regarding the NESHAP for Area Source Boilers would effectively alleviate much of the concern discussed above.

Recommendation: The EPA should extend the deadline for initial tune-ups for existing area source boilers at least 1 year from March 21, 2012, to March 21, 2013 and, as soon as possible, either publicly confirm that the area source rule will be stayed for 90 days if the deadline is not

extended before the March 21, 2012, or, issue an enforcement discretion guidance letter assuring that the EPA will not enforce the March 21, 2012 deadline pending reconsideration.

Response: As the EPA's response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11, explains, we are finalizing an initial compliance date of March 21, 2014 for existing boilers subject to the tune-up requirement.

40 CFR 63.11196(a)(1) of the March 21, 2011, final rule (76 FR 15554) requires that owners and operators of existing affected boilers subject to the tune-up requirement complete the initial boiler tune-up by March 21, 2012. In addition, 40 CFR 63.11225(a)(4) requires that owners and operators of existing affected boilers subject to the tune-up requirement submit their NOCS no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196. That means that those owners and operators were required to submit their NOCS by July 19, 2012. The Notification must include, among other information, a certification that states "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

On March 13, 2012, the EPA issued a No Action Assurance (NAA) to all owners and/or operators of existing industrial boilers and commercial and institutional boilers at area sources of HAP emissions stating that we would not enforce the requirement to conduct an initial tune-up by March 21, 2012. The NAA was primarily based upon the EPA's concern that sources were reporting a shortage of qualified individuals to prepare boilers for tune-ups and then conduct those tune-ups by the regulatory deadline, as well as upon the uncertainty in the regulated community resulting from the pending reconsideration of the Area Source Boiler Rule. The March 13, 2012, NAA states that it remains in effect until either (1) 11:59 PM EDT, October 1, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier.

As the July 19, 2012, NOCS deadline approached, a final rule addressing the proposed reconsideration of the Area Source Boiler Rule had not been issued, and thus the NAA continued to remain in effect. Nothing that the EPA learned since the issuance of the original NAA letter led us to question our original concerns about the feasibility of all sources timely completing an initial tune-up. Further, sources that did not complete a tune-up could not certify that they conducted one. Thus, on July 18, 2012, the EPA extended the NAA for sources required to complete an initial tune-up by March 21, 2012, to also include the deadline for submitting the NOCS regarding the initial tune-up. In addition, given that no final rule addressing the proposed reconsideration of the Area Source Boiler Rule had been issued as of July 18, 2012, the pending reconsideration continued to create uncertainty in the regulated community. Thus, the NAA letter also amended the expiration date of the March 13, 2012, NAA, such that the NAA would remain in effect until either (1) 11:59 PM EST, December 31, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier.

This final rule addressing the proposed reconsideration revises the compliance date for existing affected boilers subject to a tune-up from March 21, 2012, to March 21, 2014. The July 19, 2012, deadline for submitting the NOCS regarding the initial tune-up is reset to July 19, 2014, as a result of revising the compliance date for existing affected boilers subject to a tune-up to March 21, 2014. Owners or operators that had not yet conducted their boiler tune-up, but submitted a

NOCS by July 19, 2012, simply to notify the EPA that the tune-up had not been completed, will need to submit a revised NOCS after their boiler tune-up is conducted. The NAA letters can be found at: http://www.epa.gov/ttn/atw/boiler/area_source_nna_2012-03-13.pdf.

Commenter Name: Donald R. Schregardus

Commenter Affiliation: Deputy Assistant Secretary of the Navy, Clean Air Act Services Steering Committee, Department of Defense (DOD)

Document Control Number: EPA-HQ-OAR-2006-0790-2418

Comment Excerpt Number: 1

Comment: Some military facilities already perform annual boiler tune-ups. However, at some facilities, the last tune-up may not fully conform to the documentation requirements of the final rule because the information was not yet available to those who performed the tune-ups. The proposed extension would save time and resources at these facilities by allowing them to retain their current tune-up schedule and prevent them from performing an additional off-cycle tune-up.

Other military facilities may not have performed a tune-up within the last year and will need to perform a tune-up by March 21, 2012.

Without assurance that the deadline will be extended or that the Area Source Boiler Rule will be temporarily stayed, many of these facilities will perform tune-ups only to find it is no longer required. The preamble to the proposed amendments states: *“If the Agency has not taken final action on the initial compliance date for tune-ups prior to the date (March 21, 2012) for initial compliance, we could stay the effectiveness of the rule for 90 days, as allowed under CAA section 307(d)(7)(B), so that the Agency could complete reconsideration.”* The use of the word “could” does not assure facilities that the March 21, 2012, deadline will not be enforced in the event that the EPA does not complete its reconsideration before that time. Many facilities cannot wait until March to see if the rule is amended or stayed. Due to the complexities of federal fiscal requirements, some military facilities need to make financial arrangements well in advance of this deadline to ensure the tune-ups are completed. The EPA could resolve this regulatory uncertainty by publicly stating that they will stay the area source rule for 90 days if the deadline is not extended before March 21, 2012.

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 2

Comment: We take this opportunity to strongly urge the EPA to take immediate action to stay or defer the March 21, 2012 deadline for conducting tune-ups under the Area Source Boiler Rule work practice provisions for existing boilers. Unfortunately, for the biomass-fired boiler described above we have not been able to complete a determination of the status of the purchased NHSM as a fuel due to ongoing uncertainties with the concurrently re-proposed NHSM Rule and

this continues to cause delay of the required tune-up of the boiler that has a rapidly approaching deadline in March. Because of the NHSM uncertainties, the time between the May 2011 effective date of both the final NHSM Rule and the final Area Source Boiler Rule has been too short to complete the NHSM determination needed to clear the way to conduct the required tune-up work practice. And because the NHSM Rule provisions of interest will not be settled until that re-proposed rule is finalized later this Spring, our facility is caught in an impossible situation resulting from what clearly are some imperfectly designed links among this complex set of rulemakings. We are certain there are many facilities facing similar or other difficulties with the timing of the tune-up requirement. Consequently, we must strongly urge the EPA to provide a stay of the current rule's initial tune-up deadline of March 21, 2012 as soon as possible.

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 1

Comment: THE MARCH 21, 2012 COMPLIANCE DEADLINE SHOULD BE STAYED

Under the final rule now in effect, existing area sources must complete their initial tune-up by March 21, 2012 in order to comply with the rule. (76 FR 15564.) The EPA anticipates staying the effective date of the rule now in effect, so that the initial tune-up will not be required by March 21, 2012. (76 FR 80535.) The EPA will accomplish this through a separate notice in the Federal Register.

CIBO strongly supports staying the effect of the rule as early as possible and eliminating the March 21, 2012 tune-up requirement. The final Area Source Boiler Rule was published on March 21, 2011 and required compliance 1 year later, on March 21, 2012. Beginning in 2011, many sources sought from regulators a case-by-case extension of that deadline to avoid noncompliance. Although to our knowledge the EPA has not granted case-by-case extensions, the EPA has given its assurance that it will address the matter globally so that sources will not risk noncompliance. CIBO supports the stay of that deadline as soon as possible.⁴

⁴ CIBO members have heard that the EPA is considering issuing a non-enforcement assurance letter rather than issuing a stay of the tune-up deadline. CIBO strongly urges the EPA to instead issue the stay of the tune-up deadline as soon as possible. Many companies have environmental compliance policies that will not allow a generally issued non-enforcement assurance letter to relieve a duty to comply with valid, in effect regulatory provision. An enforcement discretion letter from the EPA does not relieve facilities from citizen suits or non-compliance actions by permitting agencies. These facilities may have to shut down if conducting a tune-up by the deadline is not possible for reasons explained elsewhere in these comments.

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 6

Comment: The EPA needs to provide a stay of the current rule's initial tune-up deadline of March 21, 2012 as soon as possible. Many area sources are on the verge of not being able to meet that deadline for scheduling or fuel versus waste reasons identified below and will either shut down or face non-compliance actions despite the fact the EPA has proposed moving the deadline for valid reasons.

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 7

Comment: The EPA proposes that all existing boilers would have 2 years (by March 21, 2013) to demonstrate initial compliance. However, we do not expect the majority of sources to be able to take advantage of this proposed flexibility due to the timing of the proposal. The final rule requires area sources to complete this requirement by March 21, 2012, which is just 1 month after comments for these proposals close. As we do not expect the EPA to complete review of comments and finalize the rule in 1 month, if the EPA intends to finalize this change, the Agency should immediately issue a 90-day stay notice under CAA §307(d)(7)(B).² Alternatively, we understand the EPA is considering issuing a NAA letter, stating that the Agency would not enforce this provision. Either way, we expect this change will not provide the intended flexibility for the vast majority of sources that seek to ensure compliance with the final rule.

²The preamble to the proposed reconsideration states that if "the Agency has not taken final action on the initial compliance date for tune-ups prior to the date (March 21, 2012) for initial compliance, we could stay the effectiveness of the rule for 90 days, as allowed under CAA §307(d)(7)(B), so that the Agency could complete reconsideration" (76 FR 80535, emphasis added).

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 5

Comment: Given the rapid approach of the current March 21, 2012 completion deadline, the EPA should expeditiously proceed with its proposal to issue a 90-day stay of this requirement while it completes this rulemaking. In addition, the EPA should clarify in the final

reconsideration rule that tune-ups performed in advance of this rulemaking in anticipation of the March 21, 2012 compliance deadline will satisfy compliance requirements of the final reconsideration rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 8

Comment: We recommend that the EPA provide a short term extension to the March 2012 deadline, to allow the Agency sufficient time to issue a final amended rule with the extended timeline. Otherwise, businesses are taking chances with their compliance status by not completing the tune up requirements currently in effect.

Response: See the responses to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11, and EPA-HQ-OAR-2006-0790-2418, excerpt 2.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 3

Comment: OCC supports the proposed extension of time, until March 31, 2014, for facilities to complete the initial tune-ups. Facilities need additional time to complete the initial tune-ups because detailed requirements of this rule will not be finalized until mid-to-late 2012. A very large number of units subject to this rule will be scrambling to finalize tune-up plans, compete for contractors and schedule the tune-ups. The best way to ensure that operators can achieve reliable and timely tune-ups is to postpone the compliance deadline to March 21, 2014.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 19

Comment: In its Area Source Boiler Rule reconsideration, the EPA proposed to amend 40 CFR 63.11196 to specify that all existing boilers subject to the tune-up requirement would have 2 years (by March 21, 2013) in which to demonstrate initial compliance, instead of 1 year to demonstrate initial compliance. In addition, the EPA requested comment on whether the initial compliance period for the tune-up requirement should be extended to 3 years (i.e., until March 21, 2014) (76 FR 80535).

Compliance with the March 21, 2012 deadline is logistically challenging for area sources and tune-up technicians given the short timeline, large universe of sources, and unfamiliarity with requirements under this rule. Therefore, NESCAUM supports extending the compliance period for the initial tune-up requirement to 3 years, until March 21, 2014.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 4

Comment: Although most facilities are unable to meet the March 2012 tune-up deadline under the March 2011 final rule, any facility which does in fact meet the deadline should be considered to have met the first tune-up requirement under the reconsidered rule, and subsequent tune-ups should be deferred to align with the frequency established by the new rule.

Response: The EPA agrees with the commenter that any facility that completed their initial tune-up by March 21, 2012 should be considered to have met their initial tune-up requirement. We disagree with the commenter, however, that subsequent tune-ups for those facilities should be deferred to align with the frequency established by the amended final rule (i.e., basing subsequent tune-ups on March 21, 2014). It would be unreasonable to allow a facility that met their initial tune-up requirement in March 2012 until March 2016 or March 2019, depending on whether they are subject to biennial or 5-year tune-ups, to conduct their first subsequent tune-up. That would not be representative of the biennial or 5-year tune-up requirements that we determined to be GACT. Although an additional “initial tune-up” is not required for facilities that completed their initial tune-ups by March 21, 2012, their subsequent tune-ups dates must be based on that initial tune-up (e.g., 2 years or 5 years from the initial tune-up date).

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 8

Comment: Because resolving the fuel versus waste issue will effectively amend the work practice standard by revising the scope of its applicability, the EPA would have authority to set the compliance deadline at 3 years after the effective date of the final reconsideration rule. Because of the substantial number of affected units and in light of the ongoing uncertainty on the waste/fuel issue, there is ample justification for setting the deadline at this point. Therefore, we request that the EPA set the compliance deadline for completing the work practice requirements on the date 3 years after the effective date of the final reconsideration rule.

Response: The EPA disagrees that the initial compliance date for completing the work practice/management practice requirements should be re-set based on promulgation of the final reconsideration rule. We also disagree that sources have endured such uncertainty with regard to

the NHSM regulatory action that there is ample justification for extending the compliance date. Only a relatively small subset of the covered boilers are affected by the NHSM reconsideration. With the exception of the initial compliance date for existing boilers subject to the tune-up requirement, the initial compliance date for regulatory requirements has been March 21, 2014 since the June 2010 proposal. The EPA is now revising the initial compliance date for existing boilers subject to the work practice or management standard of a tune-up and is allowing additional time to complete the initial tune-up by establishing a date of March 21, 2014 as the initial compliance deadline.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser

Document Control Number: EPA-HQ-OAR-2006-0790-2452-A1

Comment Excerpt Number: 3

Comment: We believe the EPA should reset the initial tune-up deadline to 3 years from the date of promulgation of the revisions to the March 2011 final rule, expected later this Spring. This will allow companies with multiple boilers subject to tune-ups under either or both the Area Source Boiler Rule and the Major Source Boiler MACT adequate time to efficiently schedule and complete the initial tune-ups. The EPA should recognize that like many other companies, we largely operate our own tune-up program and therefore resources are limited within short time frames across many sites subject to tune-ups under one or the other of these new standards. The 3-year compliance time allowed under the CAA is necessary to meet the tune-up obligations without undue burden.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 8.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 9

Comment: Initial compliance should run from promulgation of the final reconsideration rule, not from the March 21, 2011 promulgation date of the initial final rule. Issuance of the final reconsideration rule will end a period of intense uncertainty for sources regarding what would be their final regulatory requirements. Particularly for facilities with multiple major and area sources, the potential impact of multiple iterations of the four interrelated boiler MACT rules as initially proposed, then finalized, then proposed as reconsidered, has changed over 2 years since the EPA's initial proposals. These facilities should be guaranteed enough time to meet the final regulatory requirements and should not suffer any risk of noncompliance.

Response: The EPA disagrees that initial compliance should be from promulgation of the final reconsideration rule. We also disagree that sources have had intense uncertainty regarding what their final regulatory requirements would be. With the exception of the initial compliance date for existing boilers subject to the tune-up requirement, the initial compliance date for regulatory requirements has been March 21, 2014 since the June 2010 proposal. The EPA is now revising

the initial compliance date for existing boilers subject to the work practice or management standard of a tune-up and is allowing additional time to complete the initial tune-up by establishing a date of March 21, 2014 as the initial compliance deadline.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 2

Comment: FGCO supports the EPA's proposal to extend the deadline for initial compliance tune-ups. This will allow existing boilers additional time to conduct these tune-ups particularly for sources that operate infrequently. It would be counter-productive to require a source to operate (and produce air emissions) solely for the purpose of complying with an initial tune-up. In the utility industry these existing boilers generally operate infrequently on an unscheduled basis to provide backup steam when the electric generating units are not operating and/or to provide steam during starting up.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Allison Watkins, Baker Botts

Commenter Affiliation: Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1

Comment Excerpt Number: 5

Comment: The Class of '85 supports the EPA's proposal to extend to 3 years the initial compliance period for the tune-up requirement. The current 2-year compliance period is overly burdensome and unrealistic. As the EPA has noted, many boilers are not equipped to measure CO and O₂. These facilities must conduct stack testing to measure CO and O₂ to comply with the tune-up requirement, and it is extremely difficult (if not impossible) to schedule and complete this testing to be in compliance with the 2-year deadline.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 2

Comment: Merck supports the EPA's proposal to delay the initial tune-up for boilers to March 21, 2013.

We agree with the industry members who have pointed out that for companies with many boilers subject to the tune-up requirements, the 1-year deadline for initial tune-ups can be difficult and in some cases impossible to meet. This extension will help provide additional time for the vendors of tune-ups services that must support the large numbers of boilers in the U.S. newly subject to

this requirement, and therefore help ensure that all tune-ups can be performed by the deadline in a technically sound manner.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Andrea Grant
Commenter Affiliation: Castle Oil Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2
Comment Excerpt Number: 1

Comment: Under current NESHAP regulations applicable to area source boilers, all existing boilers subject to the tune-up requirements must demonstrate initial compliance within the next several weeks -- 1 year from the date the final rule was promulgated. Some industry representatives have explained that they are notable to complete the testing needed to meet the 1-year compliance requirement for all of the boilers subject to the rule. Additional time is required. Therefore, the EPA is proposing to extend the initial compliance period to 2 years and to allow the responsible parties the ability to stagger the tune-ups. Castle supports this extension of time. It is a reasonable approach that will minimize the financial burden on the small companies that own and operate the boilers.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Randal G. Oswald
Commenter Affiliation: Integrys Energy Group
Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2
Comment Excerpt Number: 5

Comment: Integrys supports the EPA's proposal to extend to 3 years the initial compliance period for the tune-up requirement. The current 2-year compliance period is overly burdensome and unrealistic. As the EPA has noted, many boilers are not equipped to measure CO and O₂. These facilities must conduct stack testing to measure CO and O₂ to comply with the tune-up requirement, and it is extremely difficult (if not impossible) to schedule and complete this testing to be in compliance with the 2-year deadline.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Joseph Seymour
Commenter Affiliation: Biomass Thermal Energy Council (BTEC)
Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2
Comment Excerpt Number: 6

Comment: BTEC believes that superior emission performance can be best achieved and be cost effective over the long-term with on-site tune-ups rather than onerous annual emission testing requirements for boiler owners. Therefore, BTEC supports the proposed biennial tune-up of boilers to meet manufacturers' specifications.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Samuel Denisco

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

Document Control Number: EPA-HQ-OAR-2006-0790-2478-A2

Comment Excerpt Number: 9

Comment: The Pennsylvania Chamber urges the EPA to modify the date for determining new source status from June 4, 2010 (the date of the proposal), to December 23, 2011 (the date of the proposed reconsideration rule). This will allow more reasonable lead time for covered sources to factor changes reflecting the revisions related to the tune-up into construction plans.

Response: The EPA disagrees that the date that defines whether a source is existing versus new/reconstructed (i.e., June 4, 2010) should be reset to December 23, 2011. CAA section 112(a)(4) states that a new source is a stationary source if “the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emissions standard applicable to such source.” In this case, the first time the Agency proposed standards for this source category was on June 4, 2010. Today’s action is a reconsideration action and is premised on the same general rulemaking record. It is thus reasonable to view the date EPA “first proposes” standards for the area source category to be the June 4, 2010 date.

The commenter also argues that the Agency should modify the trigger date for determining new source status. Nothing in the record supports this view and the commenter has utterly failed to explain why it would be reasonable to define the December 23, 2011 date as the date by which new source status is determined (i.e., the date the Agency “first proposes” standards). Furthermore, the basis of the commenters’ issue is not at all clear, especially given that the requirements for new sources have not changed in any material respect.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 9

Comment: In many instances, the installation of pollution control equipment and associated charges to boiler must be permitted under state air pollution statutes and/or construction codes (building permits, etc.). The proposed rule will result in an increase in the number of permit applications, potentially swamping the state and local agencies. Even in those areas where the rule may not result in significant increases in permitting work, the normal delays associated with permitting may make meeting the three year compliance deadline impossible.

In light of the difficulty in meeting a 3-year compliance deadline, the EPA and authorized states should be prepared to readily grant 1-year extensions under CAA §112(i)(3)(B) to those units that have problems installing the necessary control equipment to comply with the Boiler Rule.

Response: Some commenters have argued that the 3-year compliance deadline of March 21, 2014, for existing sources to meet the standards does not provide them with sufficient time for sources to meet the standards in view of the number of sources subject to the rule and that these sources will be competing for the needed resources and materials from engineering consultants, permitting authorities, equipment vendors, construction contractors, financial institutions, and other critical suppliers.

As an initial matter, we note that many sources subject to the standards should be able to meet the standards within 3 years (i.e., by March 21, 2014), even those that need to install pollution control technologies to do so. In addition, many sources subject to the standards are existing biomass- or oil-fired boilers or small coal-fired boilers (less than 10 MMBtu/hr) and will not need to install controls in order to demonstrate compliance, as these sources are subject only to work practices or management practices.

At the same time, as commenters have noted correctly, the CAA allows Title V permitting authorities to grant sources, on a case-by-case basis, extensions to the compliance time of up to 1 year if such time is needed for the installation of controls. *See* CAA §112(i)(3)(B)). Permitting authorities are already familiar with, and in many cases have experience with, applying the 1-year extension authority under §112(i)(3)(B) since the provision applies to all NESHAP. *See* 40 CFR 63.6(i)(4)(A). We believe that should the range of circumstances that commenters have cited as impeding sources' ability to install controls within 3 years materialize, then permitting authorities can take those circumstances into consideration when evaluating an existing source's request for a 1-year extension, and where such applications prove to be well-founded, permitting authorities can make the 1-year extension available to applicants.

In making a determination as to whether an extension is appropriate, we believe it is reasonable for permitting authorities to consider the large number of pollution control retrofit projects being undertaken for purposes of complying either with the standards in this rule or with those of other rules such as the Major Source Boilers Standards and the Mercury and Air Toxics Standards for the power sector that may be competing for similar resources.

Further, commenters have pointed out that in some cases operators of existing sources that are subject to these standards and that generate energy may opt to meet the standards by terminating operations at these sources and building new sources to replace the energy generation at the shut-down sources. While the ultimate discretion to provide a 1-year extension lies with the permitting authority, the EPA believes that it may be reasonable for permitting authorities to allow the fourth year extension for the installation of replacement sources of energy generation at the site of a facility applying for an extension for that purpose. Specifically, the EPA believes where an applicant demonstrates that it is building replacement sources of energy generation for purposes of meeting the requirements of these standards, such a replacement project could be deemed to constitute the "installation of controls" under section 112(i)(3)(B).

In sum, the EPA believes that although most, if not all, units will be able to fully comply with the standards within 3 years, the fourth year that permitting authorities are allowed to grant for installation of controls is an important flexibility that will address situations where an extra year is necessary.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 8

Comment: The timing of the retrofit work needs to be carefully planned, particularly for boilers that provide the primary and/or base load energy supply for their facilities. A facility owner will only shut down a boiler when everything is properly staged to ensure minimal disruption of the facility's operation. Based on a discussions with a number of potentially affected companies, the turnaround or shutdown cycles for boilers at many of the facilities is so long as to make this type of precise staging exceedingly difficult to do in a 3-year period without substantial business interruption.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 9.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 4

Comment: We believe that compliance dates for all requirements, including tune-ups, should be no sooner than March 21, 2014 — the maximum time allowed under the CAA. The EPA needs to consider that sources will be planning and applying resources to fulfill multiple requirements. Under these circumstances sources need flexibility to determine where best to apply resources, whether for emission limitations, tune-ups, or energy assessments. The rule should not mandate the priority or approach in reducing emissions. The EPA must also realize that the same equipment providers and vendors will be needed by sources affected by either the Major or Area Source Boiler Rules as well as the EGU boiler MACT. We also believe the EPA has flexibility to provide an additional year for performing energy assessments because implementation is voluntary. If it aids in compliance, a source will pursue energy improvement measures prior to March 21, 2014.

Response: See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11, regarding the initial compliance date for existing boilers. See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 9, regarding sufficient time to meet the standards in view of competing resources.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 6

Comment: It will be extraordinarily difficult – if not impossible – for all of the entities with existing boilers to make the changes necessary to comply with this rule in the 3-year timeframe that the EPA proposes. Put simply, the task of performing a boiler retrofit in 3 years will be made nearly impossible by the competition for critical resources and the likely gridlock in many state

permitting processes that the broad application of this rule will create. Many boiler owners will be simply unable to secure equipment and assistance and/or to obtain the state/local permits needed to retrofit their units within 3 years.

Even under the best of circumstances, a major retrofit of a boiler takes years from project start to finish. The EPA has estimated that the installation of an activated carbon injection control system on one combustion unit – a comparatively simple installation – takes about 15 months.³ However, the EPA expects a range of control devices will be used to meet the standards, including fabric filters, carbon bed adsorbers, activated carbon injection, electrostatic precipitators, wet scrubbers, replacement burners, and combustion controls.⁴

³ EPA, *Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies* (2002).

⁴ EPA, *Regulatory Impact Analysis: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*, 3-1 (April 2010) ("The control analysis considered fabric filters, carbon bed adsorbers, and activated carbon injection to be the primary control devices for mercury control, electrostatic precipitators for units meeting mercury limits but requiring additional control to meet the PM limits, wet scrubbers to meet the HCl limits, tune-ups, replacement burners, and combustion controls for CO and organic HAP control, and carbon injection for dioxin/furan control.")

Response: We note that less than 1% of all covered existing sources (approximately 600 of the 183,000 area source boilers subject to the rule) will be subject to numeric emission limitations. Therefore, the assertion that “all of the entities with existing boilers” will need to make changes and perform boiler retrofits is not credible as a basis for an extension of the compliance deadlines beyond March 21, 2014. See also the responses to EPA-HQ-OAR-2006-0790-2446-A1, excerpt 9, and EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 7

Comment: The sheer number of boilers impacted by the rule will make finding – and then scheduling – the design and construction resources almost impossible. The EPA estimates that approximately 5,500 boilers would need to meet emission limits under the rules.⁵ Many, if not all, of these boilers would need to be retrofitted. Boiler owners will need to hire engineers to assist them in designing and performing the retrofit. Thus, across the various industry sectors impacted by this rule, boiler owners will be competing for qualified engineers to design, permit and perform the retrofits necessary to make boilers compliant with this stringent rule. There will be a similar scarcity in equipment vendors, construction contractors, construction equipment (e.g, heavy lifting cranes), skilled labor (e.g., boilermakers), and other critical suppliers.

Companies may even be unable to secure the basic building materials and control equipment (e.g., baghouses and scrubbers).

In order to retrofit a boiler, the owner will need to line up the capital necessary to pay for the retrofit. In these difficult economic times, just securing the necessary capital may take significant time. In addition, the owner will need to go through the relevant permitting process(es), which will take a number of months. Finally, once the finances are secure and the permitting is complete, the owner will actually need to perform the retrofit. The design, procurement, installation, and shakedown of a retrofit project (e.g., installing a scrubber on a large boiler) can easily take multiple years.

⁵ <http://www.epa.gov/airquality/combustion/docs/20111202presentation.pdf>.

Response: We note that the 5,500 boilers cited by the commenter as needing to meet emission limits includes boilers in the Major Source Boiler Rule as well as the Area Source Boiler Rule. The EPA estimates that 600 area source boilers (less than 1% of the 183,000 area source boilers subject to the rule) will be subject to emission limits. The remaining 182,400 area source boilers (over 99% of the 183,000 area source boilers subject to the rule) will be subject to work/management practices (i.e., tune-up requirements). As an initial matter, we note that many sources subject to the standards should be able to meet the standards within 3 years (i.e., March 21, 2014), even those that need to install pollution control technologies to do so. See also the responses to EPA-HQ-OAR-2006-0790-2446-A1, excerpt number 9, and EPA-HQ-OAR-2006-0790-2446-A1, excerpt 11.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 10

Comment: The EPA should establish an extended two-step compliance period for situations where a boiler owner voluntarily elects to replace or retrofit a boiler to burn a cleaner fuel source.⁶ If a facility decides to switch to a cleaner fuel, the replacement or retrofit work required to make that switch will potentially take years, for all of the reasons discussed above. Rather than require the facility to add emissions controls to its existing boiler in time for the proposed 3-year compliance deadline – likely eliminating the possibility that the facility would switch to a cleaner fuel source – the EPA should allow 5 years total for facilities to change their boilers and meet the MACT requirements for the cleaner fuel source. This 5-year period would occur in two steps; a no-backsliding provision would apply for 2 years from publication of the rule in the Federal Register, and then the facility would have 3 years to comply with MACT standard for the subcategory for the cleaner fuel subcategory. The EPA promulgated exactly this type of extended MACT compliance deadline for certain facilities that voluntarily elected to install new technology as part of the Pulp and Paper Cluster Rule. *See* Pulp and Paper Cluster Rule, 60 FR 18503, 18,508 (Apr. 15, 1998).⁷ In addition to providing an incentive for facilities to switch to cleaner fuel sources, this approach would reduce some of the competition for resources discussed above by extending the deadline to complete the work to replace or retrofit certain boilers.

⁶ EPA recognizes the MACT rule should be crafted to encourage the use of cleaner fuels, such as natural gas. 75 FR 32025.

⁷ This two-step approach for the MACT standard is consistent with the D.C. Circuit's decision in *NRDC v. EPA*, 89 F.3d 1364 (D.C. Cir. 2007) (finding invalid the EPA's decision to extend the compliance deadline for a promulgated MACT rule by a year because of the substantial changes that the Agency made to the rule). Rather than functioning as an extension of the compliance deadline, this MACT standard for certain facilities would become applicable in two steps. For the first 3 years, a no-backsliding MACT standard would be applicable, then the 3-year deadline to implement the MACT standard for the applicable "cleaner" source would begin to run.

Response: The EPA is not establishing an extended two-step 5-year compliance period as suggested by the commenter. See the response to EPA-HQ-OAR-2006-0790-2446-A1, excerpt number 9.

Compliance: Tune-up schedule for small oil-fired units

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 9

Comment: The EPA has proposed to change the frequency for tune-ups (following the initial tune-up) for oil-fired boilers that are equal to or less than 5 MMBtu/hr to a tune-up once every 5 years (76 FR 80536, Dec. 23, 2011). For new units, the EPA has proposed to remove the requirement for the initial tune-up, considering that new units will likely be tuned during the initial startup process as part of commissioning. For facilities with a large number of small oil-fired units, completion of tune-ups on a biennial basis can quickly become a logistics issue, due to the need to schedule periods where the boilers can be shutdown and tuned without undue disruption to the operation of the facility. For area source boilers, we believe that a tune-up every 5 years is appropriate, as emissions from these boilers are small, and allowing a reduced tuning frequency will reduce the cost of the rule. Therefore, we support these changes, as they minimize burden on small sources with minimal emissions impact.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Grif Bond

Commenter Affiliation: Environmental, Health & Safety Communications Panel (EHSCP)

Document Control Number: EPA-HQ-OAR-2006-0790-2432-A1

Comment Excerpt Number: 2

Comment: The EPA has added a subcategory of small units that are equal to or less than 5 MMBtu/hr. The reconsideration proposes an initial tune-up date of March 21, 2014 and requires a subsequent tune-up for these units only once every 5 years. The EHSCP supports the EPA's efforts to reduce the burden on these smaller units. The creation of a subcategory for smaller units and the reduction of subsequent tune-ups are appropriate for these units.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barbara Patton
Commenter Affiliation: AT&T Services, Inc.
Document Control Number: EPA-HQ-OAR-2006-0790-2436-A1
Comment Excerpt Number: 3

Comment: The EPA has added a subcategory of small units that are equal to or less than 5 MMBtu/hr. The reconsideration proposes an initial tune-up date of March 21, 2014 and requires a subsequent tune-up for these units only once every 5 years. The EHSCP supports the EPA's efforts to reduce the burden on these smaller units. The creation of a subcategory for smaller units and the reduction of subsequent tune-ups are appropriate for these units.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1
Comment Excerpt Number: 35

Comment: The EPA rejected a request to exempt very small (between 2 and 10 MMBtu/hr) oil-fired units.

However, the EPA has proposed to change the frequency for tune-ups (following the initial tune-up) for oil-fired boilers that are equal to or less than 5 MMBtu/hr to a tune-up once every 5 years (76 FR 80536, Dec. 23, 2011). For new units, the EPA has proposed to remove the requirement for the initial tune-up, considering that new units will likely be tuned during the initial startup process as part of commissioning. For facilities with a large number of small oil-fired units, completion of tune-ups on a biennial basis can quickly become a logistics issue, due to the need to schedule periods where the boilers can be shutdown and tuned without undue disruption to the operation of the facility. For area source boilers, we believe that a tune-up every 5 years is appropriate, as emissions from these boilers are small, and allowing a reduced tuning frequency will reduce the cost of the rule. Therefore, we support these changes, as they minimize burden on small sources with minimal emissions impact.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 31

Comment: The EPA has proposed to change the frequency for tune-ups (following the initial tune-up) for oil-fired boilers that are equal to or less than 5 MMBtu/hr to once every 5 years. (76 FR 80536.) For new units, the EPA has proposed to remove the requirement for the initial tune-up, since new units will likely be tuned during the initial startup process as part of commissioning. For facilities with a large number of small oil-fired units, completion of tune-ups

on a biennial basis can quickly become a significant logistical challenge, since periods of shut down for tune-ups would have to be scheduled without undue disruption to the operation of the facility. For area source boilers, we believe that a tune-up every 5 years is appropriate, as emissions from these boilers are relatively small, and allowing a reduced tuning frequency will reduce the cost of the rule. Therefore, ACC supports these changes, as they minimize the regulatory burden on small sources with minimal emissions impact.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 14

Comment: We support the EPA's proposed revisions to compliance monitoring, including . . . decreasing the tune-up requirement for small (<5 MMBtu/hr) units to every 5 years, with the initial tune-up by the compliance date.

Response: The EPA thanks the commenter for their support.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 9

Comment: PA DEP agrees with the EPA's proposed approach to provide some relief to owners and operators of smaller oil-fired boilers (equal to/less than 5 MMBtu/hr) by extending the subsequent tune-up date to 5 years after the initial tune-up, instead of the biennial basis found in the final rule. The PA DEP also agrees that the initial tune-up requirement for new units should be eliminated because the sources would be tuned-up during the installation process.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 2

Comment: In the current rulemaking, the EPA is proposing to create a new subcategory for the smallest units oil-fired boilers with a capacity equal to or less than 5 MMBtu/hr. This group of oil-fired boilers would have additional time in which to demonstrate initial compliance - March 21, 2014 - and would be subject to the requirement for subsequent tune-ups only once every 5 years. Castle supports this action. A decrease in frequency of tune-ups is appropriate. It will ease the financial burden associated with this type of maintenance, particularly for small business owners.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 2

Comment: OCC supports longer times between tune-ups for the small and liquid fired units, as well as postponement of tune-ups for valid reasons. This includes extending the *tune-up frequency from the proposed annual* requirement to a maximum of 5 years for these boilers. In addition, if a burner inspection cannot be accomplished until the next scheduled maintenance outage, a site should be able to delay that tune-up activity up to a maximum of 5 years.

Response: The EPA thanks the commenter for their support. We would like to confirm that the final rule requires existing oil-fired boilers with a heat input capacity of equal to or less than 5 MMBtu/hr to conduct a tune-up every 5 years. In addition, the final rule specifies that existing boilers subject to the tune-up requirements may delay inspection of the burners and inspection of the systems controlling the air-to-fuel ratio until the next scheduled unit shutdown.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 6

Comment: If the EPA still finds it necessary to impose this burden on the regulated community we support allowing tune-ups once every 5 years. There is no evidence that frequent tune ups will have any impact on emissions.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 8

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provisions:

Allow less frequent tune-ups for those oil-fired boilers with a heat input capacity of 5MMBtu/hr. or less;

Response: The final rule requires oil-fired boilers with a heat input capacity of equal to or less than 5 MMBtu/hr to conduct a tune-up every 5 years.

Commenter Name: S. William Becker

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2455-A1

Comment Excerpt Number: 37

Comment: NACAA recommends that the frequency of mandated tune ups be based on objective data concerning decay of performance after a tune-up.

Response: The EPA received comments regarding the frequency of tune-ups that varied from suggesting a one-time tune-up to a semiannual tune-up. We do not have information regarding the rate of decay of performance after a tune-up such that we could consider basing the frequency of tune-ups on decay of performance after a tune-up as the commenter suggests. Further, the commenter has not provided such information, nor does the commenter identify sources of such information.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2424-A1

Comment Excerpt Number: 6

Comment: Improvements to Work Practice Requirements: We support the more flexible work practice provisions in the revised proposal that would change the cycle of required unit tune-ups from every 2 years to every 5 years for small boilers and process heaters. However, the EPA proposes to apply this more flexible provision only for units under 5 MMBtu/hr. Since a 10 MMBtu/hr threshold has been used throughout this rule (as well as the companion rule applicable to units located at major sources of HAPs) to distinguish between small and large sources and define certain subcategories, the EPA should extend these provisions to all units below 10MMBtu/hr so that all units within a defined subcategory at a given facility are subject to the same work practice standards and subject to the same frequency/cycle of scheduled tune-up requirements.

Response: The EPA disagrees with the commenter that the 5-year tune-up frequency should be extended to all units below 10 MMBtu/hr. As explained in the proposed action on reconsideration of the final rule, we believe that the large number of very small oil-fired units that can be located at an individual facility provides logistical issues with completing tune-ups on a biennial basis and agree that for those small units, a decreased tune-up frequency is appropriate (76 FR 80536, December 21, 2011). We continue to believe that for oil-fired boilers equal to or less than 5 MMBtu/hr, requiring a tune-up every 5 years is appropriate and, thus, the requirement is included in the final rule. We do not believe that defining rule requirements for the sole purpose of subjecting all units within a defined subcategory (e.g., boilers with heat input capacity less than 10 MMBtu/hr) at a given facility to the same work practice requirements is an appropriate basis for defining rule requirements. For example, the 10 MMBtu/hr threshold was designed to distinguish sources with stacks capable of being monitored for limits. It would not be reasonable to adopt that threshold here for another purpose when that rationale has nothing to do with the rationale for the 5-year cycle (i.e., logistical problems completing timely tune-ups at facilities with numerous small units).

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 12

Comment: The EPA has determined only that regular tune-ups every 2 years are GACT. Now the EPA proposes to water down even this inadequate standard by reducing the frequency of required tune-ups of small (capacity < 5 MMBtu/hr) oil-fired boilers to every 5 years. In light of the previous determination that tune-ups every 2 years were GACT, the EPA's proposal not to require them is unlawful and arbitrary. In the proposed reconsidered rule, the EPA suggests that owners and operators of many boilers at a single location will encounter "logistical problems" in conducting tune-ups every 2 years. The EPA says nothing about what these logistical problems would be, or whether they could be overcome. The EPA never explains why the presence of multiple boilers at a single location would not make it easier, rather than harder, to arrange tune-ups. And the EPA never actually determines that small boilers are more likely to be found in great numbers at a single location than larger boilers. It is not clear whether the EPA has examined any data on this point. For all of these reasons, the EPA's special allowance for small boilers is arbitrary. Because tune-ups every 2 years are a generally available control technology for oil-fired boilers, regardless of capacity, the CAA requires the EPA to impose that standard.

Response: The EPA determined that tune-ups every 2 years would be GACT prior to obtaining information from the petitions for reconsideration and from comments that demonstrate this conclusion was not appropriate in all situations. To determine GACT, we review available methods for limiting pollution and examine whether adopting such methods would be feasible for sources in the category given the level of technical sophistication, cost and resources in the industry, potential for emissions reductions, as well as other factors. There appeared to be impediments to tune ups every 2 years for certain specific types of boilers (i.e., seasonal boilers and very small oil-fired boilers). Therefore, we proposed and adjusted the tune-up schedule to reflect this information.

In their Petition for Reconsideration, The American Sugar Cane League of the USA, Inc. (ASCL) stated that Louisiana's eleven sugar mills operate 71 boilers. They further stated that each of those mills operate between five and eight boilers which is in contrast to the EPA's assumption of one large boiler per facility. They explained that most of the mills are not equipped to measure CO and O₂ and, thus, a third-party contractor must be hired to perform that component of the tune-up. The sugar mills typically operate no longer than 100 days per year. Due to the seasonal nature of the sugar cane boilers, a biennial tune-up requirement means that each boiler would be required to conduct a tune-up approximately every 6 to 8 months of operation. This is not the EPA's intent in requiring biennial tune-ups and is not representative of our GACT determination. Assuming 120 days (4 months) of operation each year, a 5-year tune-up requirement means that each boiler would be required to conduct a tune-up every 20 months of operation. The EPA considers this more appropriate.

An examination of our data for oil-fired boilers 5 MMBtu/hr or smaller at area source facilities identifies several types of facilities containing multiple boilers. Facility type and number of boilers range from institutions with 6 and 23 boilers to commercial facilities with 9 and 116 boilers. Although our data with complete information regarding type of facility and size and

number of boilers is minimal, it does clearly indicate the existence of area source facilities with multiple oil-fired boilers 5 MMBtu/hr or smaller. In those instances, we continue to believe that a 5-year tune-up requirement is appropriate.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 2

Comment: Under this proposal, liquid-fired boilers of <5MMBtu/hr duty require tune-ups every 5 years. As discussed in Comment II.3.B, relative to gas and light liquid-fired boilers and process heaters at major sources, even an every 5-year tune-up is not justified and we recommend a design practice or Operations and Maintenance Plan work practice instead.

Instead of the proposed 5-year tune-up, a design practice requiring the boiler to be designed to fire liquids or an Operations and Maintenance Plan work practice, such as incorporated into the RICE NESHAP should be required. Item 9 of Table 6 of Part 63 Subpart ZZZZ addresses the parallel situation for small and limited use engines. It requires that the owner/operator follow a work practice and demonstrate continuous compliance by "(i) operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or (ii) develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions."

Response: We disagree with the commenter that the EPA should only impose a design requirement, instead of the work practice of a tune-up, for oil-fired units with heat input capacity of equal to or less than 5 MMBtu/hr. The commenter suggests the design requirement should be similar to item 9 of table 6 of Subpart ZZZZ. The requirements in item 9 of table 6 of Subpart ZZZZ are to operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions. We question how that requirement is different from Subpart JJJJJ's requirement to tune/optimize the boiler emissions to manufacturer's specifications. Also, Subpart ZZZZ requires inspection of certain engine equipment, which is similar to what is required under the boiler tune-up, but with requirements on a more frequent basis than every 5 years.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 4

Comment: Merck supports the EPA's proposal to allow small boilers to perform tune-ups once every 4 years.

Merck agrees with the EPA that completing tune-ups on a biennial basis can be challenging for facilities and institutions with a large number of small boilers. However, we believe the EPA should extend this relief to all boilers 10 MMBtu/hr or smaller. This approach would be consistent with the applicability limit of 40 CFR 60 Subpart Dc and therefore minimize regulatory confusion.

Response: The EPA disagrees with the commenter that reduced tune-up frequency should be extended to all boilers 10 MMBtu/hr or smaller. We do not consider maintaining consistency with the applicability limit of Subpart Dc to be an appropriate basis for providing reduced tune-up frequency. The final rule requires that tune-ups be conducted every 5 years for certain subsets of boilers where we have determined it to be appropriate (i.e., new and existing oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr; new and existing seasonal boilers as defined in Subpart JJJJJ; new and existing limited-use boilers as defined in Subpart JJJJJ; and new and existing coal-fired, biomass-fired, or oil-fired boilers with an O₂ trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up).

Compliance: Out of Scope

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 2

Comment: Some examples below illustrate areas of compliance confusion. These examples are not inclusive of all problem areas within the rule. - The general provisions for the notification of compliance status in §63.9(g)(2)(ii) states: "The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard".

In regard to the boiler rules, it is unclear what qualifies as a "relevant compliance demonstration activity." It is also unclear whether or not the activities are to be reported through both the notification of compliance status and the compliance reports described in §63.7550.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Derek Grasso

Commenter Affiliation: Covanta Energy Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2430-A2

Comment Excerpt Number: 2

Comment: Because it is likely that final action on this amendment will not be taken by March 21, 2012, Covanta also supports the EPA's intention to stay the effectiveness of the final rule for 90 days to ensure compliance. If the proposed change to March 21, 2013 is eventually not implemented during the reconsideration, Covanta requests that the EPA provide a "No Action Assurance" similar to the one recently issued for certain aspects of the Major Source Boiler Rule and CISWI Rule.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 9

Comment: Industries in Wyoming have expressed concerns regarding the inability to maintain long-term PM, CO and Hg compliance in coal-fired units. These concerns arise due to variable coal qualities in each load, and uncertainty in the Hg concentrations in the supplied coal.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Alicia Meads

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2006-0790-2446-A1

Comment Excerpt Number: 1

Comment: These proposed rules do not provide enough time for capital planning and compliance, given the complexity of the rules and competition for a limited pool of qualified domestic vendors and installers for emission controls and boilers. Additional time is needed to allow businesses to synch up compliance with these rules with compliance on upcoming NAAQS rules.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Also see the response to EPA-HQ-OAR-2006-0790-2446, excerpt 7.

Impacts Analysis: Proposed Amendments

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 5

Comment: Wyoming DEQ recommends that the EPA estimate and report the additional burden that the reconsidered rules place on state and local governments. The evaluation should consider the development of staff expertise necessary to evaluate energy assessments, as well as the addition of staff resources needed to effectively review industry's annual monitoring, reporting and recordkeeping requirements.

Wyoming believes that the EPA should also evaluate the permitting burden placed on states, as companies may need to make process modifications to be more energy efficient. Permitting entities with minor source authority, such as Wyoming, may be faced with additional permit applications to address equipment changes associated with improving energy efficiency, especially if the equipment modifications are beyond insignificant or like-kind replacement. Energy efficiency could also bring into question the applicability of PSD review for increased capacity, process optimization, or increased reliability that may not result in a permit but will require the facility, and possibly the permitting authority, to evaluate.

Response: The amendments contained in this action are corrections that are intended to clarify, but not change, the coverage of the final rule. The clarifications and corrections should make it easier for owners and operators and for local and state authorities to understand and implement the requirements. The amendments will not increase the costs for the final rule but will result in a decrease in the burden on small facilities as a result of the reduction in the frequency of conducting tune-ups for seasonal boilers, small (equal to or less than 5 MMBtu/hr) oil-fired boilers, limited-use boilers, and boilers using an O₂ trim system that maintain an optimum air-to-fuel ratio. Further, certain units that meet the definition of seasonal boiler or limited-use boiler and would otherwise be subject to emission limits will instead be subject to tune-up requirements. Additionally, the burden will be reduced on facilities that currently operate under an energy management program compatible with ISO 50001 that includes the affected boilers because a one-time energy assessment will not be required. Burden will also be reduced on facilities with affected boilers that burn low-sulfur oil because those boilers will not be subject to the PM emission limit. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM. Further reduction in burden will occur in instances where initial compliance demonstrations with the Hg emission limit via fuel sampling or with the PM emission limit via performance stack testing show that the emissions are equal to or less than half the respective emission limit because no further sampling or testing of those boilers will be required. Accordingly, the amendments will not increase the burden on state and local governments but will result in a decrease in their burden.

The amendments will result in no significant changes to the information collection requirements of the promulgated rule and will have no increased impact on the information collection estimate of projected cost and hour burden made and approved by OMB. In fact, the reduction in tune-up frequency for some boilers will result in less information collection burden. The amendments contain no new federal mandates for state, local, or tribal governments or the private sector and impose no new enforceable duties on any state, local, or tribal governments or the private sector. In addition, the amendments do not have federalism implications. They will not have substantial

direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, nor will they impose new direct compliance costs on State or local governments or preempt State law.

When we promulgated the rule in March 2011, we determined that the rule contained a Federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any 1 year. We also concluded that the rule may have federalism implications, because it may impose substantial direct compliance costs on state or local governments, and the federal government will not provide the funds necessary to pay those costs. Accordingly, we met all requirements associated with these determinations (see 76 FR 15585-15588, March 21, 2011).

Commenter Name: Bruce Coffee, Chief Engineer

Commenter Affiliation: Hurst Boiler and Welding Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2421-A1

Comment Excerpt Number: 1

Comment: One of our main product lines is biomass-fired boilers. Our company is the manufacturer of more of these between 10 and 100 MMBtu/hr than anyone in the U.S. We have seen our production of these collapse since the EPA has taken its recent actions. This is in spite of the claims that the government wants to encourage “green energy” and “lower carbon foot-prints”. There are two principle reasons that I can see that have caused this. There is no confidence in the “stability” of the rules. As with most documents of this type, they are impossible for a “lay-person” to interpret. Usually, when there is a change, within a few days, we are able to decipher the regulation and determine the impact of the new rules. This time, after some months, with large, sweeping changes and then retreats, a climate of confusion has been created that precludes major investment. No one is certain that the emission-control equipment they would believe they need today will be adequate, or even necessary, in the future.

Response: This action finalizes the amendments to the Area Source Boiler Rule. The EPA does not anticipate any additional changes in these rule requirements.

Commenter Name: Bruce Coffee, Chief Engineer

Commenter Affiliation: Hurst Boiler and Welding Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2421-A1

Comment Excerpt Number: 2

Comment: One of our main product lines is biomass-fired boilers. Our company is the manufacturer of more of these between 10 and 100 MMBtu/hr than anyone in the USA. We have seen our production of these collapse since the EPA has taken its recent actions. This is in spite of the claims that the government wants to encourage “green energy” and “lower carbon foot-prints”. The rules have become so strict that the cost of control is prohibitive. From what we understand, boilers for biomass between 10 and 30 MMBtu/hr, now have an emission limit of 0.07 lb/MMBtu. But unfortunately, there is no affordable way to do this. The equipment that can

improve upon the normal mechanical dust collectors are the same ones that are used to reduce the emissions to 0.025 lb/MMBtu. These are now required on boilers above 30 MMBtu/hr. Although expensive, the cost can be justified on boilers of this size and larger, but smaller boilers cannot bear the cost, as the savings are more modest but the costs for the equipment are about the same.

Response: Numerical emission limits, based on GACT, are established for PM as a surrogate for other urban HAP for new biomass-fired boilers with a design heat input capacity of 10 MMBtu/hr or greater. The numerical emission limit of 0.03 lb/MMBtu for PM for biomass-fired units greater than 30 MMBtu/hr is considered GACT because those units will be subject to that emission limit for PM under the NSPS. For units between 10 and 30 MMBtu/hr, the limits were established to reflect the performance of GACT which are multiclones. The PM GACT limit is based on data from biomass-fired units using GACT technology. The EPA has determined that the promulgated numerical emission limits for PM are appropriate GACT standards for new area source biomass-fired boilers with a heat input capacity greater than 10 MMBtu/hr.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 18

Comment: Section 112(h) authorizes the Administrator to promulgate “a design, equipment, work practice, or operational standard, or combination thereof” that is consistent with the provisions of CAA §112(d) or (f) of the CAA, where in the judgment of the Administrator, it is not feasible “to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants.” 42 USC § 7412(h). Section 112(h)(2)(B) defines “not feasible” as “the application of measurement technology to a particular class of sources is not practicable due to technological and economic limitations.” 42 USC § 7412(h). The costs associated with testing and monitoring certain boilers would be excessive. The costs would be excessive due to the fact that (1) standard reference methods are not applicable for sampling certain small diameter stacks, and (2) the installation of sampling ports on certain small boilers would interfere with the functionality of exhaust systems.⁹

⁹ See EPA’s discussion in the 2011 Final Rule, 76 FR 15568.

Response: The EPA did consider the CAA §112(h) authorities and, based on that authority, the final rule does not include numerical emission limits or testing requirements for existing or new coal-fired boilers with heat input capacity less than 10 MMBtu/hr.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 1

Comment: We are very concerned that these rules will have significant and as yet unknown implications for biomass-fired boilers and processes. This is very important to Wisconsin, where a significant number of our small businesses, as well as the paper industry, depend on biomass-fired power. Wisconsin also feels that biomass is one vital key to growing renewable energy supplies, reducing pollutant emissions from fossil fuels, and growing our local economies.

We believe that with further work on the rule, costs can be significantly reduced while achieving the same or better environmental improvement.

Response: See the response to EPA-HQ-OAR-2006-0790-2420-A1, excerpt 5.

The EPA has made many adjustments to the rule that reduce the burden on industry since the June 2010 proposal. The following are some of those adjustments. Numerical emission limits and stack testing requirements are no longer applicable to many of the area source boilers. Specifically, CO limits and stack testing have been eliminated for existing biomass- and oil-fired boilers with a design heat input capacity greater than 10 MMBtu/hr. For boilers that must conduct stack tests, the stack test frequency has been decreased from once per year to once every 3 years. Certain units that meet the definition of seasonal boiler or limited-use boiler and would otherwise be subject to emission limits will instead be subject to tune-up requirements. Tune-up frequency has been decreased for biomass- and oil-fired boilers that meet the definition of a seasonal boiler. Facilities that operate under an energy management program compatible with ISO 50001 that includes the affected boilers satisfies the energy assessment requirement.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 3

Comment: Based on the EPA's published emission factors (AP-42), total potential HAP emissions from distillate boilers are 0.01 tpy per MMBtu/hr of input capacity. What reduction in HAP does the EPA reasonably expect from the tune up procedure? Assuming a 10% reduction, HAP emissions would be reduced by 0.001 tpy per MMBtu/hr. In the public record AOGA cannot find where the EPA has evaluated the owner/operator cost, HAP emission reductions, and associated cost effectiveness that can be expected by conducting these specific tune-up requirements on very small boilers.

Response: Boiler tune-ups have been shown to improve the efficiency of a boiler between 1 and 5%, depending on the age of the unit and the time lapse since the previous tune-up. An emission reduction of 1% of total HAP emissions was used in this analysis for units that are required to perform a routine tune-up. The cost for tune-ups was based on quotes obtained from the Industrial Extension Service USI Boiler Efficiency Program and the annual average cost of a tune-up for large and small boilers was estimated at \$2,228. The cost for tune-ups is discussed in the memorandum "Methodology for Estimating Control Costs for Industrial, Commercial and Institutional Boilers for the NESHAP- Area Source", and the emissions reduction estimates are discussed in the memorandum "Methodology for Estimating Impacts from Industrial,

Commercial, Institutional Boilers at Area Sources of Hazardous Air Pollutant Emissions." Both memorandums are in the docket for this rulemaking (EPA-HQ-OAR-2006- 0790).

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 2

Comment: It is burdensome on small businesses to conduct initial and periodic stack testing on these small boilers 10-30 MMBtu/hr burning a relatively clean fuel.

Response: The EPA has made many adjustments to the rule to reduce the burden on industry. Numerical limits and stack testing were removed from many of the area source boiler categories since the proposal of the rule in June of 2010. Specifically, CO limits and stack testing have been eliminated for existing biomass- and oil-fired boilers with a design heat input capacity greater than 10 MMBtu/hr. Also, the stack test frequency has been decreased from once per year to once every 3 years. Additionally, an owner or operator of an affected boiler does not need to conduct further PM emissions testing if, when demonstrating initial compliance with the PM emission limit, the performance test results show that the PM emissions are equal to or less than half of the PM emission limit. Burden will also be reduced on facilities with affected boilers that burn low-sulfur oil because those boilers will not be subject to the PM emission limit. Instead, combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 1

Comment: AOGA is very concerned about the overall ongoing cost and associated control cost effectiveness of GACT biennial tune-up requirements under §63.11223 for existing boilers less than 10 MMBtu/hr.

Response: The EPA has determined that GACT is appropriate for these small boilers and tune-ups were determined to be the industry standard practice to optimize a boiler's performance. As discussed in the preamble to the final rule published in March 2011, boilers may be at best 85% efficient, and un-tuned boilers may have combustion efficiencies of 60% or lower. A tune-up performed to the manufacturer's specifications would ensure the highest energy efficiency and reduce fuel usage, which will ultimately reduce HAP emissions. We also note that several subcategories (seasonal boilers, limited-use boilers, oil-fired boilers with heat input capacity equal to or less than 5 MMBtu/hr, boilers with O₂ trim systems that maintain an optimum air-to-fuel ratio) that would otherwise be subject to a biennial tune-up requirement or, in some instances a stack testing requirement, will instead be subject to a tune-up once every 5 years. This should help diminish the impacts that the commenter addresses.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 30

Comment: The EPA acknowledges that the cost of testing small boilers and process heaters is prohibitive.

While the cost of emissions testing larger units is less prohibitive, the EPA must consider these costs when establishing the frequency of testing.

The benefits of testing more frequently than every 5 years do not justify the costs. HAP emissions change only when operating parameters change (e.g., firing rate, maximum contaminant input limits for chloride and Hg, type of fuel, combustion efficiency, O₂ content, etc.) or when design changes occur. Absent these changes to an affected source, operating parameters established by implementation of Area Source Boiler Rule are more than sufficient to ensure that emissions will not significantly change over time.

Response: The EPA disagrees with the commenter that testing more frequently than once every 5 years is not cost effective. The operating parameter changes described in the comment such as combustion efficiency, O₂ content and source of fuel are parameters that may change over time. The routine tune-ups that must be conducted on a periodic basis (biennially or every 5 years) and the stack tests required by this final rule (every 3 years) provide assurance that emissions will not increase over time.

Impacts Analysis: Out of Scope

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 1

Comment: We are greatly concerned that even though many emissions limits have been lowered and other improvements in flexibility have been made, these rules are simply too costly and complex for affected small businesses to comply without serious economic harm.

Regulation affects small businesses in a substantially different way than it does large businesses. When a large business needs to comply with a new regulation, it designates its regulatory compliance officer – or officers – with the task. These individuals know their way around regulatory technicalities that most lay persons do not easily understand.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the

current reconsideration. Nevertheless, we also note that the primary and sole continuing requirement of the Area Source Boiler Rule affecting more than 98% of the regulated area source boilers is a tune-up. A tune-up can be performed by numerous service providers and does not require ongoing specialized staff for most small entities.

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 2

Comment: For the small-business owner, there is no regulatory compliance officer. This burden falls squarely on the owner, who, more times than not, is responsible for everything from ordering inventory and hiring employees, to taking out the trash at the end of the day. And while they may be expert in their craft, comprehending regulations, formalizing plans for their implementation and filling out paperwork is an extremely burdensome exercise.

Even beyond the significant time regulations take away from a small-business owner trying to make a living, the per-employee cost of regulation is significantly greater for small businesses. The U.S. Small Business Administration's Office of Advocacy released a study in 2010 that showed the smallest businesses – those with fewer than 20 employees – spend 36% more per employee per year complying with federal regulations.¹ Alarming, that disproportionality increases to 364% when it comes to environmental regulation. These findings do not suggest that all regulation is bad or unnecessary, but rather clearly demonstrate that agencies need to take extra care to make sure their regulations are well-reasoned and flexible. Without such flexibility, the ability of small businesses to grow and create jobs is severely inhibited.

This regulatory scheme is among the most complex in recent memory and as such, the compliance burdens presented by these rules are vast. Small-business owners will need to spend significant time to attempt to understand these rules, make expenditures to expensive consultants to bring the facility up to compliance, and greatly increase the amount of time he or she spends on paperwork compliance. The result will have serious and harmful consequences for the small businesses forced to comply with these rules.

¹ <http://archive.sba.gov/advo/research/rs371tot.pdf>

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, as described in the response to EPA-HQ-OAR-2006-0790-2420-A1, excerpt 5, the EPA has made many adjustments to the rule that reduce the burden on industry, including small business owners, since the June 2010 proposal.

Commenter Name: James Johnson

Commenter Affiliation: United States Beet Sugar Association (USBSA)

Document Control Number: EPA-HQ-OAR-2006-0790-2450-A1

Comment Excerpt Number: 1

Comment: Sugarbeet processing requires large amounts of energy, which is supplied by industrial boilers that will be subject to the requirements in the boiler rules. Such boilers are fired by a combination of coal, #6 fuel oil, and natural gas.³

³ Due to economic constraints, it is not possible for coal-fired boilers used in the production of beet sugar to switch fuels to natural gas. The capital cost of conversion at the 19 affected facilities is about \$200 million and the annual fuel costs to the industry would nearly double (fuel prices from EIA AEO 2012). In addition, burning the leaves and stalk (biomass) of the sugarbeet plant as a fuel along with coal is not a practical option. Due to the biology of the sugarbeet plant, this resource is difficult to capture in a quantity sufficient to significantly reduce fossil fuel use. Perhaps most significantly, a non-fossil fuel energy source would need to be found to dry the beet tops, which have 85 percent water content and are harvested in October when air drying options are severely limited.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Tangelia Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 9

Comment: The EPA's claim that the costs associated with the energy assessments are "minimal, in most cases," and implementation of any cost-effective conservation measures would be partially offset by fuel savings as part of its "beyond the floor" determination (75 FR 31907) is speculative and not valid. The technical support documents for the rule indicate the cost of an energy assessment ranges from \$2,000 - \$5,000 for a commercial or institutional facility and up to \$75,000 for an industrial facility. Total annualized costs for the facility energy assessments are estimated to be \$52 million nationwide for 40 CFR 63 Subpart JJJJJ and while the energy assessment may lead to emission reductions, in and of itself, the assessment does not reduce emissions.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 11

Comment: Efficiency improvements are not always possible. A company could spend up to \$75,000 for an energy assessment only to learn that no additional improvements in efficiency at the facility are possible. As a result, companies that are already efficient in their operations are more likely to incur the costs of the required energy assessment with little or no benefit in terms of cost savings and little or no potential emissions reductions.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nonetheless, we would like to point out that the final rule specifies that facilities that currently operate under an energy management program compatible with ISO 50001 that includes the affected boilers satisfies the energy assessment requirement.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 1

Comment: Many face greater risk because of their age, health conditions, or rate of exposure to the pollutants. They include: infants, children and teenagers; older adults; pregnant women; people with asthma and other lung diseases; people with cardiovascular diseases; diabetics; people with low incomes; and people who work or exercise outdoors. The discussion below highlights special concerns for several of these groups.

Children face quite different risks from air pollutants than adults. The lungs and their alveoli are not fully grown until children become adults. Biological defenses that help adults fight off infections are still developing in young bodies. Furthermore, children don't behave like adults, and their behavior also affects their vulnerability. They are outside for longer periods and are usually more active when outdoors. Consequently, they inhale more polluted outdoor air than adults typically do. Toxic substances may put children more at risk than adults. For example, the California Environmental Protection Agency explored improved methodologies to determine susceptibility to carcinogens *in utero* and childhood after finding in 2001 that the existing approaches did not adequately reflect the risks to children. Their subsequent research found that the children generally display greater sensitivity to environmental carcinogens than did adults.

People with chronic diseases, including cardiovascular diseases, respiratory diseases and diabetes, face higher risk regardless of age. Their diseases make them at much higher risk for harm. Current estimates include these groups:

- Asthma - 24.6 million people, including 7.0 million under age 18

- Cardiovascular diseases – 82.6 million people
- Diabetes – 25.8 million people

As adults age, their body's physiological process declines naturally, placing even healthy **older adults** at risk from airborne pollutants. In addition, many older adults also have one or more chronic diseases that increase their susceptibility.

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that, to the extent that this comment focuses on risk-based standard setting, such considerations under the statutory scheme are not appropriate in a technology-based rulemaking under CAA §112.

Commenter Name: Janice Nolen

Commenter Affiliation: American Lung Association

Document Control Number: EPA-HQ-OAR-2006-0790-2471-A2

Comment Excerpt Number: 2

Comment: Communities of color and poorer people also appear to face higher risk, underscoring the need to properly assess this margin of safety. Research indicates that minorities live in greater concentrations both in areas that do not meet federal air quality standards and in areas with above average numbers of air-polluting facilities (NAS, 1999). Both African Americans and Hispanics have been found to be more likely than Caucasians to live in areas with high levels of air toxics (Morello-Frosch and Lopez, 2006).

- A study in Maryland found that the risk of cancer related to air toxics was greatest in areas with the largest African American population proportions and lowest among those with the smallest African American population proportions. In addition, the estimated cancer risk decreased for every 10 percent increase in the percentage of Caucasians living in an area. Having a low income also increased the risk among African Americans more so than among Caucasians (Apelberg BJ et al., 2005).
- In Houston, Houston is home to one of the world's largest petrochemical complexes, researchers found that the risk of cancer in an area increased along with the proportion of the population that was Hispanic and as measures of social disadvantage increased (Linder et al., 2008).

Socioeconomic position has been more consistently associated with greater harm from air pollution. Recent studies show evidence of that link. Low socioeconomic status consistently increased the risk of premature death from fine particle pollution among 13.2 million Medicare recipients studied in the largest examination of mortality associated with particulate matter levels nationwide (Zeger et al., 2008).

Response: As stated in the preamble for the proposed reconsideration of final rule, dated December 23, 2011, we are not obligated to respond on the merits to any comments addressing aspects of the final rule beyond the topics for which comments were requested. This comment is not on an issue reopened by the December 23, 2011 FR notice and is outside the scope of the current reconsideration. Nevertheless, we note that, to the extent that this comment focuses on risk-based standard setting, such considerations under the statutory scheme are not appropriate in a technology-based rulemaking under CAA §112.

Title V Rationale: Exemption for all area sources

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 13

Comment: We support the EPA's rationale expressed in the March 21, 2011 final rule (76 FR 15578):

“...we lack sufficient information at this juncture to distinguish the sources which have applied controls to boilers in order to become area sources from other synthetic and natural area sources. As a result, the rationale for exempting most area sources subject to this rule as explained in the proposal preamble (see pages 31910 to 31913) is also now relevant for sources which we proposed to permit. Thus, no area sources subject to this subpart are required to obtain a title V permit as a result of being subject to this subpart.”

Synthetic minor sources must have a federally enforceable permit to assure emissions remain below the major source threshold. The federally enforceable permit serves to ensure, through monitoring, recordkeeping and reporting requirements, the source's compliance. An additional Title V requirement would not provide any further compliance assurance and no emission reductions. Therefore, it would be unreasonable to impose Title V permitting burdens on the sources or the permitting authorities for synthetic minor sources.

Response: For the reasons stated in our March 21, 2011, final rule (76 FR 15554) as well as our reconsideration proposal (76 FR 80532, December 23, 2011), the EPA is not making any changes to the Title V exemption for area sources. Thus, no area sources subject to Subpart JJJJJ are required to obtain a Title V permit as a result of being subject to Subpart JJJJJ. The EPA is not responding to individual points raised by the commenter in support of the Title V exemption for area source boilers.

Commenter Name: Michael J. Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-2448-A1

Comment Excerpt Number: 9

Comment: The final rule exempts all area sources from Title V permitting as a result of this rule. In other words, this rule alone would not trigger Title V requirements for an area source. The proposed rule required Title V permits for major sources of HAPs that became area sources by installing controls after 1990. However, the EPA determined in its review of the record that it lacked sufficient information to distinguish these sources from other area sources. Thus, in the final rule, the EPA is no longer requiring any units to obtain Title V permits as a result of this rule. Sources would need a Title V permit if they are subject to Title V for another reason. The Clean Energy Group supports this decision, which will allow both permitting authorities and covered sources to focus on the larger emitters, allowing for more efficient and effective emissions reductions.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Timothy Serie

Commenter Affiliation: American Coatings Association (ACA)

Document Control Number: EPA-HQ-OAR-2006-0790-2437-A1

Comment Excerpt Number: 5

Comment: ACA generally supports the following proposed changes in the Area Source Boiler Rule: The EPA's decision not to require Title V permits for area source boilers

Response: The EPA thanks the commenter for their support.

Commenter Name: Arthur Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2006-0790-2454-A1

Comment Excerpt Number: 8

Comment: The existing language of 40 CFR 63 Subpart JJJJJ clearly states that an area source is exempt from the requirement to obtain a Title V permit irrespective of how or when the source became an area source subject to the subpart. We agree with the proposal to maintain this exclusion from Title V permitting. Facilities subject to Title V permitting requirements have additional administrative and financial burdens, and subjecting facilities to Title V permitting requirements solely because of previous source emissions will not result in further air quality benefits so long as clear and enforceable area source permits or regulatory limits are in place.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 5

Comment: Under current law, all area sources are excluded from the requirement to obtain a Title V permit. The EPA has asked should this exemption be maintained or limited solely to

those facilities that are "natural," not synthetic area sources. Castle supports the exemption as promulgated in the March 2011 final rule. Title V permitting is tremendously time-consuming and very costly. It is an enormous burden for small businesses and non-profits to comply with such obligations. On balance, the need for an exemption outweighs any small environmental benefit that might be derived from permitting. Finally, the Agency points out in the preamble to the proposed rule that synthetic area sources represent less than 1% of area sources. Thus, the exemption, as currently crafted, should be maintained.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Andrea Grant

Commenter Affiliation: Castle Oil Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-2462-A2

Comment Excerpt Number: 11

Comment: Based on the foregoing, Castle Oil Corporation urges the EPA to adopt the following provision:

Retain the exemption for all area source boilers from the Title V permitting requirement

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corporation (OCC)

Document Control Number: EPA-HQ-OAR-2006-0790-2435-A1

Comment Excerpt Number: 9

Comment: Title V permits should not be required for boilers and process heaters at area source facilities. Simply because an area source with low HAP emissions and has process equipment that controls emissions does not justify a requirement to obtain a Title V permit. The Title V program was designed for major sources of air pollutants, not minor sources, and the CAA does not expressly specify that small sources beneficially operating with control equipment must or ought to be subject to a Title V permit that would disproportionately impose heavy administrative burdens on small sources. Furthermore, most boilers at area sources are regulated by one of the boiler NSPS standards, as well as other State requirements. In summary, no environmental benefit will result from the added burden of requiring boiler operators at area sources to obtain Title V permits.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 34

Comment: In the 2010 proposed Area Source Boiler Rule, the EPA proposed to exempt from Title V permitting, certain area source categories except for those “synthetic area sources” that “became area sources by virtue of installing add-on controls.” (75 FR 31913.) (2010 Proposed Rule). The EPA included in the 2010 proposed Area Source Boiler Rule a thorough discussion of the justification for exempting certain area sources from Title V permitting. See 75 FR 31910-913. (2010 Proposed Rule). While many area sources subject to the proposed rule were exempted from Title V permitting, the EPA concluded that the synthetic sources that are large facilities should have to comply with Title V “because their uncontrolled emissions would far exceed the major source threshold.” (75 FR 31913.) (2010 Proposed Rule).

In the final Area Source Boiler Rule, the EPA expanded the exemption from Title V permitting to all area sources subject to the rule. (76 FR 15578.) (2011 Final Rule). The EPA justified its decision because it determined that it lacked sufficient information to “distinguish the sources which have applied controls to boilers in order to become area sources from other synthetic and natural area sources.” (76 FR 15578.) (2011 Final Rule). Therefore, the EPA determined its rationale in the 2010 proposed rule for exempting some sources from Title V permitting was relevant to all sources under the rule.

Sierra Club challenged this outcome in its Petition for Reconsideration. *See* Earthjustice Petition for Reconsideration of the Area Source Boiler Rule, dated (May 20, 2011). The EPA notes that petition “disputes [EPA’s] conclusion that title V permitting is unnecessarily burdensome; discusses the benefits of permitting, including compliance benefits; contests [EPA’s] estimation of the costs of permitting; and challenges [EPA’s] determination to extend the proposed exemption from title V permitting to include synthetic area sources.” (76 FR 80538.)

The Area Source Boiler Rule covers 187,000 boilers at 92,000 facilities, most of these are very small boilers at very diverse facilities. (76 FR 80538.) For the reasons set forth by the EPA, area sources should not be required to obtain Title V permits. That would not result in improvements to environmental protection proportionate to the significant burden on area source facilities. See 75 FR 31910-913.

The EPA’s decision to expand the Title V exemption to synthetic minor sources is fully supported by the record. As the EPA concluded in the final Area Source Boiler Rule, it lacks sufficient information to differentially treat the sources which have applied controls to boilers in order to become area sources¹⁰ from other synthetic and natural area sources.

¹⁰ 76 FR 80538. “In the preamble to the proposed area source NESHAP, we estimated that at least 48 synthetic area sources reduced their emissions to below the major source threshold by installing air pollution control devices. (75 FR 31911, June 4, 2010.)”

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 14

Comment: PA DEP supports the EPA's decision to retain the Title V permit exemption for area sources and synthetic area sources. The issuance of Title V permits for approximately 137,000 of area sources at facilities including apartment buildings, churches, hospitals and schools would be unduly burdensome-there is no environmental benefit to be gained from requiring the owners and operators of areas sources and synthetic minor sources to obtain Title V permits.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 6

Comment: The Title V permit process can be burdensome for small facilities because they generally have the least resources. For smaller facilities, state operating permits are more than adequate for capturing all the air compliance requirements and documenting them in a transparent manner.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Robert R. Perry

Commenter Affiliation: FirstEnergy Generation Corp. (FGCO)

Document Control Number: EPA-HQ-OAR-2006-0790-2445-A1

Comment Excerpt Number: 3

Comment: FGCO supports the EPA's exemption of natural as well as synthetic area sources. Both will be issued a local and/or state permit which spells out required terms and conditions. There is no need to expand Title V permitting requirements to these sources; this should be reserved for major sources. There is no evidence that requiring Title V permits for these area sources will increase the level of compliance, so the EPA correctly recognized the increased cost of permitting and further burden on local and state agencies cannot be justified.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 5

Comment: Merck supports the EPA's decision to not require Title V permits for area source subject to Subpart JJJJJ.

The EPA has correctly determined that Title V permitting should not be required for area sources. There are several reasons that this determination makes sense. Area sources are generally smaller facilities that have kept their emissions low or have added controls to keep

emissions low. These controls must be federally enforceable and therefore the Title V permit provides no compliance benefit.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Allison Watkins, Baker Botts
Commenter Affiliation: Class of '85 Regulatory Response Group
Document Control Number: EPA-HQ-OAR-2006-0790-2458-A1
Comment Excerpt Number: 3

Comment: The Class of '85 supports the EPA's decision to exempt all area sources from the requirement to obtain a Title V permit. We agree with the EPA's conclusion that application of the Title V permit requirement to area sources would be "unnecessarily burdensome." The Group also supports the EPA's determination that exemption of area sources from Title V requirements will not adversely affect public health, welfare, or the environment because the level of control remains the same regardless of whether the source is subject to a Title V permit or not. Title V does not impose new substantive requirements on sources and would not lead to improvements in compliance with the Area Source Boiler Rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Randal G. Oswald
Commenter Affiliation: Integrys Energy Group
Document Control Number: EPA-HQ-OAR-2006-0790-2472-A2
Comment Excerpt Number: 3

Comment: Integrys supports the EPA's decision to exempt all area sources from the requirement to obtain a Title V permit. We agree with the EPA's conclusion that application of the Title V permit requirement to area sources would be "unnecessarily burdensome." We also support the EPA's determination that exemption of area sources from Title V requirements will not adversely affect public health, welfare, or the environment because the level of control remains the same regardless of whether the source is subject to a Title V permit or not. Title V does not impose new substantive requirements on sources and would not lead to improvements in compliance with the Area Source Boiler Rule.

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Lorraine Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1
Comment Excerpt Number: 41

Comment: In the 2010 Proposed Rule, the EPA proposed to exempt area sources from the requirement to obtain a Title V permit, if they were not an area source as a result of installing a control device on a boiler after November 15, 1990. (75 FR 31896, at 31910-13, 31925.) This

exemption would have only applied to "natural" area sources and would not have applied to "synthetic" area sources that would otherwise have been major sources but for the control device. ACC submitted comments urging the EPA to adopt the same Title V permitting exemption for all affected area sources, including synthetic minor area sources.¹¹

In the final rule, the EPA extended the exemption to all area sources, including major sources that became synthetic area sources by voluntarily reducing their emissions to below major source thresholds through the installation of air pollution controls. After promulgation of the final rule, the EPA received a petition to reconsider the decision not to require Title V permits for area source boilers in the final rule, and to reconsider the decision to extend the exemption to include synthetic area sources. The petition was from the Sierra Club and is discussed in the preamble to the reconsideration proposal as follows:

The petition disputes our conclusion that title V permitting is unnecessarily burdensome; discusses the benefits of permitting, including compliance benefits; contests our estimation of the costs of permitting; and challenges our determination to extend the proposed exemption from title V permitting to include synthetic area sources. (76 FR 80538.)

ACC supports the EPA's final determination exempting all affected area sources from Title V permitting, whether natural or synthetic. We believe that this exemption is consistent with the CAA, supported by the record and environmentally protective. Section 502(a) of the CAA grants the EPA the authority to exempt §112 area sources from Title V permitting requirements if the EPA "finds that compliance with such requirements is impracticable, infeasible, or unnecessarily burdensome on such categories." The EPA has developed a four-factor test to assess whether Title V permitting would be unnecessarily burdensome for a particular area source category. Initially, the EPA performed a detailed evaluation of these factors as applied to area source boilers and proposed to conclude that Title V permitting for natural areas sources would be unnecessarily burdensome. (75 F 31896, 31910-13.) However, after considering comments and other information, the EPA stated in the final rule that it could not find a reason to distinguish between natural and synthetic minor area sources for the boiler category, and therefore the detailed rationale for exempting natural area sources also supported exempting synthetic minor area source boilers. (76 F 15578.) In this proposed rule, the EPA noted that it made the above determination "... in response to comments and after a full review of the record..." (76 FR 80538.)

The EPA also states that even if synthetic area source boilers are not subject to Title V, they "would likely be subject to more stringent permitting and monitoring requirements than natural sources. In order for a facility to be treated as a synthetic area source due to the installation of controls, the facility still has a legal duty to use the control equipment because the control equipment must be federally enforceable. The use of the control is not optional and must be continued." *Id.* The EPA is clearly correct here, for the essence of what makes a source a "synthetic" minor source is a restriction on the potential to emit to area source levels that is "synthetically" taken – meaning a limit that is practically enforceable, and set forth in, for example, a state or local permit; a SIP approved state preconstruction or operating permit program, etc. Synthetic minor sources must have a federally enforceable permit to assure emissions remain below the major source thresholds. The federally enforceable permit serves to

ensure, through monitoring, recordkeeping and reporting requirements, the source's compliance. An additional Title V requirement would not provide any further compliance assurance and no emission reductions. Therefore, it would be unreasonable to impose Title V permitting burdens on the sources or the permitting authorities for synthetic minor sources. Accordingly, there is no legitimate reason to treat synthetic area sources differently than natural area sources.

¹¹ ACC Area Source Boiler Comments at 54 (EPA-HQ-OAR-2006-0790-1925)

Response: See the response to EPA-HQ-OAR-2006-0790-2426-A1, excerpt 13.

Commenter Name: Dan Bosch

Commenter Affiliation: National Federation of Independent Business (NFIB)

Document Control Number: EPA-HQ-OAR-2006-0790-2428-A2

Comment Excerpt Number: 7

Comment: NFIB suggests that to improve these rules further, the EPA should adopt the suggestions the small-entity representatives provided the Agency during the SBAR panel held in 2009. These recommendations include:

- Exempting area sources from Title V permitting requirements.

Response: The final reconsideration did not change the Title V provisions finalized on March 21, 2011 (76 FR 15554). As provided for in 40 CFR 63.11194(f) of the final reconsideration rule (40 CFR 63.11194(e) of the March 2011 final rule), area sources subject to Subpart JJJJJ are not subject to Title V as a result of Subpart JJJJJ.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 7

Comment: Equally important is the impact on state permitting programs of requiring potentially thousands of facilities across the U.S. to obtain Title V permits. State Title V permit programs have struggled to keep pace with all of the facilities that currently require the Title V permits and all the renewals that therefore must take place. Adding the burden of small facilities to these state efforts would result in diluting the program. Therefore, we urge the EPA to continue to exempt area source boiler facilities from the Title V permit program.

Response: See the response to EPA-HQ-OAR-2006-0790-2428-A2, excerpt 7.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 20

Comment: The Area Source Boiler Rule’s exemptions from Title V are unlawful and arbitrary. Those comments are incorporated fully by reference here. In the proposed reconsidered Area Source Boiler Rule, the EPA advances new reasons for exempting synthetic area source boilers equally with natural area source boilers. The EPA states that synthetic area sources may already have Title V permits under other air regulatory programs. Because this is true for many categories of sources, including major sources for which the EPA has not granted an exemption from Title V permitting, it cannot justify the exemption for area sources, whether synthetic or natural. If the EPA meant by this that synthetic area sources are larger and thus more likely than natural area sources to be subject to Title V permitting under other programs that might logically explain why an exemption is *relatively* more justified for synthetic than for natural area sources. But the EPA has granted an exemption for both natural and synthetic area boilers, so any such difference cannot furnish a rational basis for the EPA’s Title V decision. In any event, the EPA goes on to say that natural and synthetic area sources are indistinguishable in most respects. The EPA points to no record support for these assertions, and they are counterintuitive: all else equal, it makes sense that a source which would be a major source but for emissions control technology should be a larger source in most senses than a source which is an area source before application of emissions control technology. But even if the EPA’s unsupported and illogical assertion is accurate, the similarity of natural and synthetic area source boilers is not a special circumstance that could justify a Title V exemption for either or both groups of sources.

Response: In the proposed rule published on June 4, 2010 (75 FR 31925), we proposed to exempt area sources from the requirement to obtain a Title V permit, if they were not an area source as a result of installing a control device on a boiler after November 15, 1990. In other words, this exemption would have only applied to “natural” area sources and “synthetic” area sources that took operational limits, and would not have applied to “synthetic” area sources that would otherwise have been major sources but for the installation of a control device. In the March 21, 2011 final rule, in response to comments and after a full review of the record, we extended the exemption to all area sources, including major sources that became synthetic area sources by installing air pollution controls. We explained that we lacked sufficient information at that time to distinguish from other synthetic and natural area sources those sources which have applied controls to boilers in order to become area sources. As a result, the rationale for exempting most area sources subject to this rule as explained in the proposal preamble (see 75 FR 31910 to 31913, June 4, 2010) was also relevant for those sources which we proposed to require a title V permit. Thus, no area sources subject to Subpart JJJJJ are required to obtain a Title V permit as a result of being subject to Subpart JJJJJ.

GACT Analysis/Rationale: Results of PM standards for new oil-fired boilers

Commenter Name: Paul Noe

Commenter Affiliation: American Forest & Paper Association (AF&PA) et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2426-A1

Comment Excerpt Number: 2

Comment: We agree with the EPA’s rationale to base these limits on GACT versus MACT (please refer to comments in Section II above). We agree that PM GACT standards for new oil-

fired units should consist of numeric emission limits based on the NSPS for larger units (>10 MMBtu/hr). Basing the limit on NSPS Subpart Dc is justified, as the EPA has recently reviewed the Small Industrial Boiler NSPS (changes were published in 2007 at 72 FR 32759 and in 2009 at 74 FR 5091) and determined that a PM limit of 0.030 lb/MMBtu (see 40 CFR 60.43c(c)) was appropriate for new small boilers.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 13

Comment: In the final Area Source Boiler Rule, the EPA promulgated a GACT-based PM emission limit for new oil-fired boilers. (76 FR 15574.) (2011 Final Rule) PM is used as a surrogate for individual urban metal HAP at oil-fired boilers. The EPA concluded in the 2012 reconsidered Area Source Boiler Rule that this approach is appropriate and proposed no amendments to the PM emission limits.

For the purposes of regulating PM from new boilers, we concluded that the GACT standards should consist of numeric emission limits for units with heat input capacities greater than 10 million Btu per hour or greater because these new units will be subject to the new source performance standard (NSPS) emission limits for PM, and the NSPS will require PM emissions testing. For units with capacity less than 10 million Btu per hour, GACT does not include a numerical emission limit because of technical limitations of testing PM emissions from boilers with small diameter stacks. (76 FR 80537.)

Overall, the EPA's decision to set GACT emission limits instead of MACT is appropriate. The EPA set numeric emission limits for new oil-fired units with heat input capacities 10 MMBtu/hr or greater because those units will already have to comply with the NSPS emission limits for PM, which requires PM testing. (76 FR 80537.) The EPA's decision to set numeric GACT emission limits for larger new units that will already have to comply with NSPS is appropriate. This approach is justified as the EPA has as recently as 2009 reviewed and promulgated standards for the Small Industrial Boiler NSPS and determined that a PM limit of 0.030 lb/MMBtu is appropriate for new small boilers. See 74 FR 5091.

Response: The EPA thanks the commenter for their support and additional justification.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 11

Comment: PA DEP agrees with the EPA's approach to establish the PM emission limits and work practice requirements for biomass- and oil-fired area source boilers under the GACT provisions of the CAA.

Response: The EPA thanks the commenter for their support.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 40

Comment: Second, we support the decision to forego a numerical emission limit for smaller sources (<10MMBtu/hr). As the EPA has acknowledged, it is not appropriate to set a numerical emission limit for small units because of technical limitations of testing PM emissions from boilers with small diameter stacks. The installation of ports into small diameter vents may interfere with the functionality of exhaust systems for new and existing boilers. Many existing area source boilers with a capacity below 10 MMBtu/hr have stacks with diameters less than 12 inches, and many area source boilers do not currently have sampling ports or a platform for accessing the exhaust stack. Furthermore, very small boilers (less than 5 MMBtu/hr) typically exhaust through vents, and not stacks, which would cause further complications to meet testing requirements. See 75 FR 15568. The EPA determined that the testing and monitoring costs that area source boiler facilities would incur to demonstrate compliance with numerical emission limits would present an excessive burden for smaller sources. Thus, ACC supports the EPA's decision to establish work practice standards for these smaller sources.

Response: The EPA thanks the commenter for their support.

Commenter Name: Michael L. Krancer

Commenter Affiliation: Pennsylvania Department of Environmental Protection (PA DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2449-A1

Comment Excerpt Number: 13

Comment: PA DEP agrees with the limit of 0.03 lb/MMBtu of heat input for new oil-fired boilers, as established in the final rule.

Response: The EPA thanks the commenter for their support.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 14

Comment: The NSPS provides an exemption from the PM limit for units burning low-sulfur fuel at §60.43c (e)(4):

“an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.”

Therefore, the EPA should include an alternate compliance approach of using low-sulfur fuel for consistency with recently reviewed NSPS requirements for oil-fired units.

Response: In the final Subpart JJJJJ rule, the EPA is providing an alternative GACT compliance option for PM from oil-fired boilers burning low-sulfur fuel. We received a number of comments urging that we provide an exemption from the PM limit for units burning low-sulfur liquid fuel as is provided in Subpart Dc of 40 CFR Part 60 (standards of performance for new small industrial-commercial-institutional steam generating units). Commenters asserted that such an exemption is justified since the low sulfur content indicates low PM emissions and that boilers firing low-sulfur liquid fuel should only be subject to a requirement to maintain records documenting the liquid fuel fired. We agree with commenters that use of low sulfur liquid fuels results in much lower PM emissions. Use of low sulfur liquid fuels also results in much lower HAP metal emissions. Specifically, the HAP metal emission factors for distillate fuel oil are 7 to 10 orders of magnitude lower than the emission factors for number 6 fuel oil.

In the final rule, we are amending 40 CFR 63.11210 to specify that new or reconstructed oil-fired boilers that:

- (1) combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart; and
- (2) do not use a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions

are not subject to the PM emission limit providing the type of fuel combusted is monitored and recorded on a monthly basis. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM. In addition, the final rule specifies that the owner or operator of an affected boiler does not need to conduct further PM emission testing if, when demonstrating initial compliance with the PM emission limit, the performance test results show that the PM emissions are equal to or less than half of the PM emission limit.

Commenter Name: Lorraine Gershman

Commenter Affiliation: American Chemistry Council (ACC)

Document Control Number: EPA-HQ-OAR-2006-0790-2444-A1

Comment Excerpt Number: 39

Comment: The EPA finalized a PM emission limit based on GACT for new oil-fired area source boilers and is soliciting comment on the level at which the limit was set. (76 FR 15574.) In the reconsideration proposal rule, the EPA states:

For the purposes of regulating PM from new boilers, we concluded that the GACT standards should consist of numeric emission limits for units with heat input capacities greater than 10 million Btu per hour or greater because these new units will be subject to the new source performance standard (NSPS) emission limits for PM, and the NSPS will require PM emissions testing. For units with capacity less than 10 million Btu per hour, GACT does not include a numerical emission limit because of technical limitations of testing PM emissions from boilers with small diameter stacks. (76 FR 80537.)

First, we agree with the EPA's rationale to base these limits on GACT rather than MACT (please refer to comments in Section II above). We agree that PM GACT standards for new oil-fired units should consist of numeric emission limits based on the NSPS for larger units (>10 MMBtu/hr). Basing the limit on NSPS Subpart Dc is justified, as the EPA has recently reviewed the Small Industrial Boiler NSPS (changes were published in 2007 at 72 FR 32759 and in 2009 at 74 FR 5091) and determined that a PM limit of 0.030 lb/MMBtu (see 40 CFR 60.43c(c)) was appropriate for new small boilers. However, the NSPS provides an exemption from the PM limit for units burning low-sulfur fuel at §60.43c (e)(4):

an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

Therefore, the EPA should include an alternate compliance approach of using low-sulfur fuel for consistency with recently reviewed NSPS requirements for oil-fired units.

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 14.

Commenter Name: Matthew Todd

Commenter Affiliation: American Fuel & Petrochemical Manufacturers (AFPM) and the American Petroleum Institute (API)

Document Control Number: EPA-HQ-OAR-2006-0790-2482-A2

Comment Excerpt Number: 21

Comment: The EPA finalized a PM emission limit in the existing final Area Source Boiler Rule based on GACT⁵⁸ for new oil-fired area source boilers and is soliciting comment on the level at which the limit was set. In this proposal, the EPA stated:⁵⁹

For the purposes of regulating PM from new boilers, we concluded that the GACT standards should consist of numeric emission limits for units with heat input capacities greater than 10 MMBtu/hr or greater because these new units will be subject to the NSPS emission limits for PM, and the NSPS will require PM emissions testing. For units with capacity less than 10 MMBtu/hr, GACT does not include a numerical emission limit because of technical limitations of testing PM emissions from boilers with small diameter stacks.

We agree with the EPA's rationale to base these limits on GACT versus MACT. Basing the limit on NSPS Subpart Dc is justified, as the EPA has recently reviewed that NSPS⁶⁰ and determined that a PM limit of 0.030 lb/MMBtu (see 40 CFR 60.43c(c)) is appropriate. However, NSPS Dc provides an exemption from the PM limit for units burning low-sulfur fuel at §60.43c (e)(4), as follows.

An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

Therefore, to reflect GACT, the EPA should include a similar sulfur criterion in the Area Source NESHAP in applying the new source boiler PM limit. Boilers firing liquid fuels containing < 0.5 weight percent sulfur should only be subject to the work practice requirement to maintain a record that the liquid fuel-fired contains < 0.5 weight percent sulfur. Such a work practice is justified since the low sulfur content indicates low PM emissions and thus meets the CAA §112(h) criteria of being infeasible to measure.

⁵⁸ 76 FR 15574 (March 21, 2011)

⁵⁹ 76 FR 80537 (December 23, 2011)

Response: See the response to EPA-HQ-OAR-2006-0790-2443-A1, excerpt 14.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 8

Comment: Merck proposes that the EPA change the heat input threshold for new oil-fired boilers subject to a particulate emission standard from 10 MMBtu/hr to 30 MMBtu/hr.

In establishing the threshold for new oil-fired boilers subject to a particulate standard at 10 MMBtu/hr the EPA stated three rationales: multi-clones, which are the control technology used by sources in the category, are capable of achieving the limit; new sources over 30 MMBtu/hr will be subject to that limit through regulation under 40 CFR 60 Subpart Dc ("Subpart Dc") in any event; and units under 10 MMBtu/hr are likely to have stacks which are too small to allow cost effective stack testing (76 FR 15574). In this current proposal the EPA has stated the rationale for requiring GACT controls on these sources is because sources over 10 MMBtu/hr will be subject to the Subpart Dc and have to do particulate emissions testing (76 FR 80537).

We object to the current promulgated threshold. First, in the interest of regulatory simplicity we believe the EPA should strive to make the Area Source Boiler Rule be consistent with Subpart Dc where possible. The Agency has done this in other MACT rules, most notably aspects of the

RICE MACT (40 CFR 63 Subpart ZZZZ). The EPA correctly stated in the March 21, 2011 notice that the particulate emission standard in Subpart Dc applies to oil-fired boilers greater than 30 MMBtu/hr (76 FR 15574). However, in this rule the EPA has created confusion by citing Subpart Dc as a partial basis for the rule and using a different threshold for a particulate standard for oil-fired boilers than the threshold in Subpart Dc.

Response: For the purposes of regulating PM from new area source boilers with heat input capacity of 10 MMBtu/hr or greater, the EPA has determined that the GACT standards should consist of numeric emission limits. PM is used as a surrogate for urban metals, which we are required to regulate pursuant to CAA §112(c)(3). With regard to the PM emission limit for new oil-fired boilers with a heat input capacity between 10 and 30 MMBtu/hr, our June 2010 proposal included a PM limit of 0.03 lb/MMBtu as did our March 2011 final rule. We believe that this promulgated numeric emission limit for PM is an appropriate GACT standard for new oil-fired boilers with a heat input capacity greater than 10 MMBtu/hr. Although we are not making any changes to the 0.03 lb/MMBtu PM limit for new oil-fired boilers with heat input capacity greater than 10 MMBtu/hr, we are confirming that a PM limit of 0.03 lb/MMBtu is appropriate for new oil-fired boilers with heat input capacity between 10 MMBtu/hr and 30 MMBtu/hr. Because new oil-fired boilers with heat input capacity between 10 MMBtu/hr and 30 MMBtu/hr would not be subject to the PM limit of 0.03 lb/MMBtu in Subpart Dc of 40 CFR Part 60, commenters have questioned the requirement under this subpart that new oil-fired boilers with heat input capacity between 10 MMBtu/hr and 30 MMBtu/hr must meet a limit of 0.03 lb/MMBtu. We previously stated that the data that we have available suggests that the control technologies currently used by facilities in the source category for reduction of non-Hg metallic HAP and PM are multiclones. We determined during the development of the June 2010 proposed rule that these controls are generally available and cost effective for new area source boilers. Using the AP-42 PM emission factor for number 6 fuel oil and applying an 85% PM emission reduction level for multiclone control, the resulting PM emission limit is 0.027 lb/MMBtu. We believe this is confirmation that a PM limit of 0.03 lb/MMBtu is appropriate for new oil-fired boilers with heat input capacity between 10 MMBtu/hr and 30 MMBtu/hr.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 9

Comment: The EPA has identified multiclones as GACT, even though by their own admission this technology is generally used on solid fuel units. The Agency has not presented any data indicating that multiclones are generally used on units smaller than 30 MMBtu/hr that only fire oil, let alone data showing that they would be effective in achieving significant reductions in particulate from these units. In fact, the EPA's AP-42 factors indicate that for distillate-fired oil boilers less than 100 MMBtu/hr, no controls would ever be needed. Therefore setting the particulate standard at this heat input threshold imposes a stack test obligation on the small facilities and institutions with the least resources to deal with them, while providing no environmental benefit.

Response: In addition to this commenter's assertion that establishing a PM limit for new oil-fired boilers imposes a stack test obligation on small facilities with the least resources to deal with the testing, the EPA received comments asserting that the most effective control strategy for small oil-fired boilers is the tune-up required by the standards and that establishing a PM limit for those boilers between 10 MMBtu/hr and 30 MMBtu/hr just ensures that those boilers will do stack testing demonstrating that the boilers are in compliance without the need for controls; a fact already known. We have reviewed the comments and are not eliminating or revising the PM limit for new oil-fired boilers with heat input capacity between 10 MMBtu/hr and 30 MMBtu/hr. We do, however, believe that adjustments to the PM performance test frequency are appropriate for certain boilers. Specifically, we are amending the PM performance testing requirements in 40 CFR 63.11220(b) to specify that the owner or operator of an affected boiler does not need to conduct further PM emission testing if, when demonstrating initial compliance with the PM emission limit, the performance test results show that the PM emissions are equal to or less than half of the PM emission limit. The owner or operator must continue to comply with all applicable operating limits and monitoring requirements to ensure that there are no changes in operation of the boiler or air pollution control equipment that could increase emissions. If the initial performance test results show that the PM emissions are greater than half of the PM emission limit, the owner or operator must conduct subsequent performance tests as specified in 40 CFR 63.11220(a). This adjustment in PM performance test frequency will potentially reduce the burden on small facilities and institutions operating boilers that meet the adjustment criteria. We are also amending the applicability of PM emission limit requirements for certain new or reconstructed oil-fired boilers. We are amending 40 CFR 63.11210 to specify that new or reconstructed oil-fired boilers that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart and that do not use a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions are not subject to the PM emission limit. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 10

Comment: The most effective control strategy for distillate-fired oil boilers is the combustion tune-up already required by the standard. Therefore, for small boilers between 10 MMBtu/hr and 30 MMBtu/hr that are not subject to the Subpart Dc particulate limit, the Area Source Boiler Rule just ensures that they will do stack testing to demonstrate what is already known; these facilities do not need controls. This is not a result compelled or envisioned by §112 of the CAA.

Response: See the response to EPA-HQ-OAR-2006-0790-2460-A2, excerpt 9.

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: National Steering Committee, Small Business Ombudsman and Small Business Environmental Assistance Programs (SBO/SBEAP)

Document Control Number: EPA-HQ-OAR-2006-0790-2459-A2

Comment Excerpt Number: 6

Comment: We believe that an error was made in the reference to NSPS requiring testing for boilers greater than 10 MMBtu/hr. In 40 CFR Part 60 Subpart Dc, it only requires stack testing for certain boilers greater than 30 MMBtu/hr heat input. The current Area Source NESHAP requirement adds considerable burden to predominantly small businesses with very little environmental benefit. Therefore, we believe that the stack testing requirements for distillate boilers between 10 and 30 MMBtu/hr heat input, at a minimum, be replaced with periodic tune-up requirements.

Response: The proposed reconsideration and this final rule do not include limits for PM emissions or require emissions testing, for existing oil-fired boilers. For new or reconstructed oil-fired boilers that combust only oil that contains no more than 0.50 weight percent sulfur, no PM limits apply. Combustion of low-sulfur fuels under the conditions in the rule would be GACT for PM. Periodic tune-ups are required for existing and new oil-fired units. See the response to EPA-HQ-OAR-2006-0790-2460-A2, excerpt 9.

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 1

Comment: NC DAQ believes initial and triennial emission testing for PM from small No. 2 oil-fired boilers between 10 and 30 MMBtu/hr heat input is unnecessary because it provides marginal environmental benefit.

Response: See the responses to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 6, and EPA-HQ-OAR-2006-0790-2460-A2, excerpt 9.

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 5

Comment: NC DAQ recommends the Subpart JJJJJ rule exclude PM emission standard or periodic emission testing requirements but include the periodic tune-up provision to ensure continuing compliance for small distillate oil-fired boilers between 10 to 30 MMBtu/hr.

Response: See the responses to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 6, and EPA-HQ-OAR-2006-0790-2460-A2, excerpt 9.

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 6

Comment: NC DAQ recommends eliminating similar PM emission standard or periodic emission testing provisions for distillate- fired boilers larger than 30 MMBtu/hr.

Response: See the responses to EPA-HQ-OAR-2006-0790-2459-A2, excerpt 6, and EPA-HQ-OAR-2006-0790-2460-A2, excerpt 9.

Commenter Name: Joseph Seymour

Commenter Affiliation: Biomass Thermal Energy Council (BTEC)

Document Control Number: EPA-HQ-OAR-2006-0790-2475-A2

Comment Excerpt Number: 3

Comment: BTEC's proposed biomass boiler emissions limits were calculated using the EPA's boiler data set originally published on June 4, 2010.¹ The average CO of the six boilers with the lowest PM emissions and calculating the average PM of the eight boilers with the lowest CO were used in determining the minimum emissions limits.² BTEC is confident that its proposed alternative standards and requirements move towards a common-sense balance between significantly reducing emissions from new biomass boilers as well as fostering a strong renewable biomass thermal sector. Based on this approach, the initial and interim recommended limits and practices include:

- CO – 1,164 ppm at 7% O₂, for all boilers (Method 10);
- PM - 0.23 lb/MMBtu, for boilers under 10 MMBtu/hr input (Method 5);
- Initial independent third party certification test for biomass boilers to prove compliance at the factory. Once a boiler (or range of boilers) is tested, that boiler would be approved for installation until a change was made in the boiler design;
- Work practice standard for biomass boilers, consisting of an annual boiler tune-up according to manufacturers' specifications.

¹ BTEC's proposed emissions limits calculations were submitted to the EPA on July 20, 2010 in response to Docket ID No. EPA-HQ-OAR-2006-0790 and can be accessed at http://www.biomassthermal.org/pdf/BTEC_Boiler_MACT_Comments.pdf.

² These limits also correspond to the European EN303-5 Standards for commercial-scale biomass boilers, further underlining the reasonableness of the proposed limits

Response: As we responded to this comment when submitted in response to the June 2010 proposal, the EPA appreciates the comment and the effort put forth to devise alternative

standards. We continue to believe that basing the standards for biomass- and oil-fired area source boilers on GACT instead of MACT is appropriate. Our rationale can be found in the preamble to the 2011 final rule (76 FR 15565-1567 and 15574-15575, March 21, 2011) and the December 23, 2011, proposed reconsideration of final rule action (76 FR 80537).

Commenter Name: Sheila C. Holman

Commenter Affiliation: NC Division of Air Quality (NC DAQ), North Carolina Department of Environment and Natural Resources (NCDENR)

Document Control Number: EPA-HQ-OAR-2006-0790-2474-A2

Comment Excerpt Number: 4

Comment: Regarding the GACT proposed amendments, page 80537 indicates:

"For the purposes of regulating PM from new boilers, we concluded that the GACT standards should consist of numeric emission limits for units with heat input capacities greater than 10 million Btu per hour or greater because these new units will be subject to the new source performance standard (NSPS) emission limits for PM, and the NSPS will require PM emissions testing."

This statement is not accurate, as the NSPS only requires PM standards and emissions testing for sources 30 MMBtu/hr and larger and not even then in some cases.

Response: In the preamble to the proposed amendments (76 FR 80537, December 23, 2011), the EPA referred to the preamble for the March 2011 final rule for the rationale for emission limits for new biomass- and oil-fired units. The December 2011, preamble then incorrectly stated that new units with heat input capacities greater than 10 MMBtu/hr or greater will be subject to the NSPS emission limits for PM. The March 2011 preamble to the final rule (76 FR 15574), however, correctly stated that new area source boilers with heat input capacity of 30 MMBtu/hr or greater are subject to the NSPS.

Commenter Name: Neil Gormley

Commenter Affiliation: Earthjustice et al.

Document Control Number: EPA-HQ-OAR-2006-0790-2473-A2

Comment Excerpt Number: 11

Comment: The EPA should more closely examine whether baghouses or ESPs are in general use for control of particulate emissions (and the HAPs for which PM is used as a surrogate), whether acid gas control is in general use for HCl, and whether oxidation catalysts are in general use for CO.

Response: When we assessed controls in the 2010 proposal and the 2011 final rule, we reviewed technologies for purposes of determining GACT. For existing biomass-fired boilers, we found that the add-on control technology generally being used is a multiclone. For existing oil-fired boilers, we found no add-on control technology being used. We determined that fabric filters were not in wide use, would be expensive to install, and were not considered GACT for existing

boilers. For new boilers, we determined that multiclones, fabric filters and ESP controls were generally available and cost-effective. We believe that these determinations are appropriate. Additionally, we note that this category was not listed for HCl, and that CO control would only have been required as a surrogate for POM. Since these pollutants are not regulated under CAA §112(c)(3), there is no basis for applying GACT to the controls.

Commenter Name: James Pew

Commenter Affiliation: Earthjustice, Clean Air Council, Partnership for Policy Integrity

Document Control Number: EPA-HQ-OAR-2006-0790-2480; 2480-A2

Comment Excerpt Number: 11

Comment: Major source emissions standards for PM are higher than area source standards.

Major source emissions for PM (new sources) are as follows. The area source standard is 0.03 lb/MMBtu for boilers greater than 30 MMBtu/hr. It makes no sense for new major sources to be permitted to emit more PM than area sources.

Rates for some categories are as high as from a unit that has *no* emission controls.

The floor for new stokers burning kiln-dried wood in the rule is 0.32 lb/MMBtu; the EPA's own AP-42 document shows filterable PM10 emissions of 0.36 lb/MMBtu for dry wood combusted with no emissions controls. The AP-42 document further shows that use of just a mechanical collector (which relies on centrifugal force to spin out large particles) reduces the emissions to 0.3 lb/MMBtu for dry wood.

Response: This comment is not one appropriately addressed under this action regarding area source boilers. We have previously explained and documented in the rulemaking docket our rationale for PM emission limits.

Commenter Name: William O'Sullivan

Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2479-A2

Comment Excerpt Number: 2

Comment: We recommend that emission limits for a boiler and process heater located at an area HAP source be the same as limits for the same size unit located at a major HAP source.

Response: See the response to EPA-HQ-OAR-2006-0790-2480, excerpt 11. We would like to point out, however, that process heaters are not one of the categories of sources being regulated under this area source action.

Commenter Name: Barbara Schulze

Commenter Affiliation: Merck & Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-2460-A2

Comment Excerpt Number: 11

Comment: Because the EPA has departed from past practice under both the PSD and NSPS programs and indicated fuel switching as a trigger for a facility being considered "new", without regard to whether the unit could previously accommodate the fuel, many existing facilities that today only use oil as a back-up could suddenly be subject to stack testing in the unlikely event that fuel price upheavals make natural gas economically less favorable than fuel oil. To compound the economic upheaval of unexpected, drastic changes in fuel prices with stack testing that will result in no emission reductions is a waste. Given these factors we urge the EPA to adopt the Subpart Dc threshold for oil fired boilers of 30 MMBtu/hr.

Response: With regard to compliance requirements for dual-fuel fired boilers that fuel switch after June 4, 2010, see the responses to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8, and EPA-HQ-OAR-2006-0790-2459-A2, excerpt 9.

As explained in our response to EPA-HQ-OAR-2006-0790-2460-A2, excerpt 8, with regard to the PM emission limit for new oil-fired boilers with a heat input capacity between 10 and 30 MMBtu/hr, our June 2010 proposal included a PM limit of 0.03 lb/MMBtu as did our March 2011 final rule. We believe that this promulgated numeric emission limit for PM is an appropriate GACT standard for new oil-fired boilers with a heat input capacity greater than 10 MMBtu/hr.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 5

Comment: Units switching from natural gas to another fuel should not be considered new units.

40 CFR 63.11194 (d) states: *A boiler is a new affected source if you commenced fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel after June 4, 2010.*

We have many boilers manufactured and installed with fuel switching capabilities. Treating them as "new" when they are operated as originally designed does not make sense, and is inconsistent with the Major Source Boiler MACT.

Response: See the responses to EPA-HQ-OAR-2006-0790-2474-A2, excerpt 8, and EPA-HQ-OAR-2006-0790-2459-A2, excerpt 9.

Petition Issues Not Granted Reconsideration: Legal/Applicability: De minimis threshold

Commenter Name: John V. Corra

Commenter Affiliation: Wyoming Department of Environmental Quality (Wyoming DEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2420-A1

Comment Excerpt Number: 7

Comment: Wyoming suggests the addition of a small boiler and process heater exemption. The exemption of boilers and process heaters less than 2 MMBtu/hour will somewhat alleviate the recordkeeping and tracking burden on both the State and industry.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)

Document Control Number: EPA-HQ-OAR-2006-0790-2443-A1

Comment Excerpt Number: 36

Comment: The EPA should promulgate a *de minimis* exemption, not merely a work practice standard, for small boilers and process heaters of up to 10 MMBtu/hr or less. *Alabama Power Co. v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979), clearly establishes the EPA's authority to fashion *de minimis* and administrative necessity exemptions. In addition to the logistical issues involved with shutting down multiple small units in a facility at the same time, there is the considerable cost involved with performing the tune-ups. This significant cost produces only minimal corresponding reductions in HAP emissions. Tune-ups required under the current final and proposed rules will have only a limited effect on the HAP emissions from these small units. At least one CIBO member facility has estimated the cost of performing biennial tune-ups at \$20,000 per ton and quintennial tune-ups at \$8,000 per ton. The tune-up requirement results in a disproportionate expense in a very small portion of industry-wide HAP emissions.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Mark R. Vickery

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A2

Comment Excerpt Number: 1

Comment: The TCEQ supports the proposed new exemptions for temporary, residential, and electric boilers to clarify the rule and exempting sources within significant emissions. However, the EPA should include a *de minimis* size-based exemption for very small oil-fired and biomass-fired boilers.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 1

Comment: The majority of area source boilers in Texas are gas-fired and already exempt from 40 CFR 63 Subpart JJJJJ under §63.11194(e); however, the TCEQ is concerned at the lack of a size exemption in the rule. While many requirements (e.g., emissions standards, performance testing, and energy assessment) in the rule only apply to units with a capacity of 10 MMBtu/hr or greater, boilers less than 10 MMBtu/hr are still subject to certain requirements such as the periodic boiler tune-up provisions in §63.11223. Despite comments in the prior proposed rulemaking for 40 CFR 63 Subpart JJJJJ (published in the June 4, 2010, *Federal Register*) and petitioners' subsequent requests for a *de minimis* size exemption, the current proposed rule revisions only change the frequency of the boiler tune-up requirements for small oil-fired boilers equal to or less than 5.0 MMBtu/hr. As 40 CFR 63 Subpart JJJJJ is currently adopted and considering the EPA's proposed revisions, a single oil-fired boiler of any size at an industrial, commercial, or institutional site could trigger applicability of the rule. The TCEQ has identified oil-fired boilers as small as 40,000 Btu/hr that are expected to be at an industrial or commercial area source and subject to the rule.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 2

Comment: Many small boilers are used for steam and power purposes and not as hot water boilers or heaters; therefore, the units would not qualify for exemption under the proposed revised definition of *hot water heater* in §63.11237.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 3

Comment: The EPA did not provide any rationale for denying petitioners' requests for including a size exemption in the current proposed revisions other than to indicate that "the EPA disagrees that small boilers should be exempt from the rule..." (76 FR 80536). However, in the March 21, 2011, *Federal Register* publication of the final rule (76 FR 15568), the EPA's response to comments regarding a *de minimis* heat input level appears to indicate that the EPA believes that CAA §112 mandates establishing standards (numeric limits or work practices) for all sources in the category or subcategory and that the EPA is prohibited from providing a size-based exemption. It is counter-intuitive for the EPA to argue that it may provide an exemption for boilers within a category based on limited use at the site (i.e., the current proposed temporary

boiler exemption) yet a permanent boiler within the same category cannot be exempted based on limited size.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Tangela Niemann

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2006-0790-2464-A3

Comment Excerpt Number: 4

Comment: The EPA has already incorporated certain size-based criteria in other exemptions via the definitions used for those exemptions. The definition of *hot water heater* includes a maximum size of 120 gallons capacity that serves as a sized-based exemption for all hot water heaters 120 gallons or less. Similarly, the proposed addition of hot water boilers less than 1.6 MMBtu/hr to the definition of a *hot water heater* also establishes a sized-based exemption threshold.

The potential hazardous air pollutant emissions from such small units (e.g., a 40,000 Btu/hr oil-fired boiler) would be significantly less than other units that are currently exempt from 40 CFR 63 Subpart JJJJJ or that the EPA has proposed exemptions for with the current rulemaking. The TCEQ encourages the EPA to incorporate a *de minimis* size-based exemption threshold into the final rule to eliminate burdensome and unnecessary requirements on owners and operators of small boilers that have insignificant emissions.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Marilyn Crocket

Commenter Affiliation: Alaska Oil and Gas Association (AOGA)

Document Control Number: EPA-HQ-OAR-2006-0790-2466-A2

Comment Excerpt Number: 5

Comment: We encourage the EPA to consider a *de minimis* size threshold, below which no requirements apply due to the very low uncontrolled emission rates of such units. The EPA could reasonably use insignificance thresholds authorized under Part 71, e.g., Alaska regulations define diesel-fired boilers with a heat input rating of less than 1.7 MMBtu/hr as insignificant. Such an approach would help eliminate the Title 5 compliance issues.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Bart Sponsellar

Commenter Affiliation: Wisconsin Department of Natural Resources (Wisconsin DNR)

Document Control Number: EPA-HQ-OAR-2006-0790-2453-A1

Comment Excerpt Number: 8

Comment: The EPA in several cases reconsidered the schedule of requirements for smaller oil boilers and limited use boilers. Wisconsin DNR agrees that the frequency of tune-ups for these subcategories should be reduced because these sources are relatively low emitters. In this context we believe that the EPA also needs to apply some bottom threshold at which boilers are subject to the rule requirements. Currently, boiler categories are defined by thresholds such as less than 10 MMBtu/hr or less than 5 MMBtu/hr. This means that even the smallest boiler at an area or major source is subject to the requirement. The EPA does not supply a justification for regulating the very smallest emission sources in such an open-ended manner and needs to establish thresholds at which boilers are too small to be subject to the requirements. Clearly, at some level these sources do not contribute to the sources emissions in a significant manner. Further, we find it hard to resolve this issue when all Gas 1 and 2 boilers are subject to requirements under the Major Source Boiler Rule while they are not regulated under the Area Source Boiler Rule. These sources are exempt under the Area Source Boiler Rule because their emissions are deemed to be minor if not insignificant.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.

Commenter Name: Heather Parent

Commenter Affiliation: State of Maine Department of Environmental Protection (Maine DEP)

Document Control Number: EPA-HQ-OAR-2006-0790-2470-A2

Comment Excerpt Number: 6

Comment: The EPA should establish a straight forward heat input exemption for the Major Source and Area Source Boiler Rules.

Maine DEP supports the EPA's intent to exempt small residential sized boilers. Unfortunately, the final hot water heater definition was complicated and difficult for implementing agencies and boiler technicians to understand, making applicability determinations very difficult. The proposed addition of the 1.6 MMBtu/hr threshold makes implementation more straightforward. However, Maine DEP believes this should be used as an overall applicability threshold for all types of boilers and fuels.

Response: This comment relates to a petition that was denied by the EPA. Refer to the preamble section 'Other Actions the EPA is Taking' for the reasons for the denial.