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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260, 261, and 270

[EPA-HQ-RCRA-2010-0742; FRL-XXXX-X]

RIN 2050-AG62

Rulemaking on the Definition of Solid Waste

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA or the Agency) is proposing to revise certain exclusions from the definition of solid waste for hazardous secondary materials intended for reclamation that would otherwise be regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The purpose of these proposed revisions is to ensure that the recycling regulations, as implemented, encourage reclamation in a way that does not result in increased risk to human health and the environment from discarded hazardous secondary material.

DATES: Comments must be received on or before **[Insert date 60** days after publication in the Federal Register]

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-RCRA-2010-0742 by one of the following methods:

- www.regulations.gov: Follow the on-line instructions for submitting comments.
- Email: Comments may be sent by electronic mail (email) to RCRA-docket@epa.gov, Attention Docket ID No. EPA-HQ-RCRA-2010-0742.
- Fax: Fax comments to: 202-566-9744, Attention Docket ID No. EPA-HQ-RCRA-2010-

0742

- Mail: Send comments to: OSWER Docket, EPA Docket Center, Mail Code 28221T, Environmental Protection Agency, 1200 Pennsylvania Avenue N.W. Washington D.C. 20460, Attention Docket ID No. EPA-HQ-RCRA-2010-0742. Please include two copies of your comments. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St., Washington D.C. 20503.
- Hand delivery: Deliver two copies of your comments to: Environmental Protection Agency, EPA Docket Center, Room 3334, 1301 Constitution Avenue, N.W., Washington D.C., Attention Docket ID No. EPA-HQ-RCRA-2010- 0742. Such deliveries are only accepted during the docket's normal hours of operation and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID Number EPA- HQ-RCRA-2010-0742. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or email. The www.regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through www.regulations.gov, your email address will be automatically captured and included as part of

the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, such as CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically at www.regulations.gov or in hard copy at the OSWER Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., N.W., Washington DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m. Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room and the OSWER Docket is (202) 566-1744.

FOR FURTHER INFORMATION CONTACT: For more detailed information on specific aspects of this rulemaking, contact Marilyn Goode, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. N.W., Washington DC 20460, (703) 308-8800, (goode.marilyn@epa.gov) or Tracy Atagi, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. N.W., Washington DC 20460, at (703) 308-8672 (atagi.tracy@epa.gov). For information on future public meetings on this proposal, contact Amanda Geldard, Office of Resource Conservation and Recovery, Materials Recovery and

Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. N.W., Washington DC 20460, at 703-347-8975 geldard.amanda@epa.gov. Information regarding these public meetings will also be posted at EPA's Web site at: http://www.epa.gov/epawaste/hazard/dsw/rulemaking.htm.

SUPPLEMENTARY INFORMATION:

A. Does this Action Apply to Me?

Entities potentially affected by today's action include between 6,500 to 9,100 industrial facilities (depending on the regulatory option(s) selected) in upwards of 622 industries that generate or recycle hazardous secondary materials that are (1) currently regulated as RCRA Subtitle C hazardous wastes, (2) hazardous secondary materials currently excluded under the 2008 DSW final rule (three exclusions), or (3) hazardous secondary materials currently excluded from RCRA Subtitle C under other recycling exclusions (32 exclusions). Most of the 622 industries have relatively few counts of potentially affected entities and are not listed here. There are 27 industries with the largest counts of potentially affected entities which EPA evaluated in detail in its "Regulatory Impact Analysis" (RIA) for today's action These industries in ascending code order by 6-digit NAICS codes are: (1) 323110 Commercial Lithographic Printing; (2) 324110 Petroleum Refineries; (3) 325188 All Other Basic Inorganic Chemical Manufacturing; (4) 325199 All Other Basic Organic Chemical Manufacturing; (5) 325211 Plastics Material and Resin Manufacturing; (6) 325412 Pharmaceutical Preparation Manufacturing; (7) 325510 Paint and Coating Manufacturing; (8) 325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing; (9) 326199 All Other Plastics Product Manufacturing; (10) 331111 Iron and Steel Mills; (11) 331492 Secondary Smelting, Refining & Alloying of Nonferrous Metal (except Copper, Aluminum); (12) 332312 Fabricated

Structural Metal Manufacturing; (13) 332812 Metal Coating, Engraving (except Jewelry and Silverware) and Allied Services to Manufacturers; (14) 332813 Electroplating, Plating, Polishing, Anodizing and Coloring; (15) 332999 All Other Miscellaneous Fabricated Metal Product Manufacturing; (16) 333415 Air Conditioning, Warm Air Heating Equipment, and Commercial and Industrial Refrigeration Equipment Manufacturing, (17) 334412 Bare Printed Circuit Board Manufacturing; (18) 334413 Semiconductor and Related Device Manufacturing; (19) 334418 Printed Circuit Assembly, (20) 336399 All Other Motor Vehicle Parts Manufacturing; (21) 336412 Bare Printed Circuit Board Manufacturing; (22) 336413 Other Aircraft Part and Auxiliary Equipment Manufacturing; (23) 541710 Research & Development in the Physical, Engineering, and Life Sciences; (24) 562211 Hazardous Waste Treatment and Disposal; (25) 611310 Colleges, Universities and Professional Schools; (26) 622110 General Medical and Surgical Hospitals; and (27) 928110 National Security.

In aggregate, the RIA estimates the future average annualized costs to industry to comply with the seven proposed revisions at between $7.2 million to $13.1 million per year under a lower-bound state adoption scenario, which results in 13% of recycling facilities implementing the revisions, and between $7.4 million to $47.5 million per year under an upper-bound state adoption scenario, which results in 74% of recycling facilities implementing the revisions. This range reflects uncertainty about the ultimate number of states which may voluntarily adopt the proposed revisions. More information on the potentially affected entities, industries, and industrial materials, as well as the economic impacts of this proposed rule, is presented in Section XVII.A of this preamble and in the Regulatory Impact Analysis available in the docket for this final rule.

B. What to Consider When Preparing Comments for EPA.

1. Submitting CBI. Do not submit this information to EPA through www.regulations.gov or email. Clearly mark all information that you claim to be CBI. For CBI information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed, except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- Follow directions. The Agency may ask for commenters to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If estimating burden or costs, explain methods used to arrive at the estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate any concerns and suggest alternatives.
- Make sure to submit comments by the comment period deadline identified above.

Preamble Outline

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I. Statutory Authority

These regulations are proposed under the authority of sections 2002, 3001, 3002, 3003, 3004, 3007, 3010, and 3017 of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and

Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 6921, 6922, 6923, and 6924. This statute is commonly referred to as "RCRA."

II. List of Abbreviations and Acronyms

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CFR – Code of Federal Regulations

DOT – Department of Transportation

DSW – Definition of Solid Waste

EPA – Environmental Protection Agency

HSWA – Hazardous and Solid Waste Amendments of 1984

LDR – Land Disposal Restrictions

NAICS – North American Industry Classification System

NPL – National Priority List

RCRA – Resource Conservation and Recovery Act of 1976

RIA – Regulatory Impact Analysis

III. What is the Intent of this Proposal?

Today's proposal would revise and clarify the RCRA definition of solid waste (DSW) for certain types of hazardous secondary materials that are currently conditionally excluded from the definition of solid waste. These exclusions were promulgated in October 2008 (73 FR 64688, October 30, 2008) and were intended to encourage the recovery and reuse of valuable resources as an alternative to land disposal or incineration, while at the same time maintaining protection of human health and the environment.

In response to concerns raised by stakeholders about potential increases in risks to human health and the environment from hazardous secondary materials, EPA is proposing to revise the

2008 DSW final rule in order to ensure that the rule, as implemented, encourages reclamation in a way that protects human health and the environment from the mismanagement of hazardous secondary materials.

IV. What is the Scope of this Proposal?

In today's notice, EPA is proposing to revise the definition of solid waste regulations that were promulgated in October 2008 and that deal with the regulatory status of certain types of hazardous secondary materials sent for reclamation. The 2008 DSW final rule does not apply to recycling of "inherently waste-like" materials (40 CFR 261.2(d)); recycling of hazardous secondary materials that are "used in a manner constituting disposal," or "used to produce products that are applied to or placed on the land"(40 CFR 261.2(c)(1)); or for "burning of hazardous secondary materials for energy recovery" or "used to produce a fuel or otherwise contained in fuels" (40 CFR 261.2(c)(2)).

The regulatory changes being proposed today are summarized below. The intent of this summary is to give a brief overview of the proposed changes. More detailed discussions, including the Agency's rationale for the changes, are discussed in later sections. In addition, to aid commenters in their review, EPA has also included in the docket for today's proposal an informational redline/strikeout version of the proposed revised regulations as compared to the current Code of Federal Regulations.

A. *Exclusion For Hazardous Secondary Materials That Are Transferred For The Purpose of Reclamation*

EPA is proposing to replace the exclusion at 40 CFR 261.4(a)(24) and (25) for hazardous secondary materials that are transferred from the generator to other persons for the purpose of

reclamation with an alternative Subtitle C regulation for hazardous recyclable materials.[1] (See Section VIII for a detailed discussion of the alternative regulatory approach.) EPA's new analyses of potential hazards posed by the 2008 DSW final rule indicate that, when implemented, the transfer-based exclusion may pose significant risk to human health and the environment from hazardous secondary material that may become discarded. While the transfer of materials is inherent in ordinary commerce and does not automatically indicate discard has occurred, in the case of hazardous secondary materials transferred for reclamation, EPA has determined that only a specific set of hazardous secondary materials and reclamation practices clearly do not involve discard. Based on new EPA analyses, EPA believes that in most cases, hazardous secondary materials transferred to another party for reclamation are discarded and are best regulated under RCRA Subtitle C. Further discussion of this proposed withdrawal can be found in Section VII of this preamble.

B. *Alternative Subtitle C Regulation for Hazardous Recyclable Materials*

EPA is proposing to replace the transfer-based exclusion with an alternative Subtitle C regulation in 40 CFR 266.30 for hazardous recyclable materials, with the intention of promoting the safe and sustainable reclamation of these materials. Under these alternative requirements, the hazardous recyclable materials must be managed according to the current RCRA Subtitle C requirements, including manifesting and hazardous waste permits for storage, except that generators may accumulate hazardous recyclable materials for up to a year without a RCRA permit if the generator makes advance arrangements for legitimate reclamation and documents those arrangements in a reclamation plan. EPA also requests comment on setting an upper limit

[1]A hazardous secondary material is a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under 40 CFR part 261. A hazardous recyclable material is a hazardous wastes that is recycled. Unlike hazardous secondary materials, hazardous recyclable materials have clearly been discarded and therefore are always solid wastes.

on the amount of hazardous recyclable material accumulated at the generator at any one time. Further discussion of these proposed alternative standards can be found in Section VIII of this preamble.

C. *Revisions to the Exclusion for Hazardous Secondary Materials Reclaimed Under the Control of the Generator*

EPA is proposing to retain the exclusion for hazardous secondary materials reclaimed under the control of the generator with certain revisions, including (1) adding a regulatory definition of "contained" to 40 CFR 260.10; (2) making notification a condition of the exclusion; (3) adding a recordkeeping requirement for speculative accumulation in 40 CFR 261.1(c)(8); and (4) adding a recordkeeping requirement for reclamation under toll manufacturing agreements in 40 CFR 261.4(a)(23)(i)(C). EPA is also requesting comment on whether to withdraw the toll manufacturing provision of the exclusion. Further discussion of these proposed revisions can be found in Section IX of this preamble.

D. *Legitimacy*

EPA is also proposing revisions to the definition of legitimacy in 40 CFR 260.43, including (1) applying the codified definition to all recycling activities regulated under 40 CFR 260–266; (2) making all legitimacy factors mandatory, with a petition process for instances where a factor is not met, but the recycling is still legitimate; and (3) requiring documentation of legitimacy. Further discussion of these proposed revisions can be found in Section X of this preamble.

E. *Revisions to Solid Waste Variances and Non-Waste Determinations*

EPA is also proposing revisions to the solid waste variances and non-waste determinations found in 40 CFR 260.30–260.34 in order to foster greater consistency on the part

of implementing agencies and help ensure the protectiveness of the implementation of the solid waste variances and non-waste determinations. Proposed revisions include (1) requiring facilities to re-apply for a variance in the event of a change in circumstances that affects how a material meets the criteria upon which a solid waste variance has been based; (2) requiring facilities to re-notify every two years with updated information; (3) revising the criteria for the partial reclamation variance to more clearly explain when the variance applies and to require, among other things, that the criteria for this variance must be reviewed and evaluated collectively; (4) revising the criteria for the non-waste determination in 40 CFR 260.34 and requiring that petitioners demonstrate why the existing solid waste exclusions would not apply to their hazardous secondary materials; and (5) designating the Regional Administrator as the EPA recipient of petitions for variances and non-waste determinations. Further discussion of these proposed revisions can be found in Section XI of this preamble.

F. *Request for Comment on Re-Manufacturing Exclusion*

EPA is also requesting comment on an exclusion from the definition of solid waste for specific types of higher-value hazardous secondary materials sent for re-manufacturing into similar products and on a petition process for higher-value hazardous secondary materials that are not included within this exclusion, but that are destined to be re-manufactured into similar products. This exclusion would help promote sustainable materials management by extending the productive use of these materials and thus minimizing the amount of raw materials used overall and all the associated environmental impacts of production. Further discussion of this possible exclusion can be found in Section XII of this preamble.

G. *Request for Comment on Revisions to Other Recycling Exclusions and Exemptions*

EPA is also requesting comment on revisions that would affect other definition of solid

waste exclusions and hazardous waste exemptions for recyclable materials. These possible revisions include (1) recordkeeping for speculative accumulation in all cases; (2) requiring facilities to re-notify every two years with updated information on their operating status under the various exclusions and exemptions; and (3) containment standards for excluded hazardous secondary material. Further discussion of these possible revisions can be found in Section XIII of this preamble.

V. History of the Definition of Solid Waste

A. Background

RCRA gives EPA the authority to regulate hazardous wastes (see, e.g., RCRA sections 3001–3004). The original statutory designation of the subtitle for the hazardous waste program was Subtitle C and the national hazardous waste program is referred to as the RCRA Subtitle C program. Subtitle C is codified at 42 USC 6921 through 6939f. “Subtitle C” regulations are found at 40 CFR parts 260 through 279. “Hazardous wastes” are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed (see RCRA section 1004(5)). Hazardous wastes are a subset of solid wastes.

Materials that are not solid wastes are not subject to regulation as hazardous wastes under RCRA Subtitle C. Thus, the definition of “solid waste” plays a key role in defining the scope of EPA’s authorities under Subtitle C of RCRA. The statute defines “solid waste” as “...any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and *other discarded material*... resulting from industrial, commercial,

mining, and agricultural operations, and from community activities..." (RCRA Section 1004 (27) (emphasis added)).

Since 1980, EPA has interpreted "solid waste" under its Subtitle C regulations to encompass both materials that are destined for final, permanent treatment and placement in disposal units, as well as certain materials that are destined for recycling (see 45 FR 33090–95, May 19, 1980; 50 FR 604–656, January 4, 1985 (see in particular pages 616–618)). EPA has offered three arguments in support of this:

- The statute and the legislative history suggest that Congress expected EPA to regulate certain materials that are destined for recycling as solid and hazardous wastes (see 45 FR 33091, citing numerous sections of the statute and *U.S. Brewers' Association* v. *EPA*, 600 F. 2d 974 (D.C. Cir. 1979); 48 FR 14502–04, April 3, 1983; and 50 FR 616–618, January 4, 1985).
- Hazardous secondary materials stored or transported prior to recycling have the potential to present the same types of threats to human health and the environment as hazardous wastes stored or transported prior to disposal. In fact, EPA has found that recycling operations have accounted for a number of significant damage incidents. For example, hazardous secondary materials destined for recycling were involved in one-third of the first 60 filings under RCRA's imminent and substantial endangerment authority and in 20 of the initial 160 sites listed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (48 FR 14474, April 4, 1983). Congress also cited some damage cases which involve recycling (H.R. Rep. 94-1491, 94th Cong., 2d Sess., at 17, 18, 22). More recent data (i.e., information on damage incidents occurring

after 1982) included in the rulemaking docket for today's proposed rule corroborate the fact that recycling operations can and have resulted in significant damage incidents.

- Excluding all hazardous secondary materials destined for recycling would allow materials to move in and out of the hazardous waste management system depending on what any person handling the hazardous secondary materials intended to do with them, which is inconsistent with the RCRA mandate to track hazardous wastes and control them from "cradle to grave."

Hence, RCRA confers on EPA the authority to regulate discarded hazardous secondary materials even if they are destined for recycling and may be beneficially reused. The Agency has therefore developed in part 261 of 40 CFR a definition of "solid waste" for Subtitle C regulatory purposes. (Note: This definition is narrower than the definition of "solid waste" for RCRA endangerment and information-gathering authorities. (See 40 CFR 261.1(b). Also *Connecticut Coastal Fishermen's Association* v. *Remington Arms Co.*, 989 F.2d 1305, 1315 (2d Cir.1993) holds that EPA's use of a narrower and more specific definition of solid waste for Subtitle C purposes is a reasonable interpretation of the statute. See also *Military Toxics Project v. EPA*, 146 F.3d 948 (D.C. Cir. 1998).)

EPA has consistently asserted that hazardous secondary materials are not excluded from regulation as solid wastes merely because of a claim that they will be recycled. EPA has consistently considered hazardous secondary materials intended for "sham recycling" (i.e., disposal performed in the guise of recycling) to be discarded and, hence, to be solid wastes for Subtitle C purposes (see 45 FR 33093, May 19, 1980; 50 FR 638–639, January 4, 1985). The U.S. Court of Appeals for the D.C. Circuit has agreed that materials undergoing sham recycling are discarded and, consequently, are solid wastes under RCRA (see *American Petroleum*

Institute v. *EPA*, 216 F.3d 50, 58–59 (D.C.Cir. 2000)).

B. A Series of D.C. Circuit Court Decisions on the Definition of Solid Waste

Because the interpretation of what constitutes a solid waste is the foundation of the hazardous waste regulatory program, there has been quite a bit of litigation over the meaning of "solid waste" under Subtitle C of RCRA. Specifically, industries representing mining and oil refining interests challenged EPA's January 1985 regulatory definition of solid waste. In 1987, the D.C. Circuit held that EPA exceeded its authority "in seeking to bring materials that are not discarded or otherwise disposed of within the compass of 'waste'" (*American Mining Congress* v. *EPA* ("*AMC I*"), 824 F.2d 1177, 1178 (D.C. Cir. 1987)). The Court held that certain of the materials EPA was seeking to regulate were not "discarded materials" under RCRA section 1004(27). The Court also held that Congress used the term "discarded" in its ordinary sense, to mean "disposed of" or "abandoned" (824 F.2d at 1188–89). The Court further held that the term "discarded materials" could not include materials "...destined for beneficial reuse or recycling in a continuous process by the generating industry itself (because they) are not yet part of the waste disposal problem" (824 F.2d at 1190). The Court held that Congress had directly spoken to this issue, so that EPA's definition was not entitled to deference under *Chevron U.S.A., Inc.* v. *NRDC*, 467 U.S. 837 (1984) (824 F.2d at 1183, 1189–90, 1193).

At the same time, the Court held that recycled materials could be regulated as discarded materials. The Court mentioned at least two examples of recycled materials that may be regulated as wastes, noting that used oil can be considered a solid waste (824 F.3d at 1187 (fn 14)). Also, the Court suggested that materials disposed of and recycled as part of a waste management program may be regulated as solid wastes (824 F. 2d at 1179).

Subsequent decisions by the D.C. Circuit also indicate that some materials destined for

recycling may be considered "discarded." In particular, the Court held that emission control dust from steelmaking operations listed as hazardous waste "K061" is a solid waste, even when sent to a metals reclamation facility, at least where that is the treatment method required under EPA's land disposal restrictions program (*American Petroleum Institute* v. *EPA* ("*API I*"), 906 F.2d 729 (D.C. Cir. 1990)). In addition, the Court held that it is reasonable for EPA to consider as discarded (and solid wastes) listed wastes managed in units that are in part wastewater treatment units, especially where it is not clear that the industry actually reuses the materials (*AMC II*, 907 F. 2d 1179 (D.C. Cir. 1990)).

It also is worth noting that two other Circuits also have held that EPA may regulate at least some materials destined for reclamation rather than final discard. The U.S. Court of Appeals for the Eleventh Circuit found that "[i]t is unnecessary to read into the term 'discarded' a congressional intent that the waste in question must finally and forever be discarded" (*U.S.* v. *ILCO*, 996 F.2d 1126, 1132 (Eleventh Cir. 1993) (finding that used lead batteries sent to a reclaimer have been "discarded once" by the entity that sent the battery to the reclaimer)). In addition, the Fourth Circuit found that slag held on the ground untouched for six months before sale for use as road bed could be a solid waste (*Owen Electric Steel Co.* v. *EPA*, 37 F.3d 146, 150 (4th Cir. 1994)).

In 1998, EPA promulgated a rule in which EPA regulated under Subtitle C hazardous secondary materials recycled by reclamation within the mineral processing industry, the "LDR Phase IV rule" (63 FR 28556, May 26, 1998). In that rule, EPA promulgated a conditional exclusion for all types of mineral processing hazardous secondary materials destined for reclamation. As a condition of the exclusion, EPA prohibited the land-based storage of these mineral processing secondary materials prior to reclamation because it considered hazardous

secondary materials from the mineral processing industry that were stored on the land to be solid wastes (63 FR 28581, May 26, 1998). The conditional exclusion decreased regulation over spent materials stored prior to reclamation, but increased regulation over by-products and sludges that exhibit a hazardous characteristic and that are stored prior to reclamation. EPA noted that the statute does not authorize it to regulate "materials that are destined for immediate reuse in another phase of the industry's ongoing production process." EPA, however, took the position that hazardous secondary materials that are removed from a production process for storage are not "immediately reused," and therefore are "discarded" (63 FR 28580, May 26, 1998).

The mining industry challenged the rule, and the D.C. Circuit vacated the provisions that expanded EPA regulation over characteristic by-products and sludges destined for reclamation (*Association of Battery Recyclers* v. *EPA* ("*ABR*"), 208 F.3d 1047 (D.C. Cir. 2000)). The Court held that it had already resolved the issue presented in ABR in its opinion in *AMC I*, where it found that "...Congress unambiguously expressed its intent that 'solid waste' (and therefore EPA's regulatory authority) be limited to materials that are 'discarded' by virtue of being disposed of, abandoned, or thrown away" (208 F.2d at 1051). It repeated that materials reused within an ongoing industrial process are neither disposed of nor abandoned (208 F.3d at 1051–52). It explained that the intervening *API I* and *AMC II* decisions had not narrowed the holding in *AMC I* (208 F.3d at 1054–1056).

Notably, the Court did not hold that storage before reclamation automatically makes materials "discarded." Rather, it held that "... at least some of the secondary material EPA seeks to regulate as solid waste (in the mineral processing rule) is destined for reuse as part of a continuous industrial process and thus is not abandoned or thrown away" (208 F.3d at 1056).

In its most recent opinion dealing with the definition of solid waste, *Safe Food and*

Fertilizer v. *EPA* ("*Safe Food*"), 350 F.3d 1263 (D.C. Cir. 2003), the D.C. Circuit upheld an EPA rule that excludes from the definition of solid waste hazardous secondary materials used to make zinc fertilizers, and the fertilizers themselves, as long as the recycled materials meet certain handling, storage, and reporting conditions and the resulting fertilizers have concentration levels for lead, arsenic, mercury, cadmium, chromium, and dioxins that fall below specified thresholds (Final Rule, "Zinc Fertilizers Made From Recycled Hazardous Secondary Materials" ("Fertilizer Rule"), 67 FR 48393, July 24, 2002). EPA determined that if these conditions are met, the hazardous secondary materials used to make the fertilizer have not been discarded. The conditions also apply to a number of recycled materials not produced in the fertilizer production industry, including certain zinc-bearing hazardous secondary materials, such as brass foundry dusts.

EPA's reasoning was that market participants, consistent with the EPA-required conditions in the rule, would treat the exempted materials more like valuable products than like negatively-valued wastes and, thus, would manage them in ways inconsistent with discard. In addition, the fertilizers derived from these recycled feedstocks are chemically indistinguishable from analogous commercial products made from raw materials (350 F.3d at 1269). The Court upheld the rule based on EPA's explanation that market participants manage materials in ways inconsistent with discard, and the fact that the levels of contaminants in the recycled fertilizers were "identical" to the fertilizers made with virgin raw materials (also called "the identity principle"). The Court held that this interpretation of "discard" was reasonable and consistent with the statutory purpose. The Court noted that the identity principle was defensible because the differences in health and environmental risks between the two types of fertilizers are so slight as to be substantively meaningless.

The Court also stated that it "need not consider whether a material could be classified as a non-discard exclusively on the basis of the market-participation theory" (350 F.3d at 1269). The Court only determined that the combination of market participants' treatment of the materials, EPA-required management standards, and the "identity principle" constitutes a reasonable set of tools to establish that the recycled hazardous secondary materials and fertilizers are not discarded.

C. October 2003 Proposal to Revise the Definition of Solid Waste

Prompted by concerns articulated in various Court opinions decided up to that point, in October 2003, EPA proposed a rule which defined those circumstances under which hazardous secondary materials would be excluded from RCRA's hazardous waste regulations because they are generated and reclaimed in a continuous process within the same industry. In addition, the Agency also clarified in a regulatory context the concept of "legitimate recycling," which has been a key component of RCRA's regulatory program for hazardous material recycling, but which up to that point, had been implemented without specific regulatory criteria (68 FR 61558, October 28, 2003).

In response to the October 2003 DSW proposal, a number of commenters criticized the Agency for not having conducted a study of the potential impacts of the proposed regulatory changes. These commenters expressed the general concern that deregulating hazardous secondary materials that are reclaimed in the manner proposed could result in the mismanagement of these materials, and could create new cases of environmental damage that would require remedial action under federal or state authorities. Some of the commenters further cited a number of examples of environmental damage that were attributed to hazardous secondary material recycling, including sites listed on the Superfund National Priorities List

(NPL).

Other commenters to the 2003 DSW proposal expressed the view that the great majority of these cases of recycling-related environmental problems occurred before RCRA, CERCLA, or other environmental programs were established in the early 1980s. These commenters argued that these environmental programs—most notably, RCRA's hazardous waste regulations and the liability provisions of CERCLA—have created strong incentives for proper management of recyclable hazardous secondary materials and recycling residuals. Several commenters further noted that, because of these developments, industrial recycling practices have changed substantially since the early 1980s and present day generators and recyclers are much better environmental stewards than in the pre-RCRA/-CERCLA era. Thus, they argued that cases of "historical" recycling-related environmental damage are not particularly relevant when modifying the current RCRA hazardous waste regulations for hazardous secondary materials recycling.

D. Recycling Studies

In light of these comments on the 2003 DSW proposal, and in deliberating on how to proceed with the rulemaking effort, the Agency decided that additional information on hazardous secondary material recycling would benefit its regulatory decision-making, and would provide stakeholders with a clearer picture of the hazardous secondary material recycling industry in this country. Accordingly, the Agency examined three issues that we believed were of particular importance to revising the definition of solid waste:

- How do responsible generators and recyclers of hazardous secondary materials ensure that recycling is done in an environmentally safe manner?

- To what extent have hazardous secondary material recycling practices resulted in environmental problems since enactment of major waste management statutes, and why?
- Are there certain economic forces or incentives specific to hazardous secondary material recycling that can explain why environmental problems can sometimes originate from such recycling activities?

Reports documenting these studies are available in the docket for the 2008 DSW final rule under the following titles:

- *An Assessment of Good Current Practices for Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0354) ("study of successful recycling")
- *An Assessment of Environmental Problems Associated With Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0355) ("environmental problems study")
- *A Study of Potential Effects of Market Forces on the Management of Hazardous Secondary Materials Intended for Recycling* (EPA-HQ-RCRA-2002-0031-0358) ("market forces study")

In the study of successful recycling, EPA found that responsible recycling practices used by generators and recyclers to manage hazardous secondary materials fall into two general categories. The first category includes the audit activities and inquiries performed by a generator of a hazardous secondary material to determine whether the entity to which it is sending such material is equipped to manage it responsibly without the risk of releases or other environmental damage. These recycling and waste audits of other companies' facilities are common to those generators that responsibly recycle in the hazardous secondary materials market. The second category of responsible recycling practices consists of the control practices that ensure

responsible management of any given shipment of hazardous secondary material, such as the contracts under which the transaction takes place and the tracking systems that can inform a generator that its hazardous secondary material has been properly managed.

The goal of the environmental problems study was to identify and characterize environmental problems that have been attributed to some types of hazardous secondary material recycling that are relevant for the purpose of this rulemaking effort. To address commenters' concerns that historic damages are irrelevant to current practices because environmental programs (post-RCRA and -CERCLA implementation) have created strong incentives for proper management of recyclable hazardous secondary materials, EPA only included cases where damages occurred after 1982. The study identifies 208 cases in which environmental damages of some kind occurred from some type of recycling activity and that otherwise fit the scope of the study.[2] The Agency believes that the occurrence of certain types of environmental problems associated with post-1982 recycling practices shows that discard has occurred. In particular, instances where hazardous secondary materials were abandoned (e.g., in warehouses) and which required removal overseen by a government agency and the expenditure of public funds clearly demonstrate that the hazardous secondary material was discarded. Of the 208 damage cases, 69 cases (33%) involve abandoned materials. The relatively high incidence of abandoned materials likely reflects the fact that bankruptcies or other types of business failures were associated with 138 (66%) of the cases.

[2] EPA initially identified over 800 potential damage cases, most of which were not included in the analysis because (1) the damages occurred before 1982, (2) the damages were not caused by recycling, or (3) there was not enough information to determine when the damages occurred or whether recycling contributed to the damages. The cases EPA considered, but did not include, were listed in an appendix to the report to allow the public to comment on whether additional cases should be included in the analysis. As a result of public comment, EPA identified one new damage case and updated two existing damage case profiles with more information about environmental problems, as detailed in *Addendum: An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0601). EPA determined that the new damage case and supplemental information were consistent with the damage cases previously cited in the study.

In addition, the pattern of environmental damages that resulted from the mismanagement of recyclable materials (including contamination of soils, groundwater, surface water and air) is a strong indication that the hazardous secondary materials were generally not managed as valuable commodities and were discarded. Of the 208 damage cases, 81 cases (40%) primarily resulted from the mismanagement of recyclable hazardous secondary materials, while mismanagement of recycling residuals was the primary cause in 71 cases (34%). Often, in the case of mismanagement of recycling residuals, reclamation processes generated residuals in which the toxic components of the recycled materials were separated from the non-toxic components, and these portions of the hazardous secondary material were then mismanaged and discarded. Examples of this include a number of drum reconditioning facilities, where large numbers of used drums were cleaned out to remove small amounts of remaining product, such as solvent, and these wastes were then improperly stored or disposed, while the drums were reused or recycled.

The market forces study used accepted economic theory to describe how various market incentives can influence a firm's decision-making process when recycling hazardous secondary materials. This study helps explain some of the possible fundamental economic drivers of both the successful and unsuccessful recycling practices.

As pointed out by some commenters to the 2003 DSW proposed rule, the economic forces shaping the behavior of firms that recycle hazardous secondary materials are often different from those at play in manufacturing processes using virgin materials. The market forces study used economic theory to provide information on how certain characteristics can influence three different recycling models to encourage or discourage an optimal outcome. The three recycling models examined were (1) commercial recycling, where the primary business of the

firm is the recycling of hazardous secondary materials that are accepted from off-site industrial sources (which usually pay a fee); (2) industrial intra-company recycling, where firms generate hazardous secondary materials as by-products of their main production processes and recycle the hazardous secondary materials for sale or for their own reuse in production; and (3) industrial inter-company recycling, where firms either use or recycle hazardous secondary materials obtained from other firms, with the objective of reducing the cost of their production inputs. The report looked at how the outcome from each model is potentially affected by three market characteristics: (1) the value of the recycled product, (2) the price stability of recycling output or inputs, and (3) the net worth of the firm.

An individual firm's decision-making is based on many factors and extrapolating a firm's likely behavior from a few factors could be an over-simplification. However, when used in conjunction with other information, the economic theory can be quite illuminating. For example, according to the market forces study, industrial intra- and inter-company recyclers have more flexibility in adjusting to unstable recycling markets (e.g., during price fluctuations, these companies can more easily switch from recycling to disposal or from recycled inputs to virgin inputs). Therefore, they would be expected to be less likely to have environmental problems from over-accumulated materials.

On the other hand, in certain types of commercial recycling, the product has low value, the prices are unstable, and/or the firm has a low net worth. Facilities in these situations can be more susceptible to environmental problems from the over-accumulation or mishandling of hazardous secondary materials, especially when compared to recycling by a well-capitalized firm that yields a product with high value. These predicted outcomes appear to be supported by the results of the environmental problems study, which showed the majority of environmental

damages occur at off-site commercial recyclers.

However, as shown by the study of successful recycling, generators who might otherwise bear a large liability from poorly-managed recycling at other companies have addressed this issue by carefully examining the recyclers to which they send their hazardous secondary materials to ensure that they are technically and financially capable of performing the recycling. In addition, we have seen that successful recyclers (both commercial and industrial) have often taken advantage of mechanisms, such as long-term contracts to help stabilize price fluctuations, allowing recyclers to plan their operations more effectively.

Further discussion of the recycling studies, including the methodology and limitations of the studies, can be found in the March 2007 supplemental proposal (72 FR 14178–83), and the October 2008 DSW final rule (73 FR 64673–74) and the studies themselves can be found in the docket for the 2008 DSW final rule (EPA-HQ-RCRA-2002-0031-0355).

E. March 2007 Supplemental Proposal to Revise the Definition of Solid Waste

In March 2007, EPA published a supplemental proposal that provided the public the opportunity to comment on these studies. The Agency also re-structured the proposed rule and proposed (1) two exclusions for hazardous secondary materials recycled under the control of the generator (one exclusion would apply to hazardous secondary materials managed in non-land-based units, and the other exclusion would apply to hazardous secondary materials managed in land-based units) and (2) an exclusion for hazardous secondary materials transferred to another party for reclamation. The Agency also proposed a non-waste determination petition process, and re-proposed the legitimacy criteria, with certain modifications (72 FR 14172, March 26, 2007).

For the exclusions of hazardous secondary materials reclaimed under the control of the generator, EPA described three circumstances under which we believed that discard does not

take place and where the potential for environmental releases is low. The three situations involve hazardous secondary materials that are generated and legitimately reclaimed at the generating facility, legitimately reclaimed at a different facility within the same company, or legitimately reclaimed through a tolling arrangement. Under all three circumstances, the hazardous secondary materials must be generated and reclaimed within the United States or its territories. Because the hazardous secondary material generator in these situations still finds value in the hazardous secondary materials, has retained control over them, and intends to use them, EPA proposed to exclude these materials from the definition of solid waste and, thus, from regulation under Subtitle C of RCRA, provided the reclamation is legitimate and the hazardous secondary materials are contained and not speculatively accumulated. In addition, EPA proposed that facilities generating and reclaiming hazardous secondary materials under the control of the generator must submit notification to their regulatory authority.

For the exclusion of hazardous secondary materials transferred to another party for reclamation (referred to as the transfer-based exclusion), the Agency proposed conditions that, when met, would indicate that these hazardous secondary materials were not discarded. For example, one of the conditions would require the generator to make reasonable efforts, a form of due diligence, to determine that its hazardous secondary materials would be properly and legitimately recycled (and that the hazardous secondary material would not be discarded). Another condition would require the reclamation facility to have adequate financial assurance (thus demonstrating that the hazardous secondary material would not be abandoned). In addition, EPA proposed that both the generator and reclaimer would be required to maintain shipping records (to demonstrate that the hazardous secondary material was sent for reclamation and was received by the reclaimer). Furthermore, the reclaimer would be subject to additional storage and

residual management standards (to address the instances of discard observed at off-site reclamation facilities in the damage cases). Finally, facilities operating under the transfer-based exclusion must also submit notification to their regulatory authority.

In addition, the 2007 DSW supplemental proposal included a case-by-case non-waste determination petition process that would allow applicants to receive a formal determination from EPA that their hazardous secondary materials were not discarded and therefore were not solid wastes. The case-by-case petition process would allow EPA or the authorized state to take into account the particular fact pattern of the recycling and to determine that the hazardous secondary materials in question were not solid wastes. The petition process for the non-waste determination was the same as that for the variances from the definition of solid waste found at 40 CFR 260.31.

EPA also proposed a definition of legitimate recycling that restructured the legitimacy factors originally proposed in October 2003. The proposed legitimacy factors would be used to determine that the recycling of hazardous secondary materials is not a “sham” and is not waste treatment.

F. October 2008 Final Rule to Revise the Definition of Solid Waste

In October 2008, EPA promulgated a final rule largely as proposed in March 2007, with some revisions and clarifications, including (1) clarifying that hazardous secondary materials held at a transfer facility for less than 10 days are considered to be in transport (and therefore such transfer facilities are not considered to be storing the hazardous secondary materials for the purpose of the DSW exclusion), (2) allowing the use of intermediate facilities that store hazardous secondary materials for more than 10 days under the transfer-based exclusion, provided the facilities comply with the same conditions applicable to reclamation facilities, (3)

requiring facilities operating under the generator-controlled and/or the transfer-based exclusion to notify their regulatory authority prior to operating under the exclusion and every other year thereafter, and (4) making legitimacy a condition of the exclusions and the non-waste determinations in that rule, but not finalizing the legitimacy language for all recycling activities.

G. Section 7004 Petition Submitted by the Sierra Club and Industry Response

On January 29, 2009, the Sierra Club submitted an administrative petition under RCRA section 7004(a), 42 U.S.C. 6974(a), to the Administrator of EPA requesting that the Agency repeal the October 2008 revisions to the definition of solid waste rule and stay the implementation of the rule.

The administrative petition was submitted at the same time that the American Petroleum Institute (API) and Sierra Club filed judicial Petitions for Review under RCRA section 7006(a), 42 U.S.C. 6976(a) challenging the rule in the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit). These cases, designated as Docket Nos. 09-1038 and 1041, respectively, are currently before the D.C. Circuit.

The petition argued that the revised regulations are unlawful and that they increase threats to public health and the environment without producing compensatory benefits and, therefore, should be repealed. Among other things, the petition singled out the lack of regulatory definitions for key conditions of the rule and disagreed with the Agency's findings that the rule would have no adverse environmental impacts, including the finding there would be no adverse impact to environmental justice communities or children's health.

On March 6, 2009, a coalition of industry associations ("industry coalition") submitted a letter to the Administrator of EPA in response to the Sierra Club petition. This letter requested that EPA deny Sierra Club's petition on the grounds that the 2008 DSW final rule comports with

court cases construing the scope of the definition of solid waste under RCRA, and that the 2008 DSW final rule achieves significant economic and conservation benefits, while imposing significant controls on the hazardous secondary material recycling industry that are fully protective of the environment. The letter also responds to each of the specific points raised by Sierra Club in its petition.

H. June 2009 Public Meeting and the Draft DSW Environmental Justice Analysis Methodology

In response to Sierra Club's administrative petition and the industry coalitions letter to the Administrator, EPA issued a May 27, 2009, Federal Register notice (74 FR 25200) describing possible actions and optional paths forward, as well as announcing a public meeting on June 30, 2009, to allow the public and interested stakeholders the opportunity to provide input to the decision-making process.

In the May 27, 2009, Federal Register notice announcing the public meeting, EPA described the scope of possible action, which is governed by the concept of "discard." As stated in RCRA section 1004(27), "solid waste" is defined as "…any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material….resulting from industrial, commercial, mining and agricultural activities." The May 2009 public meeting notice said that "[b]ecause the final revisions to the definition of solid waste are closely tied to EPA's interpretation of "discard," EPA does not expect to completely repeal the rule or stay its implementation, because such an action could result in hazardous secondary materials that are not discarded being regulated as hazardous waste. In particular, EPA said that it does not expect to repeal either the exclusion for hazardous secondary materials reclaimed under the control of the generator or the non-waste determination petition process. However, the Agency stated that it could revise other parts of the definition of solid

waste rule, such as the definition of legitimacy and the transfer-based exclusion, in ways that could increase environmental protection, while still appropriately defining when a hazardous secondary material being reclaimed is a solid waste" (74 FR 25203).

Thirty-three people spoke at the public meeting, and approximately 4,000 written comments were received, of which the majority were from private citizens who wrote in via a mass email campaign to repeal the rule. The remaining comments came from state and local governments (17), the generating industry (28), the waste management/recycling industry (15), environmental, public health and community organizations (12), and academics (2). Industry comments were uniformly in favor of denying the Sierra Club petition to repeal the rule, citing legal issues and the protectiveness of the rule's conditions. Environmental and community organizations, on the other hand, were uniformly in favor of repealing the rule, expressing concerns over the protectiveness, enforceability and environmental justice and children's health impacts of the rule. Waste management/recycling industry comments were split, with hazardous waste recyclers generally advocating that EPA retain and improve the rule with more stringent standards. Other waste management industry comments, particularly those from companies representing landfills and incinerators, were in favor of repealing the rule. State comments expressed concerns about implementing the rule, particularly given the economic climate, and generally were in favor of repealing or significantly revising the transfer-based exclusion. EPA appreciates all the comments that were provided and has carefully considered them in deciding to revisit the definition of solid waste in today's proposal. A copy of the public meeting transcript and the comments submitted in response to the public meeting notice are available in the docket for the public meeting (Docket ID number EPA-HQ-RCRA-2009-0315).

Many commenters (including those at the public meeting and those who responded with

written comments) expressed strong concerns that the Agency did not adequately address environmental justice in the rulemaking. In response to the concerns over the environmental justice analysis, EPA committed to perform a more rigorous and thorough analysis of the environmental justice impacts of the 2008 DSW final rule. On January 15, 2010, EPA released for public input a draft methodology for conducting the DSW Environmental Justice Analysis. The draft methodology was presented to the National Environmental Justice Advisory Committee (NEJAC) and discussed at three public roundtable meetings.

I. Settlement Agreement with the Sierra Club

1. Overview of Settlement Agreement

On September 7, 2010, EPA signed a settlement agreement with the Sierra Club under which the Sierra Club agreed to withdraw their administrative petition and EPA agreed to prepare a notice of proposed rulemaking to be signed no later than June 30, 2011, which would address, at a minimum, the issues raised in the Sierra Club's administrative petition, including the four issues discussed in the May 27, 2009, public meeting Federal Register notice (74 FR 25200). The settlement agreement did not specify the outcome of the final rule or specifically what regulatory changes EPA would propose. A notice taking final administrative action concerning the notice of proposed rulemaking is to be signed no later than December 31, 2012.

The settlement agreement was approved by the court on January 11, 2011. Today's proposal represents EPA's fulfillment of the portion of the settlement agreement concerning the proposed rule.

The four issues in the settlement agreement are (1) the definition of "contained" (which includes the issue of defining "significant releases") (addressed in Section IX.B.1 of this preamble), (2) notification before operating under the exclusion (addressed in Section IX.B.2 of

this preamble), (3) the definition of "legitimacy" (addressed in Section X of this preamble) and (4) the transfer-based exclusion (addressed in Section VII of this preamble). Other issues presented in the administrative petition are discussed below.

2. Request To Immediately Stay The Implementation Of And Revoke the 2008 DSW Rule

The Sierra Club's administrative petition included a request to immediately stay and revoke the 2008 DSW final rule. To support this request, the petition asserted that the damage case study demonstrates that hazardous waste recycling has caused substantial harm to health and the environment and that the 2008 DSW final rule increases the likelihood of greater future harm. The petition also asserted that the 2008 DSW final rule does not account for the possibility that unstable recycling markets or financial conditions increase the risk of hazardous waste abandonment. In addition, the petition asserted that the 2008 DSW final rule will not substantially increase recycling and that the economic benefits are few and will only accrue to deregulated industries. Additionally, the petition claimed that there would be job losses in the hazardous waste treatment industry and increased worker health problems as a result of the rule.

EPA addressed Sierra Club's request to revoke the 2008 DSW final rule in whole and stay its implementation in the May 27, 2009, public meeting notice, which continues to reflect EPA's current thinking. In that notice, EPA stated at 74 FR 25202:

> "The scope of possible changes to the definition of solid waste is governed by the concept of "discard." As discussed in the preamble to the DSW final rule, EPA used the concept of discard as the central organizing idea behind the October 2008 revisions to the definition of solid waste. As stated in RCRA section 1004(27), ''solid waste'' is defined as "… any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control

facility and other discarded material …resulting from industrial, commercial, mining and agricultural activities" (emphasis added). Therefore, in the context of the DSW final rule, a key issue relates to the circumstances under which a hazardous secondary material that is recycled by reclamation is or is not discarded (73 FR 64675). In exercising its discretion in the DSW final rule to define what constitutes "discard" for hazardous secondary materials reclamation, EPA included an explanation of how each provision of the final rule relates to discard (73 FR 64676–64679).

For example, in the DSW final rule, EPA determined that if the generator maintains control over the recycled hazardous secondary material and if the material is legitimately recycled under the standards established in the final rule and not speculatively accumulated within the meaning of EPA's regulations, then the hazardous secondary material is not discarded. This is because the hazardous secondary material is being treated as a valuable commodity rather than as a waste. By maintaining control over, and potential liability for, the reclamation process, the generator ensures that the hazardous secondary materials are not discarded. (See 73 FR 64676.)

Because the final revisions to the definition of solid waste are closely tied to EPA's interpretation of the concept of "discard," EPA does not plan to repeal the rule in whole or stay its implementation. Such an action could result in hazardous secondary materials that are not discarded being regulated as hazardous wastes. In particular, EPA does not expect to repeal either the exclusion for hazardous secondary materials reclaimed under the control of the generator or the

non-waste determination petition process.

However, EPA believes that there may be opportunities to revise or clarify the definition of solid waste rule, particularly with respect to the definition of legitimacy and the transfer-based exclusion, in ways that could improve implementation and enforcement of the provisions, thus increasing environmental protection, while still appropriately defining when a hazardous secondary material being reclaimed is a solid waste and subject to hazardous waste regulation."

Today's proposal includes a discussion of several potential changes to the generator-controlled exclusion and to the non-waste determination petition process, but, for the reasons stated above, EPA did not stay the rule and is not proposing to withdraw either provision.

3. Adequacy of EPA's Analyses

Finally, the Sierra Club petition asserted that EPA's conclusion that the 2008 DSW final rule would have no adverse environmental impacts, and therefore would have no disproportional adverse impacts to minority and low-income communities, is unsupported by the administrative record. In response to these comments and similar comments by other stakeholders at the 2009 public meeting, EPA committed to producing an expanded analysis of the potential disproportionate impacts of the 2008 DSW final rule. A draft methodology for the analysis was shared with the public in January 2010, and three public roundtable discussions were held to discuss the draft methodology.[3] EPA considered the comments raised in those discussions and conducted an analysis. The analysis has undergone peer review, the results of which are included in the docket for today's proposed rule. The environmental justice analysis is discussed in detail in the next section (Section VI) below.

[3]U.S. EPA. *Draft Environmental Justice Methodology for the Definition of Solid Waste Rule*, January 2010, http://www.epa.gov/epawaste/hazard/dsw/ej.htm

J. Commitment to Sustainable Materials Management

In addition to addressing the environmental and public health concerns raised by the Sierra Club and other commenters, EPA also envisions today's proposal as an opportunity to discuss focused approaches to revising the hazardous waste recycling regulations to promote sustainable materials management, while ensuring protection of human health and the environment. Sustainable materials management is an approach to serving human needs by using/reusing resources most productively and sustainably throughout their life cycles, generally minimizing the amount of materials involved and all the associated environmental impacts. Sustainable materials management is a core element of RCRA's resource conservation objectives.

The shift to sustainable materials management by taking a life-cycle approach to managing materials is articulated in EPA's *2020 Vision Report: Sustainable Materials Management: The Road Ahead,*[4] which was endorsed by both the Environmental Council of the States (ECOS) and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO).[5] Sustainable materials management, as articulated in the "2020 Vision Report," is aligned also with the vision and efforts of the World Business Council for Sustainable Development.[6]

Sustainable materials management helps identify opportunities to reduce environmental

[4] www.epa.gov/waste/inforesources/pubs/vision.htm.
[5] Environmental Council of the States Resolution 10-1 on National Sustainable Materials Management, approved March 23, 2010, and Letter from Gary Baughman, president, ASTSWMO, to Matt Hale, Director, Office of Solid Waste, U.S. EPA, February 3, 2010.
[6] www.wbcsd.org/web/projects/BZrole/Vision2050-FullReport_Final.pdf

impacts, including greenhouse gas reductions, and societal impacts across the life cycle of materials from how they are extracted, manufactured, distributed, used, reused, recycled, and disposed. It works to ensure unintended consequences are avoided. Efficiencies gained in a sustainable materials management approach, especially with respect to non-renewable materials, can result in less energy used, more efficient use of materials, more efficient movement of goods and services, conservation of water, and reduced volume and toxicity of waste.

By considering system-wide impacts, sustainable materials management casts a far broader net than traditional waste and chemicals management approaches and represents a change in how we think about environmental protection. Hazardous waste regulations can only influence a small part of the picture, but to the extent that the Agency can use today's proposal to help advance these goals, while ensuring protection of human health and the environment, EPA believes that it makes sense to do so.

VI. Definition of Solid Waste Environmental Justice Analysis

To achieve the goals of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, EPA must consider environmental justice when developing a regulation. Because decisions involving a regulation must be informed by a consideration of a number of different issues, an environmental justice analysis is one of several analyses the Agency uses when developing regulations. The environmental justice analysis may be qualitative and/or quantitative and is designed to provide the appropriate information on disproportionately high and adverse impacts to minority and/or low-income populations to decision-makers. To the extent an environmental justice analysis reveals potential disproportionately high adverse impacts on minority and/or low-income populations, this result can affect how EPA uses its policy discretion under applicable authorities

to pursue specific regulatory options or provide opportunities to involve the public in the implementation of regulations.

The purpose of the DSW environmental justice analysis is two-fold. First, the analysis represents a systematic examination of the potential for an increase in adverse impacts under the 2008 DSW final rule (considered independently from which communities might be impacted). Second, the analysis includes a demographic analysis characterizing the extent any potential adverse impacts are likely to affect minority and/or low-income communities. The results of this analysis have informed EPA's decision-making on which regulatory options to pursue, within scope of the Agency's authority to regulate hazardous waste.

The methodology for the DSW environmental justice analysis consists of six steps:

Step 1: Hazard characterization	Includes two phases: (1) identifying potential hazards that could pose risks to human health and the environment from recycling of hazardous secondary materials, including accidental releases of hazardous constituents and (2) analyzing the likelihood of such hazards occurring under the requirements of the 2008 DSW exclusions as compared to the pre-2008 DSW hazardous waste regulations.
Step 2: Identification of potentially affected communities	Modeling the locations of facilities (including potential new facilities) that are likely to choose to take advantage of the 2008 DSW final rule.
Step 3: Demographics of potentially affected communities	Mapping the location of the facilities modeled in Step 2 and identifying the demographics (e.g., minority population and income level) of the surrounding communities.

Step 4: Identifying other factors that affect vulnerability in potentially affected communities	Identifying important vulnerability factors. These include factors that may increase the likelihood of "damages," the likelihood that a facility is sited within a community, or the likelihood of health risks in the event of releases. Examples include the presence of other pollution sources and any information about the public health of the surrounding population.
Step 5: Information synthesis: assessment of disproportional impact	Synthesizing all the information to characterize whether the 2008 DSW rule will facilitate the occurrence of any adverse impacts and whether some population groups (e.g., minority or low income populations) would be overrepresented in the impacted communities.
Step 6: Identification of potential preventive and mitigation strategies	Identifying potential strategies to prevent non-compliance and releases to the environment and also strategies to mitigate any impacts identified under step 5.

A brief description of the six steps is presented below.

A. *Step 1—Hazard Characterization*

The first step of the methodology is hazard characterization, which includes both identifying the potential hazards that hazardous secondary materials recycling could pose to human health and the environment, and evaluating the likelihood of such hazards resulting in increased risk under the 2008 DSW final rule. In conducting this analysis, EPA, assessed a number of different scenarios, which reflect how such hazardous secondary materials may be managed.

With respect to the first part of the analysis, because hazardous secondary materials sent to recycling are physically and chemically similar, if not identical to many of the hazardous wastes sent for treatment and disposal, the potential risks from their management are similar, if not the same, as from hazardous wastes sent for treatment and disposal. The most commonly recycled hazardous secondary materials are spent solvents and electric arc furnace dust (which is recycled to reclaim metals). Spent solvents present particular management challenges in that recycling them involves the storage of liquids containing volatile organic chemicals and includes both halogenated and non-halogenated organic chemicals, which represent a broad range of chemicals and associated hazards. Electric arc furnace dust, which is usually in a solid state, presents different management challenges, including that the dust contains high concentrations of toxic metals, the storage of the dust is typically in waste piles, and the potential for the dust to become wind-blown, or otherwise released, and the potential for toxic metals contained in this waste to leach into the ground water.

These two classes of hazardous secondary materials (as well as other hazardous secondary materials that are recycled) can pose risks via a wide variety of exposure routes and include a range of potential adverse health effects, both carcinogenic and non-carcinogenic, as well as a potential for acute impacts, such as fires and explosions.

The second part of the hazard characterization step—determining whether these hazards could result in increased risk to human health and the environment—is a complex issue because of the interactions between how the regulations are written and how they are actually implemented. Under the 2008 DSW final rule, EPA believed that the conditions of the rule, which were designed to determine when a hazardous secondary material is not discarded, would also prevent any increase in risk. For example, the condition that the hazardous secondary

materials be "contained" was intended to address this issue. If the material is not released to the environment, there would be no increased exposure or associated risk.

However, what the 2008 analysis failed to take into account was whether the conditions of the rule—such as the "contained" standard—would operate as effectively in the real world as the more prescriptive requirements of the RCRA hazardous waste regulations. One of the most common criticisms of the January 2010 draft environmental justice methodology was that it did not include consideration of the potential for adverse impact from removing some of the important protections of the hazardous waste regulations, particularly the public participation requirements, which were also not considered by the Agency when developing the 2008 DSW final rule.

A more detailed comparative analysis of the regulatory requirements under the 2008 DSW final rule with the hazardous waste regulations reveals potentially significant gaps in environmental protection under the 2008 DSW final rule, particularly the incentives to accumulate larger volumes of hazardous secondary materials, the reduction in oversight resulting from eliminating the permit requirement for storage, and the reduction in the public's access to information and the opportunity for public participation. The specific gaps vary depending on the baseline scenario and the post-DSW scenario being considered,[7] and in some cases, there is also a potential for increased benefits, primarily from resource conservation and from reduced transportation distances.[8]

[7] The specific scenarios evaluated were (1) generator continues current recycling practices; (2) generator switches from off-site disposal to on-site reclamation; (3) generator switches from off-site disposal to off-site recycling under the control of the generator; (4) generator switches from off-site disposal to off-site recycling at a RCRA-permitted facility; (5) generator switches from off-site disposal to off-site recycling at a U.S. facility without a RCRA permit; (6) generator switches from off-site disposal to exporting for recycling; (7) generator switches from off-site recycling at a facility without a permit to another type of recycling under the 2008 DSW final rule; and (8) generator switches from off-site recycling at a RCRA-permitted facility or exporting waste for recycling to another type of recycling under the 2008 DSW final rule.

[8] By reporting the potential for increased benefits under certain scenarios, EPA does not intend to imply that such

B. *Step 2—Identification of Potentially Affected Communities*

The second step of the methodology identified those potential facilities that can represent the facilities that are likely to take advantage of the 2008 DSW final rule. These facilities are grouped into four different categories: (1) facilities that have already notified under the 2008 DSW final rule ("Notification Facilities"), (2) facilities from the environmental problems study (many of which operated under various exclusions or reduced regulations) which have documented environmental damages from recycling activities ("Damage Case Facilities"), (3) hazardous waste facilities that are likely to recycle under the rule (including hazardous waste generators producing more than a truckload (25 tons) of recyclable hazardous secondary materials annually, and hazardous waste recyclers) ("Hazardous Waste Facilities"), and (4) facilities currently recycling non-hazardous industrial waste (e.g., antifreeze) that could most easily switch or expand to recycling under the 2008 DSW final rule ("Non-Hazardous Industrial Waste Facilities").

C. *Step 3—Demographics of Potentially Affected Communities*

The third step characterized the demographics of the communities within a three-kilometer radius around these facilities and determined whether they had a larger proportion of minority and/or low-income individuals as compared to the nation as a whole, and as compared to the population in the state. [9] The comparison was done at both at the *community* and at the *population* level.

For the community-level analysis, the question is whether the communities around a

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benefits could justify increased risk to human health and the environment from discarded hazardous secondary material. Promoting resource conservation and recovery is a major goal of RCRA, but this goal does not supersede the mandate to assure that hazardous waste management practices are protective of human health and the environment.

[9] EPA chose a three-kilometer radius as an approximation of the potential area that could be affected by an acute release scenario (such as a fire or explosion) at a reclamation facility. EPA focused on the acute scenario because such a scenario posed the most immediate harm to public health.

facility had a higher or lower percentage of minority and/or low-income population as compared to the comparison population (i.e., national or state population). In general, some communities will have a higher percentage than the comparison population, while some communities will have a lower percentage. As long at these differences have a regular, or uniform, distribution, they generally would not indicate potential for disproportionate adverse impact. However, if the number of communities with a higher percentage of minority and/or low-income population is greater than that of the comparison populations, then there is a potential for disproportionate adverse impact. The higher the average differences between the potentially affected communities and the comparison group, the greater the potential for a disproportionate adverse impact.

In the chart below, the category that consistently demonstrates the potential for disproportionate adverse impact are the damage case facilities, which is the third category of facilities identified in Step 2, although a few other categories indicates the potential for disproportionate adverse impact in a few instances.[10] For both the national and the state comparison populations, more than 50 percent of the damage case facilities are located in communities with minority and low-income populations that have a higher representation than the comparison populations. In addition, the average difference in these cases (i.e., the average amount that these facilities have a higher-than-average percentage of minorities or low-income populations) ranges from 6–8 percent.

Community-Level Analysis of Potential Disproportionate Adverse Impacts

of 2008 DSW Final Rule to Minority and Low-Income Communities

Values Greater than 50% Indicate Potential Disproportionate Impact

[10] For the damage cases, EPA notes that demographic data is not necessarily matched to the temporal period associated with the beginning of the damage case. For example, if the damage case began in 1990, EPA did not examine demographics from 1990, but rather the demographics were from 2000.

	National Comparison % communities with higher minority representation (average difference)	National Comparison % communities with higher low-income representation (average difference)	State Comparison % communities with higher minority representation (average difference)	State Comparison % communities with higher low-income representation (average difference)
Facilities that Have Notified (40 total)	7.5% (-20.7%)	32.5% (-2.0%)	50.0% (IA) (3.1%) 20.0% (NJ) (-11.0%) 31.3% (PA) (-2.3%)	64.0% (IA) (1.7%) 0% (NJ) (-3.7%) 50% (PA) (2.6%)
Damage Case Facilities (217 total)	53% (8.2%)	65% (5.9%)	55.8% (8.2%)	69% (6.7%)
Hazardous Waste Facilities (2,677 total)	42% (0.9%)	48% (1.5%)	47.9% (4.0%)	50.6% (1.8%)
Non-Hazardous Industrial Waste	36% (-5.0%)	40% (-0.5%)	36% (-2.55%)	44% (-0.3%)

Facilities (25 total)				

The population-level analysis examines the demographics of *the total potentially affected population*[11] as compared to the total comparison population to determine (1) whether there is a substantially greater probability of members in a population group of concern (minority or low-income) being present as compared to members of the comparison population, and (2) whether members of the population group of concern comprised a substantially greater proportion of the potentially affected population than the comparison populations. These two comparisons are referred to as (1) the Affected Population Ratio, and (2) the Demographic Ratio. In both cases, if the ratio is greater than 1.0, then there is a potential for disproportionate adverse impact to the population of concern, and the larger the ratio, the greater the disproportionality.

Population-Level Analysis of Potential Disproportionate Impacts

of 2008 DSW Rule to Minority and Low-Income Communities

Ratios Greater Than 1.0 Indicate Potential Disproportionate Impact to Population of Concern

All Results Statistically Significant (p-value <0.05)

	National Comparison Minority Population	National Comparison Low-Income Population	State Comparison Minority Population	State Comparison Low-Income Population

[11] The total affected population is the sum of each of the populations around all the facilities in a category.

	Affected Population Ratio Demographic Ratio	Affected Population Ratio Demographic Ratio	Affected Population Ratio Demographic Ratio	Affected Population Ratio Demographic Ratio
Notification Facilities (40 total)	0.70 0.76	1.05 1.04	1.80 (IA) 1.76 (IA) 1.02 (NJ) 1.01 (NJ) 1.46 (PA) 1.47 (PA)	1.34 (IA) 1.32 (IA) 0.64 (NJ) 0.65 (NJ) 1.74 (PA) 1.63 (PA)
Damage Case Facilities (217 total)	2.87 1.86	1.98 1.80	2.59 1.64	2.04 1.90
Hazardous Waste Facilities (2,677 total)	1.90 1.80	1.39 1.50	1.94 2.04	1.47 1.83

Non-Hazardous Industrial Waste Facilities (25 total)	1.19 1.12	1.16 1.14	1.34 1.20	1.17 1.15

The chart above shows that the population level analysis has a greater incidence of potential disproportionate adverse impact to minority and low-income populations than the community-level analysis. For the population-level analysis, the potential for disproportionate impact (i.e., ratios greater than one) occurs under all categories, while the community-level analysis exhibits the potential for disproportionate impact primarily in the damage case facility category. This difference can occur when the populations of those communities that do have a greater percentage of minority or low-income individuals also have a significantly higher total population than those communities that do not. In other words, for the categories of facilities, except the damage case facilities, the facilities of concern generally do not appear to be disproportionately located in minority or low-income communities. The facilities that are located in minority and low-income communities have the potential to adverse impact much larger populations than those which are not, resulting in an overall potential disproportionate adverse impact to minority and low-income populations as a whole.

D. *Step 4—Other Factors That Affect Vulnerability In Potentially Affected Communities*

In addition to considering the potential for the 2008 DSW final rule to result in adverse impacts that disproportionately affect minority and low-income communities, the DSW environmental justice analysis also considers other factors that could affect the impacts of the rule, based on categories from EPA's interim guidance on incorporating environmental justice

into rulemaking.[12] Two of these factors are of particular concern to the 2008 DSW final rule: ability to participate in the decision-making process, and multiple and cumulative effects.[13]

1. Ability to Participate in the Decision-Making Process

A key element of environmental justice is ensuring that all people have an opportunity for meaningful involvement in decision-making which may impact them. Certain groups may not have historically participated in decision-making because of economic (e.g., income), social (e.g., language barriers, education levels, distrust of government), and infrastructural reasons (e.g., access to public transportation). A critical concern is whether, and the extent to which, communities have the ability to influence the types and number of regulated activities taking place in their community, as well as the requirements, conditions, and parameters under which such activities must operate (e.g., permit conditions). Under the 2008 DSW final rule, facilities claiming an exclusion must submit an initial and biennial notification to EPA or the state, providing general facility information and describing hazardous secondary material types and activities under the exclusion.

However, under the 2008 DSW final rule, this information is not made directly available to potentially affected communities, and facilities and regulators are not required to solicit or consider community input into the decision-making process as is the case with RCRA-permitted facilities.[14] Thus, by removing the RCRA permitting requirement for facilities that manage excluded hazardous secondary materials, the 2008 DSW final rule also removed one of the key provisions for allowing communities to participate in the regulatory process (at least as it

[12] U.S. EPA *Interim Guidance on Considering Environmental Justice During the Development of an Action* July 2010. http://www.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-07-2010.pdf

[13] The other factors are (1) susceptible populations, (2) unique exposure pathways, and (3) physical infrastructure. Because of the wide variety of locations of the facilities and the many different hazardous secondary materials involved, any one of these factors could be present at a site, but EPA does not have specific information on these factors being particularly associated with the 2008 DSW final rule.

[14] Although not required, EPA has posted on the internet a list of facilities that have notified under the DSW exemption. The most recent list can be found at http://www.epa.gov/epawaste/hazard/dsw/notify-sum.pdf.

concerns the management of the hazardous secondary materials excluded under the rule). Communities with lower participation levels may experience greater adverse impacts from environmental decision-making because their input has not been considered fully, particularly if competing interests are set forth more effectively. This effect is most likely to occur in communities that have traditionally been excluded from the decision-making process.

2. Multiple and Cumulative Effects

Minority, low-income, and indigenous communities that have been affected by multiple pollution sources may be at risk for increased health consequences. Potential sources of pollution can include, for example, industrial facilities, landfills, transportation-related air emissions, poor housing conditions (e.g., lead-based paint), leaking underground storage tanks, pesticides, and incompatible land uses. An analysis of the cumulative effects from multiple stressors can provide a more complete evaluation of a population's health risks from pollutants. For example, an analysis of discrete stressors and effects on a population might conclude that nearby pollution sources are within regulatory limits; however, an analysis of cumulative effects might determine that a person's collective exposure to a contaminant from multiple sources exceeds a health-based limit.

An examination of the facilities that have already notified under the 2008 DSW final rule shows that multiple environmental hazards are a potential concern for communities around these facilities.[15] All have multiple facilities reporting to EPA, either under RCRA, the Clean Air Act (CAA), or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA - also known as Superfund), within a three-kilometer radius of the facility.

E. *Step 5—Assessment of Disproportionate Impact*

As discussed under Step 1 in Section VI.A. of this preamble, the environmental justice

[15] See U.S. EPA *Environmental Justice Analysis of the Definition of Solid Waste Rule*, Section 5.2, Table 5.1/

analysis demonstrates that hazardous secondary material recycling can pose significant potential hazards to human health and the environment, and that it is reasonable to conclude that the potential for hazards from hazardous secondary materials recycling adversely impacting human health and the environment has increased under the 2008 DSW final rule. Of particular concern are (1) the absence of required measures (e.g., weekly inspections, training, contingency plans, etc.) at hazardous secondary materials reclaimers to prevent problems (e.g., spills, fires, explosions, etc.) , (2) the incentives to accumulate larger volumes of hazardous secondary materials due to longer storage time limits and (3) the reduction in access to information and opportunity for public participation.

Moreover, as discussed under Step 3 in Section VI.C. of this preamble, some of the communities potentially impacted by this increase in risk of adverse impacts are minority and low-income communities, and in most cases the populations potentially impacted are disproportionately minority and/or low income. In particular, the population-level analysis shows a potential disproportionate impact to minority and low-income populations, with the damage case facilities, the hazardous waste facilities and the non-hazardous waste facilities all consistently showing potential statistically significant disproportionate representation in potentially affected communities. In addition, as discussed under Step 4 in Section VI.D. of this preamble, underlying vulnerabilities traditionally associated with minority and low-income communities can pose the potential to exacerbate potential adverse impacts of the 2008 DSW final rule. The ability of communities to participate in the decision-making process and potential for multiple and cumulative effects are of particular concern.

F. *Step 6—Identification of Potential Strategies to Mitigate Adverse Impacts*

Potential strategies to mitigate adverse impacts of the 2008 DSW final rule, including the

disproportionate impacts to minority and low-income communities, include both possible regulatory changes and implementation strategies.

1. Regulatory Changes

Regulatory changes to the 2008 DSW final rule were made according to EPA's authority under RCRA to regulate discarded material. As discussed in the preamble to the 2008 DSW final rule, EPA used the concept of discard as the central organizing idea behind the October 2008 revisions to the definition of solid waste.

As stated in RCRA section 1004(27), "solid waste" is defined as "… any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material…resulting from industrial, commercial, mining and agricultural activities." In exercising its discretion in the 2008 DSW final rule to define what constitutes "discard" for hazardous secondary materials reclamation in the 2008 DSW final rule, EPA included an explanation of how each provision of the final rule relates to discard (73 FR 64676–64679).

While the concept of discard also is the central organizing principle in this proposed rule since EPA only has authority under RCRA to regulate materials that have been discarded, the Federal Register notice announcing the June 2009 public meeting identified areas or opportunities to revise the 2008 DSW final rule in ways that could increase environmental protection, including in environmental justice communities, while still appropriately defining when a hazardous secondary material being reclaimed is a solid waste and subject to hazardous waste regulation (74 FR 25202). The purpose of today's proposal is to provide notice and the opportunity to comment on potential regulatory revisions to address the potential for adverse impacts to human health and the environment from discarded material, including

disproportionate impacts to minority and low income communities.

In particular, the proposed withdrawal of the transfer-based exclusion and its replacement with an alternative Subtitle C standard could be one way of addressing the concerns regarding third-party recyclers, including the impact of longer accumulation times, the lack of preventative measures under the containment standard, the lack of public participation requirements, the lack of RCRA air standards, and concerns regarding certain transportation issues. In addition, the proposed codification of the "contained" standard could be one way of addressing the lack of preventative measures and the lack of RCRA air standards under the generator-controlled exclusion. The proposed additional recordkeeping requirements for speculative accumulation and legitimacy could be one way of helping ensure that hazardous secondary material is being legitimately recycled and not simply discarded through over-accumulation and abandonment, and recordkeeping under the tolling and same-company provisions will help ensure that the hazardous secondary materials meet their intended destinations. Each of these proposed changes are discussed in more detail in Sections VII- X of this preamble. EPA requests comment on whether there are additional or alternate regulatory approaches for addressing the potential adverse impacts of the 2008 DSW final rule.

2. Implementation Measures

In addition to considering regulatory changes to address potential adverse impacts of the 2008 DSW final rule, EPA can take steps in implementing the 2008 DSW final rule that would help mitigate any potential adverse impacts. These steps include closely monitoring the facilities notifying under the 2008 DSW final rule, making information about the DSW facilities available to the public, and working with the states and EPA Regions to ensure they have the information they need to ensure compliance with the provisions of the rule, and making available to the

public information about the facilities that have notified. EPA has begun this process for the states and territories currently operating under the 2008 DSW final rule and plans to continue these efforts in order to help prevent potential adverse impacts at the same time that revisions to the rule are under consideration.

VII. Exclusion For Hazardous Secondary Materials That Are Transferred For The Purpose Of Legitimate Reclamation

EPA is proposing to replace the exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation with an alternative Subtitle C standard. EPA believes that such a standard would be more appropriate for hazardous secondary material because (1) the Agency reasonably believes (as explained in detail in the 2008 DSW final rule) that, absent specific conditions, transfers of hazardous secondary materials to third-party reclaimers generally involve discard, and (2) the conditions of the 2008 DSW final rule have serious gaps, particularly the incentives to accumulate larger volumes of hazardous secondary materials, the reduction in oversight resulting from eliminating the permit requirement for storage, and the reduction in the public's access to information and the opportunity for public participation, that could create a potentially unacceptable likelihood of adverse effects to human health and the environment from such discarded material.

A. *Summary of Transfer-Based Exclusion*

The exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation, 40 CFR 261.4(a)(24) and (25),[16] applies to hazardous secondary materials (i.e., spent materials, listed sludges, and listed by-products) that are generated and subsequently transferred to a different person or company for the purpose of reclamation. As

[16] 40 CFR 261.4(a)(24) is the primary transfer-based exclusion and 40 CFR 261.4(a)(25) contains the export requirements for the transfer-based exclusion.

long as the conditions and restrictions to the exclusion are satisfied, the hazardous secondary materials would not be subject to the Subtitle C hazardous waste regulations.

General requirements under this exclusion include that

- hazardous secondary material generators, reclaimers, and intermediate facilities (i.e., facilities that would not reclaim the hazardous secondary material, but would store them for more than 10 days) must submit a notification prior to operating under the exclusion and by March 1 of each even-numbered year thereafter to the EPA Regional Administrator or, in an authorized state, to the State Director (see 40 CFR 260.42), reporting volumes and types of hazardous secondary materials being reclaimed and
- hazardous secondary materials managed at such facilities must not be speculatively accumulated as defined in § 261.1(c)(8) and must be legitimately reclaimed as specified in § 260.43.

Conditions applicable to generators of hazardous secondary materials are found at 40 CFR 261.4(a)(24)(v) and include

- containment of such hazardous secondary materials,
- reasonable efforts, a form of due diligence, to ensure that the intermediate facility or reclaimer intends to manage or recycle the hazardous secondary material properly and legitimately, and
- retention of records of off-site shipments for three years.

Conditions applicable to intermediate facilities and reclaimers of hazardous secondary materials are found at 40 CFR 261.4(a)(24)(vi) and include

- containment of such materials,

- transmittal of confirmations of receipt to generators,
- retention of records for hazardous secondary materials received and sent off-site,
- financial assurance equivalent to that required of hazardous waste facilities, and
- (for reclaimers) proper management of any residuals generated from the reclamation activities.

In addition, if any of the hazardous secondary materials excluded under 40 CFR 261.4(a)(24) are generated and then exported to another country for reclamation, the exporter must notify and obtain consent from the receiving country and file an annual report. This export requirement is codified in 40 CFR 261.4(a)(25).

B. *EPA's Rationale for Replacing the Transfer-based Exclusion*

The first part of the Agency's rationale for replacing the transfer-based exclusion is based on the fact that EPA has already determined that, absent specific conditions, it is reasonable to conclude that transfers of hazardous secondary materials to third-party recyclers generally involve discard except for instances where EPA has promulgated a case-specific exclusion that a hazardous secondary material is not a solid waste. This determination is unchanged from the 2008 DSW final rule. As noted in the preamble to the 2008 DSW final rule, generators of hazardous secondary materials who do not reclaim these materials themselves often ship these materials to a commercial facility or another manufacturer for reclamation in order to avoid the costs of disposing of the material. Because of the low commercial value and the high potential liability associated with most types of hazardous secondary materials (i.e., spent materials and listed hazardous waste by-products and sludges), generators will typically pay the reclamation facility to accept these hazardous secondary materials or receive a salvage fee that only partially offsets the cost of transporting and managing them. In such situations, the generator has

relinquished control of the hazardous secondary materials and the entity receiving such materials may not have the same incentives to manage them as a useful product (73 FR 64675).

This behavior of hazardous secondary materials not being managed as a useful product is evidenced by the results of the environmental problems study, found in the docket of the 2008 DSW final rule. Of the 208 damage cases discussed in the 2008 DSW final rule, 195 (or approximately 94%) were from reclamation activities of off-site third-party recyclers, with clear instances of discard resulting in risk to human health and the environment, including cases of large-scale soil and ground water contamination with remediation costs in some instances in the tens of millions of dollars (73 FR 64673).

In addition, the market forces study in the docket for the 2008 DSW final rule supports the conclusion that the pattern of discard at off-site, third-party reclaimers is a result of inherent differences between commercial recycling and normal manufacturing. As opposed to manufacturing, where the cost of raw materials or intermediates (or inputs) is greater than zero and revenue is generated primarily from the sale of the output, hazardous secondary materials recycling can involve generating revenue primarily from the receipt of the hazardous secondary materials. Recyclers of hazardous secondary materials in this situation may thus respond differently from traditional manufacturers to economic forces and incentives, accumulating more inputs (hazardous secondary materials) than can be processed (reclaimed). In addition, commercial recyclers have less flexibility than in-house recyclers in changing how they manage their hazardous secondary materials (e.g., during price fluctuations, in-house recyclers can more easily switch from recycling to disposal or from recycled inputs to virgin inputs, while commercial recyclers cannot switch to disposal without obtaining a RCRA permit) (73 FR 64674).

The 2008 DSW final rule attempted to address this pattern of adverse impacts to human health and the environment from hazardous secondary materials transferred to a third party for recycling by setting conditions for the transfer-based exclusion. The intent of these conditions was to define when transfers to third-party recyclers would not result in discard. The link between each of the conditions and their ability to prevent discard is discussed in detail in the 2008 DSW final rule preamble at 73 FR 64675–79. However, EPA failed to take into account how the conditions of the 2008 transfer-based exclusion would work when actually implemented. EPA's analysis of the 2008 DSW final rule assumed that DSW conditions would operate with the same level of oversight as the Subtitle C hazardous waste regulations.

Which leads to the second part of EPA's rationale for replacing the transfer-based exclusion. Before excluding materials that have already been determined to be hazardous wastes, the Agency needs adequate assurance that the conditional exclusion will not result in discarded hazardous materials posing significant risks to human health and the environment (e.g, fires/explosion, soil and water contamination, air emissions, and abandoned hazardous secondary materials). Because EPA has already evaluated these hazardous secondary materials (for example, during a hazardous waste listing determination) and determined them to be solid and hazardous wastes, a conditional exclusion must be reasonably expected not to result in the excluded hazardous secondary material being discarded.

As discussed in more detail in Section XIII of this preamble, over the years EPA has developed many such conditional exclusions (found in 40 CFR 261.4(a)). In each of these cases, EPA did so by examining the specific hazardous secondary material, or the specific recycling practice, or both, before making a determination that they are not solid waste. However, unlike these types of specific transfer-based exclusions from the definition of solid waste (found in 40

CFR 261.4(a)), the 2008 transfer-based exclusion in 40 CFR 261.4(a)(24) and (25) did not focus on the chemical or physical properties of any particular type of hazardous secondary material, or on how it is typically managed. Instead, the transfer-based exclusion is broadly applicable to a wide range of hazardous spent materials and listed by-products and sludges. Thus, while other solid waste exclusions were developed based on EPA's knowledge of the specific hazardous secondary materials, the industries generating them, or the current recycling management practice for those hazardous secondary materials, the 2008 DSW transfer-based exclusion relied entirely on the conditions that were developed by EPA operating as the Agency anticipates they should. The conditions themselves were developed in a reasoned manner,[17] but without specific evidence that they would work as intended (i.e., would not result in significant risk to human health and the environment from discarded materials).

However, the conditions for the transfer-based exclusion in the 2008 DSW final rule lack several important implementation provisions that the Subtitle C requirements for treatment, storage, and disposal facilities provide. These provisions ensure a greater level of oversight of the Subtitle C requirements, thereby increasing the likelihood of compliance and decreasing the potential for risk to human health and the environment from discarded hazardous secondary material. Most important of these is the permit requirement under RCRA section 3005, which ensures that EPA or the state has reviewed a facility's planned operations before waste management begins and which allows public participation in the environmental decision-making process under RCRA section 7004. Subtitle C requirements for treatment, storage, and disposal facilities also include a statutory provision that such facilities be inspected every two years under RCRA section 3008(e). Finally, the detailed regulatory standards for hazardous waste

[17] See Chapter 11, *Regulatory Impact Analysis: EPA's 2008 Final Rule Amendments to the Industrial Recycling Exclusions of the RCRA Definition of Solid Waste,* EPA-HQ-RCRA-2002-0031-0602

management help ensure that both the regulatory authority and the regulated community have the specific information they need to comply in such a way that meets EPA's expectations when the rule was promulgated. EPA has performed a detailed regulatory comparison of the 2008 DSW final rule with the hazardous waste regulations, identifying significant differences that could lead to the potential for an increased likelihood of environmental and public health hazards, including fires/explosion, soil and water contamination, air emissions, and abandoned hazardous secondary materials.[18]

EPA has also carefully monitored the implementation of the 2008 DSW final rule since it came into effect in December 2008. A total of 27 facilities are operating under the transfer-based exclusion, 23 of which are generators transferring off-site and 4 which are reclamation facilities.[19] All four reclamation facilities are RCRA permitted. (There are no unpermitted reclaimers currently operating under the transfer-based exclusion.) Of the 23 generators operating under the transfer-based exclusion, 6 generators appear to have either started or substantially increased their recycling as a result of the 2008 DSW exclusions. These six generators had previously reported in their 2007 or 2009 biennial report that they sent their solvents offsite for fuel blending, and then in 2009 or 2010 notified that they are sending their spent solvents for reclamation under the 2008 DSW final rule.[20] To date, no environmental problems have been reported at facilities claiming the DSW exclusions. However, because all reclaimers operating under the transfer-based exclusion also have RCRA hazardous waste permits, most of the novel conditions of the transfer-based exclusion (e.g., reasonable efforts

[18] See Chapter 2 and Attachment A of *EPA's Environmental Justice Analysis of the Definition of Solid Waste Rule*, available in the docket for today's proposal.
[19] Some of these facilities are also managing hazardous secondary materials under the generator-controlled exclusion.
[20] U.S. EPA, *EPA's Evaluation of Data Collected from Notifications Submitted under the 2008 Definition of Solid Waste Exclusions*, June 30, 2011.

audits and financial assurance for reclamation facilities without a RCRA permit) have not been tested.

Based on this reconsideration of the DSW transfer-based exclusion conditions, EPA is now proposing that hazardous secondary materials transferred for the purpose of legitimate reclamation are most appropriately regulated under Subtitle C of RCRA. The evidence of past damage cases leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material, indicate the need to regulate these hazardous secondary materials as hazardous waste, unless there is specific information about a hazardous secondary material or reclamation practice that indicates discard is not occurring. EPA is therefore proposing to withdraw the transfer-based exclusion found in 40 CFR 261.4(a)(24) and (25). EPA requests comment on this withdrawal, and is particularly interested in any information commenters can provide about alternative approaches that would address the concerns regarding ensuring that a transfer-based exclusion does not result in significant risk to human health and the environmental from discarded hazardous secondary material (e.g., by adding more conditions, such as requiring the reclamation facility be inspected every five years, or by requiring the reclamation facility certify annually that there have been no releases).

At the same time, EPA acknowledges that some specific types of hazardous secondary materials are more like valuable commodities than solid wastes, and the act of transferring them to a third-party does not automatically involve discard. Many of the other exclusions in 40 CFR 261.4(a) are for these types of materials, and the non-waste determination process under 40 CFR 260.34(c) provides an administrative process for determining that additional hazardous

secondary materials are indistinguishable from products and therefore are not waste. In addition, in Section XII of this preamble, EPA is requesting comment on a possible re-manufacturing exclusion from the definition of solid waste for certain higher-value hazardous secondary materials whose management is more like manufacturing than waste management. EPA also requests comment if there are other specific hazardous waste streams or recycling practices, that, similarly to those found in 40 CFR 261.4(a)(6)–(21), would be most appropriately addressed through a conditional exclusion due to their physical or chemical properties and/or current management practices.

VIII. Alternative Subtitle C Regulation for Hazardous Recyclable Materials

A. *Purpose of the Alternative Subtitle C Regulatory Standards for Hazardous Recyclable Materials*

As discussed above, after examining the potential adverse impacts to human health and the environment from discarded hazardous secondary materials transferred to another party for reclamation, EPA is proposing to replace the transfer-based exclusion with an alternative regulatory scheme for hazardous recyclable materials transferred from the generator to other persons for the purpose of reclamation. EPA recognizes the environmental benefits of safe recycling and how recycling can contribute to the goal of sustainable materials management, and acknowledges that in some cases the additional costs of Subtitle C regulation can be an economic disincentive to such recycling. However, as discussed in Section VII above, because (1) the Agency reasonably believes that, absent specific conditions, transfers of hazardous secondary materials to third-party reclaimers generally involve discard, and (2) the conditions of the 2008 DSW final rule have serious gaps that could create a potentially unacceptable likelihood of adverse effects to human health and the environment from such discarded material, the Agency

has decided to replace the transferred based exclusion with an alternative hazardous waste standard.

Specifically, EPA is proposing alternative hazardous waste standards under 40 CFR part 266 subpart D for generators of hazardous recyclable materials sent for reclamation. "Hazardous recyclable materials" would be defined as hazardous waste being reclaimed. EPA is proposing to use this term to be consistent with other standards for the management of specific hazardous wastes in 40 CFR part 266, and to distinguish them from the "hazardous secondary materials" reclaimed under the control of the generator and excluded under 40 CFR 261.4(a)(23). These proposed alternative standards are designed to be as protective as the current hazardous waste standards, but tailored to the specific circumstances faced by generators of hazardous waste who would want to send their materials to a reclaimer, but are not able to do so because they cannot accumulate enough hazardous waste during the generator accumulation time limits to make such recycling economically viable.

Under these alternative standards, the hazardous recyclable material would, for the most part, be subject to all hazardous waste regulations (i.e., accumulated in Subtitle C storage units, transported under a hazardous waste manifest, sent to a RCRA-permitted facility or a facility operating under 40 CFR 261.6(c)(2)). However, in order to allow generators time to accumulate enough hazardous recyclable material to make reclamation more economical, EPA is proposing alternative regulatory standards that would allow hazardous recyclable materials to be accumulated up to one year without a permit or interim status (although the hazardous waste generator standards would continue to apply).

To guard against the risks of over-accumulation and possible abandonment of hazardous recyclable materials, EPA is proposing that before operating under the alternative standard and

by March 1 of each even-numbered year thereafter, a generator must notify the EPA Regional Administrator (or the State Director, if the state is authorized). In addition, before operating under the alternative standard, the generator must develop a reclamation plan that provides details of where the hazardous recyclable material will be sent for reclamation, a short description of the recycling process, and the estimated volume of materials in each shipment. Also, the generator must contact the reclaimer in advance and make arrangements for the recycling. In addition, EPA is requesting comment on setting an upper limit on the amount of hazardous recyclable material a generator may accumulate at any one time, limiting it to no more than two shipments worth of hazardous secondary materials (as documented in the reclamation plan) at any point in time. Finally, as discussed below, EPA is requesting comment on allowing an alternative manifest system for hazardous recyclable materials regulated under this provision by replacing the hazardous waste manifest with a "hazardous recyclable materials manifest."

B. *Proposed Part 266 Standards for the Management of Hazardous Recyclable Material*

Under the proposed part 266 subpart D Hazardous Recyclable Materials standards, large quantity generators and small quantity generators of hazardous recyclable materials would need to meet the alternative requirements described below.

1. Notification

Under the proposed alternative standards, generators would be required to submit a notification prior to operating under this standard and by March 1 of each even-numbered year thereafter to the EPA Regional Administrator using EPA Form 8700-12.[21] In states authorized by EPA to administer the RCRA Subtitle C hazardous waste program, notifications may be sent to the state director. The notice must include:

- The name, address and EPA ID number of the facility;

[21] These notification requirements are the same as those currently found in 40 CFR 260.42.

- The name and telephone number of a contact person;
- The NAICS (North American Industry Classification System) code of the facility;
- The regulatory citation under which the hazardous recyclable materials will be managed (i.e., 40 CFR part 266 subpart D)
- When the facility expects to begin managing the hazardous recyclable materials in accordance with the alternative standard;
- A list of hazardous recyclable materials that will be managed according to the new standard (reported as the EPA hazardous waste numbers that would apply if the hazardous recyclable materials were managed as hazardous waste);
- The quantity of each hazardous recyclable material to be managed annually; and
- The certification (included in EPA Form 8700-12) signed and dated by an authorized representative of the facility.

EPA believes that the information requested in the notification is the minimum information necessary to ensure that such hazardous recyclable materials are managed in a manner that is protective of human health and the environment.

Generators would be required to notify on a per facility basis. In other words, each generator facility managing hazardous recyclable materials would need to submit a notification form in accordance with the alternative standard. One notification cannot cover two or more generators or facilities. Furthermore, each generator need only use one notification form to list all of the hazardous recyclable materials to be managed under the exclusion at any particular facility (i.e., generators need not file separate notifications for each hazardous recyclable material). We also would require facilities that stop managing hazardous recyclable materials in accordance with the exclusion to notify the Regional Administrator (or State Director) using the

same EPA Form 8700-12 within 30 days after ceasing to claim the exemption.

2. Reclamation Plan

Prior to operating under the alternative standard, generators would be required to make and document advance arrangements for reclamation. These advance arrangements would be documented in a reclamation plan that (1) describes the hazardous recyclable material(s) and identifies the reclamation facility where the material will be sent, (2) includes written confirmation from the facility that they are able to reclaim the hazardous recyclable material (3) documents the amount of hazardous recyclable material expected in each shipment and the anticipated frequency of shipments, and (4) documents that the reclamation is legitimate per 40 CFR 260.43. The purpose of the reclamation plan is to ensure that the hazardous secondary material will be recycled legitimately and not over-accumulated and abandoned. The reclamation plan must be kept on-site for at least three years from the date the generator ceases to operate under the alternative standards

3. Management Standards

Generators operating under the proposed alternative standards would be able to accumulate hazardous recyclable materials on site for one year or less without a permit or without having interim status, provided that they follow the usual requirements for on-site management of hazardous wastes by large quantity or small quantity generators, with the following exceptions:

(a) While accumulated on-site, each container and tank is labeled or marked clearly with the words “hazardous recyclable material,” rather than being marked as “hazardous waste.”

(b) As noted, the allowed accumulation period will be up to one year, rather than 90 or 180 days,

respectively.[22]

EPA believes that the combination of the requirements of the notification and the reclamation plan (including the provision mandating advance arrangements for reclamation) would be as fully protective as the current generator times limits of 90 days for large quantity generator and 180/270 days for small quantity generators, since the reclamation plan will help demonstrate that the hazardous recyclable materials are going to be recycled and not be stored indefinitely, and the notification provision will allow proper oversight of this provision.

However, EPA also requests comment on limiting the maximum volume of a hazardous recyclable materials accumulated on-site at any one time to no more than two standard shipments to the designated facility, as identified in the generator's reclamation plan. Under such a requirement, the maximum volume would differ depending on the hazardous recyclable materials and where they are being transferred to, but it would ensure that the generator is not accumulating more than what it would need to make an off-site shipment economically feasible. (Setting the upper limit at two shipments worth would allow the generator to continue to accumulate hazardous recyclable materials while the first shipment is being prepared).

4. Transportation

Before transporting hazardous recyclable materials or offering hazardous recyclable materials for transportation off-site, a hazardous recyclable material generator would need to meet all the applicable pre-transportation requirements for hazardous waste generators under 40 CFR part 262 subparts B and C, including the need to package, label and placard the materials in accordance with Department of Transportation standards, as applicable to large or small quantity generators and preparing a hazardous waste manifest.

[22] Small quantity generators may accumulate hazardous waste on-site for up to 270 days if they transport, or offer the waste for transport, over a distance of 200 miles or more for off-site treatment, storage, and disposal.

In addition, EPA requests comment on allowing an alternative hazardous recyclable materials manifest. Under the alternative manifest system, the same requirements (e.g., filling out the manifest, record-keeping and procedures for rejected shipments) and information would apply to hazardous recyclable materials shipped on a hazardous recyclable materials manifest as those that apply to the hazardous waste manifest, but the manifests would be labeled "hazardous recyclable materials manifest." Such an alternative system would require conforming changes to 40 CFR §§262.20, 262.21, 262.40(a), 262.42, the appendix to part 262, §§263.20, 263.22, 264.71, 264.72, 265.71 and 265.72, plus 49 CFR 171.8 (DOT regulations) and EPA would integrate such a system into any future e-manifest systems. EPA requests comment on whether an alternative manifest would benefit the regulated community in such a way that would be worth the additional administrative effort in setting up such a system.

C. *Request for Comment*

EPA requests comment on the alternative standards for hazardous recyclable materials sent to reclamation, particularly on whether the longer accumulation times without requiring a hazardous waste permit or complying with the interim status standards and alternative designation of the materials as "hazardous recyclable materials" will help encourage legitimate reclamation. EPA notes that although the materials would be labeled as "hazardous recyclable materials," they would be, by definition, still hazardous wastes and, per 40 CFR 261.5, would count towards a facility's generator status (e.g., Large Quantity Generator, Small Quantity Generator). EPA requests comment on this issue.

In developing this proposed alternative standard, EPA also considered whether there were other areas, besides longer accumulation times, alternative labeling, and hazardous recyclable material manifests, where alternative standards for generators would help encourage safe and

legitimate recycling of hazardous recyclable materials. Below is a discussion of the other major areas of the generator standards. EPA requests comment on whether there are other aspects of the hazardous waste generator standards where an alternative standard for hazardous recyclable material generators would pose no significant risk to human health and the environment from discarded materials and would also promote increased recycling.

1. Storage Standards

Under the proposed alternative standards, generators must meet the same design, operating, inspection, and closure standards (including air emission standards) for containers, tanks, containment buildings, and drip pads as they would under the hazardous waste regulations. One alternative would be to replace these standards with the containment standards proposed for generators operating under the generator-controlled exclusion at §261.4(a)(23). Under that proposed provision, a hazardous secondary material is contained if it is managed in a unit, including a land-based unit as defined in §260.10, that meets the following criteria: (1) the unit is in good condition, with no leaks or other continuing or intermittent releases of hazardous secondary materials to the environment, and is designed, as appropriate, to prevent releases of hazardous secondary materials to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) a unit that is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and (3) a unit that does not hold incompatible materials and addresses any potential risks of fires or explosions.

EPA solicits comment on whether such a containment standard would help encourage generators to recycle, while posing no significant risk to human health and the environment from

discarded materials.

2. Manifest

As discussed earlier, EPA is requesting comment on allowing a hazardous recyclable materials manifest as an alternative to the hazardous waste manifest. Another option may be to use basic shipping records to document off-site shipments of the hazardous recyclable materials. This approach would be similar to how universal wastes are managed under streamlined hazardous waste regulations. However, EPA notes that two of the factors used to determine if a waste is appropriate to be considered a universal waste is if the risk posed by the waste during accumulation and transport is relatively low compared to other hazardous wastes, and whether the quantities generated by each generator are relatively small (see 40 CFR 273.81).

3. Personnel Training, Contingency Plan, and Emergency Procedures

Under the proposed alternative standards, large quantity generators must meet the same personnel training, contingency plan and emergency procedures as they would under the hazardous waste requirements. One alternative could be to apply standards similar to the small quantity generator requirements for management of hazardous recyclable materials by hazardous recyclable material generators. Small quantity generator requirements for personnel training, contingency planning and emergency procedures may be particularly appropriate if EPA also, as discussed above, applies a limit to the maximum amount of hazardous recyclable materials accumulated on-site at any one time. These reduced requirements may be appropriate if the maximum quantity of hazardous recyclable materials is limited because of the decreased risks associated with smaller quantities of materials present at any point in time.

4. Biennial Report

Under RCRA Subtitle C, large quantity generators of hazardous waste must submit

biennial reports to their regulatory authority that describe the type and quantity of hazardous waste generated, as well as how the waste was managed (among other information). However, a biennial reporting requirement may be duplicative of the requirement for generators of hazardous recyclable materials to renotify in compliance with 40 CFR 260.42, which also requires generators to report the type and quantity of hazardous secondary materials generated and reclaimed. Eliminating the biennial reporting requirement may avoid duplication in reporting and reduce paperwork burden on generators of hazardous recyclable materials. EPA requests comment on using the renotification in lieu of requiring biennial reports.

IX. Revisions to the Exclusion for Hazardous Secondary Materials that are Legitimately Reclaimed Under the Control of the Generator

A. *Summary of Current Exclusion*

In the 2008 DSW final rule, EPA excluded from the definition of solid waste those hazardous secondary materials that are legitimately reclaimed under the control of the generator, provided the materials are contained in the units in which they are stored, are not speculatively accumulated, and are reclaimed within the United States or its territories. Under the 2008 DSW final rule, the generator must also periodically notify EPA or the authorized state (as discussed previously) that it is operating under the exclusion. The regulatory provision excluding hazardous secondary materials under the control of the generator that are managed in land-based units is currently found at 40 CFR 261.4(a)(23), while the provision excluding such materials that are managed in non-land-based units is currently found at 40 CFR 261.2(a)(2)(ii). A land-based unit is defined in 40 CFR 260.10 as an area where hazardous secondary materials are placed in or on the land before recycling, but this definition does not include land-based production units. Examples of land-based units include surface impoundments and piles.

Examples of non-land-based units include tanks, containers, and containment buildings.

The definition of "hazardous secondary material generated and reclaimed under the control of the generator" is currently found at 40 CFR 260.10. Hazardous secondary materials are considered "under the control of the generator" under the following circumstances:

- they are generated and then reclaimed at the generating facility; or
- they are generated and reclaimed at different facilities, if the generator certifies that the hazardous secondary materials are sent either to a facility controlled by the generator or to a facility under common control with the generator, and that either the generator or the reclaimer has acknowledged responsibility for the safe management of the hazardous secondary materials; or
- they are generated and reclaimed pursuant to a written agreement between a tolling contractor and toll manufacturer, if the tolling contractor certifies that it has entered into a tolling contract with a toll manufacturer and that the tolling contractor retains ownership of, and responsibility for, the hazardous secondary materials generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process.

Under this provision, the hazardous secondary materials must be contained, whether they are stored in land-based or non-land-based units. The materials are also subject to the speculative accumulation requirements of 40 CFR 261.1(c)(8), as well as the provisions for legitimate recycling at 40 CFR 260.43. Finally, under 40 CFR 260.42, the generator (and the reclaimer, if the generator and reclaimer are located at different facilities) must send a notification prior to operating under the exclusion and by March 1 of each even-numbered year thereafter to the EPA Regional Administrator or, in an authorized state, to the State Director.

By maintaining control over, and potential liability for, the hazardous secondary materials and the reclamation process, the generator ensures that such materials have not been discarded. When reclaimed under the control of the generator, the hazardous secondary materials are being handled as a valuable commodity rather than a waste. However, if such hazardous secondary materials are released into the environment and are not recovered for legitimate recycling immediately, they have been discarded (i.e., are solid and hazardous wastes) and the generator is subject to all applicable federal and state regulations, as well as applicable cleanup authorities. (See 73 FR 64680, October 30, 2008 for a more detailed discussion of the generator-controlled exclusion.)

B. *Proposed Changes to Generator-Controlled Exclusion*

As discussed in Section V.I.2 of today's proposal, EPA is not proposing to withdraw the generator controlled exclusion. In the 2008 DSW final rule, EPA determined that if the generator maintains control over the recycled hazardous secondary materials and if the materials are legitimately recycled under the standards established in the final rule and not speculatively accumulated within the meaning of EPA's regulations, then the hazardous secondary materials are not discarded. This is because the hazardous secondary materials are being treated as a valuable commodity rather than as a waste. By maintaining control over, and potential liability for, the reclamation process, the generator ensures that the hazardous secondary materials are not discarded (see 73 FR 64676). EPA has not received any information that would cause the Agency to reverse this determination, and this continues to be the underlying rationale for the generator-controlled exclusion.

However, EPA does believe that revisions to the generator-controlled exclusion are needed in order to ensure that it operates as intended and does not result in discarded hazardous

secondary material posing a significant risk to human health and the environment. The proposed changes are in five areas: (1) the contained standard, (2) notification as a condition, (3) recordkeeping for speculative accumulation, (4) recordkeeping for the tolling provision, and (5) clarifying edits to the regulatory text. In each of the five areas, the proposed changes are intended to improve the implementation of the generator-controlled exclusion to ensure that it is correctly functioning to only exclude hazardous secondary material that is not discarded.

1. Contained Standard

Under the generator-controlled exclusion, hazardous secondary materials must be contained, regardless of whether they are stored in land-based units or non-land-based units. The contained standard is a key provision for determining that a hazardous secondary material is not discarded. Hazardous secondary materials that are not contained and are instead released to the environment are not destined for recycling and are clearly discarded. In today's proposed rule, EPA is retaining the "contained" condition based on the same rationale used in the 2008 DSW final rule, but is adding a regulatory definition of contained to make it easier for implementing agencies and the regulatory community to determine that a material is contained.

In the preamble to the 2008 DSW final rule (73 FR 64681), the Agency stated that such material is "contained" if it is placed in a unit that controls the movement of the hazardous secondary materials out of the unit and into the environment. However, EPA did not provide specific guidance on how an implementing agency or the regulated community would determine if a unit did adequately control the movement of hazardous secondary materials and meet the contained standard.

In the same preamble, EPA also discussed the issue of releases to the environment from stored hazardous secondary materials and when such materials could be considered "contained."

We stated that in the event of a release to the environment, the hazardous secondary materials remaining in the unit may or may not meet the terms of the exclusion, and specifically stated that such hazardous secondary materials would be considered wastes if a "significant" release occurred as a result of its not being managed as a valuable raw material, intermediate, or product, including storing acidic materials in a tank not suitable for such materials or failure to monitor the structural integrity of a tank, resulting in releases. If these releases were not immediately recovered, they would be considered discarded and, if hazardous, subject to the appropriate federal or state regulations and applicable authorities. The Agency also noted that a "significant" release is not necessarily large in volume. For example, unaddressed small releases to the environment could cause significant damage over time and, if the hazardous secondary materials are managed in such a way that such unaddressed releases are likely to continue, the hazardous secondary materials still remaining in the unit could be considered discarded because they were not being managed as a valuable raw material, intermediate, or product.

Conversely, the Agency also said that a unit in good condition could experience small releases resulting from normal operations of the facility, or a released material could be captured by secondary containment before being released to the environment. In those cases, the unit would retain its exclusion from the RCRA hazardous waste regulations and the hazardous secondary material in the unit would still be excluded from the definition of solid waste, even though any such materials that had been released would be considered discarded if not immediately recovered and would be subject to appropriate regulation.

EPA did not finalize a regulatory definition of "contained," nor did the 2008 DSW final rule impose specific performance or storage standards. In response to comments on the 2007 DSW supplemental proposal suggesting such specific standards, EPA stated its belief that such

detailed measures were unnecessary for hazardous secondary materials that are handled as valuable products and are destined for recycling. Rather, in the Agency's view at that time, regulatory authorities could determine whether such hazardous secondary materials were contained by considering site-specific circumstances (such as local conditions) and measures employed by the facility (such as liners, leak detection measures, and monitoring) to determine whether the hazardous secondary materials were contained in a storage unit.

Since implementation of the 2008 DSW final rule, the Agency has reconsidered its position about whether a regulatory definition of "contained" might be necessary for hazardous secondary materials managed under the control of the generator. EPA has received a considerable number of inquiries from state authorities and the regulated community about how to determine if a hazardous secondary material is contained. In particular, there have been many questions about when a release is "significant" and when hazardous secondary materials remaining in a unit that has suffered a release should be considered discarded.

Of particular concern is the lack of preventative measures in the contained standard in the 2008 DSW final rule, which is noted as a major regulatory gap in the environmental justice analysis discussed in Section VI of this preamble. As noted above, EPA did not provide specific guidance on which types of units would be considered as adequately containing a hazardous secondary material. In the 2008 DSW final rule preamble, only the absence of containment, i.e., a release to the environment, is discussed, and even then the confusion over whether a release is "significant" makes proper implementation of the contained standard problematic.

Given that the contained standard is one of the major requirements for determining that hazardous secondary materials reclaimed under the generator-controlled exclusion are not discarded, this lack of specificity has the potential to undermine the exclusion. That is, if the

primary or only way to determine that the hazardous secondary material is not contained is to wait until it is released to the environment, then the 2008 DSW final rule increases the likelihood of discard for these materials. The Agency therefore has considered whether adding a regulatory definition of "contained" could resolve this uncertainty without sacrificing the flexibility that would allow the implementing authority to take into account a wide variety of case-specific circumstances when necessary.

For these reasons, EPA is today proposing to amend 40 CFR 260.10 to include a regulatory definition of "contained." Under today's proposal, a hazardous secondary material is contained if it is managed in a unit, including a land-based unit as defined in §260.10, that meets the following criteria: (1) the unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary material, to prevent releases of the hazardous secondary materials to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and (3) the unit does not hold incompatible materials and addresses any potential risks of fires or explosions. Hazardous secondary materials in units that meet the applicable requirements of 40 CFR Part 264 or 265 are considered to be contained.

This proposed definition specifies factors which, if met, demonstrate that the hazardous secondary materials in a unit are handled as valuable raw materials, intermediates, or products and thus are not being discarded. We note that the criteria in proposed 40 CFR 261.4(a)(23)(i) are all measures suggested by commenters in response to the June 2009 public meeting on the

2008 DSW final rule. These criteria also exemplify practices discussed in the preamble to that rule regarding containment of hazardous secondary materials, such as ways to prevent releases and operation and maintenance of the storage unit in the same manner as a production unit. The appropriateness of specific measures undertaken to ensure a hazardous secondary material is contained would depend on the material in the unit. For example, in the case of land-based piles of hazardous secondary materials in the form of fine particulate matter, a covering to prevent wind-blown dust could demonstrate that the unit was designed to prevent releases of such materials. On the other hand, land-based piles of hazardous secondary materials in the form of scrap metal that is unlikely be carried off by the wind would not need a covering to be considered contained.

If these criteria were not met and a release of the hazardous secondary materials subsequently occurred that was not immediately recovered, the materials remaining in the unit would be considered solid and hazardous wastes and the unit would be subject to the appropriate hazardous waste regulations.

Also, to clarify the regulatory status of units from which releases have occurred, the Agency is also proposing to add to 40 CFR 261.4(a)(23) the following: (1) a hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation; and (2) hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases of the hazardous secondary material to the environment is discarded and a solid waste.

In the preamble to the 2008 DSW final rule, EPA referred to “significant” releases as the criterion to determine whether hazardous secondary materials remaining in the unit should be considered wastes. We believe that today’s proposed codification better expresses our intent that

all releases are of potential concern. However, under today's proposal, in the event of a release from a unit to the environment, the hazardous secondary materials that remain in the unit could still meet the terms of the exclusion, as long as the other provisions of the containment definition are met. A single release that is quickly addressed would not generally affect the regulatory status of the hazardous secondary materials still contained in the unit. Sometimes a material may escape from primary containment and may be captured by secondary containment or some other mechanism that would prevent the hazardous secondary materials from being released to the environment or would allow immediate recovery of the materials. In that case, the unit would not be subject to the RCRA hazardous waste regulations and the hazardous secondary materials in the unit would still be excluded from the definition of solid waste, even though any such materials that had been released would be considered discarded if not immediately recovered for reclamation and would be subject to appropriate regulation.

EPA also notes that certain units may be subject to occasional precipitation runoff that consists essentially of water, with trace amounts of hazardous constituents. For example, precipitation runoff containing trace amounts of metals may occur from units storing furnace bricks collected from production units and stored on the ground in walled bins before being used as feedstocks in the metals production process. Similarly, metal components from fired ammunition or other scrap metal are sometimes stored on the ground before being sent for recycling, and precipitation may run off from this unit. As long as such runoff does not contain hazardous secondary material (e.g., it is essentially rainwater with trace amounts of metals), it would not be considered a "release of hazardous secondary material." Therefore, the runoff would not cause the land-based units to be subject to Subtitle C controls. On the other hand, if the hazardous secondary material itself is swept away by the runoff (e.g., if the hazardous

secondary material consists of fine particulate matter, such as electric arc furnace dust), this transport via precipitation runoff could be considered a "release of a hazardous secondary material" and that pile may not be considered contained.

A unit that has had a release of hazardous secondary materials and is likely to have one in the future (as demonstrated by not meeting the three factors in the standard)[23] is not "contained" and is therefore a solid waste and the unit would be subject to Subtitle C regulation. In order to determine whether a unit that has had a release is likely to suffer future releases, the regulatory authorities should consider all the factors in proposed 40 CFR 261.4(a)(23)(i). The Agency believes that this procedure is more likely to provide effective guidance to regulatory authorities and the regulated community than the current criterion of "significant."

EPA notes that under today's proposal, this definition of "contained" would apply to both land-based units and non-land-based units under the generator-controlled exclusion. For the reasons explained in section IX.B.5 of this preamble, EPA is proposing to place all requirements for both types of units in 40 CFR 261.4(a)(23).

The Agency solicits comment on whether the proposed changes to 40 CFR 261.4(a)(23)(i) will be effective in improving the implementability and enforceability of the "contained" requirement, and on whether additional requirements might be needed to achieve this end, or to ensure the hazardous secondary material is not discarded. We also request comment on whether the proposed regulatory definition of "contained" allows sufficient flexibility to regulatory authorities to evaluate site-specific circumstances that might be relevant

[23] The unit (which can include a land-based unit such as a pile) must meet the following three criteria: (1) the unit is in good condition with no leaks or other continuing or intermittent releases of hazardous secondary material s to the environment and is designed, as appropriate for the hazardous secondary material, to prevent releases of the hazardous secondary material to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary material in the unit; and (3) the unit does not hold incompatible materials and addresses any potential risks of fires or explosions.

to whether a hazardous secondary material could be considered discarded.

2. Notification

a. *Summary*. Under 40 CFR 260.42, hazardous secondary material generators, tolling contractors, toll manufacturers, intermediate facilities, and reclaimers managing hazardous secondary materials under 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25), are required to submit a notification prior to operating under these exclusions and by March 1 of each even-numbered year thereafter to their regulatory authority. Facilities must also notify their regulatory authority within 30 days of stopping management of hazardous secondary materials under the rule.

The intent of the notification requirement is to provide basic information to the regulatory agencies about who will be managing hazardous secondary materials under the exclusion. The specific information included in the notification requirement enables regulatory agencies to monitor compliance and to ensure that the hazardous secondary materials are managed according to the exclusion and not discarded. Notification information is collected in EPA's RCRAInfo database, which is the national repository of all RCRA Subtitle C site identification information, whether collected by a state authority or EPA. As explained in the 2008 DSW final rule, EPA believes our authority to request such information is inherent in our authority to determine whether a material is discarded. We consider this to be the minimum information needed to enable credible evaluation of the status of hazardous secondary materials under section 3007 of RCRA and to ensure that the terms of the exclusions are being met by generators and reclaimers. EPA continues to support the underlying rationale outlined in the 2008 DSW final rule for the need to collect this information. (See 73 FR 64682, October 30, 2008, for a more detailed discussion of our authority to collect this information.)

As codified, the requirement to provide this notification is not a condition of the

exclusions. Thus, although failure to comply with the requirement constitutes a violation of RCRA, it does not affect the excluded status of the hazardous secondary material.

b. *Proposed changes*. We are proposing today to make the notification provision in 40 CFR 260.42 a condition of the generator-controlled exclusion in 40 CFR 261.4 (a)(23).

In the 2009 Federal Register notice announcing the June 2009 DSW public meeting, EPA listed as an issue for discussion whether notification should be a condition, rather than a requirement, of the exclusions. A number of commenters weighed in on both sides of this issue. On one hand, commenters stated that keeping notification as a requirement would create an unintended incentive for hazardous secondary material generators, intermediate facilities and reclaimers not to notify, because those who chose not to notify would likely evade oversight for many years and, if caught, could simply regard the violation as a "paperwork violation," and regard the possible penalty for that violation as a cost of doing business. These commenters also argued that the failure of a hazardous secondary material generator, intermediate facility or reclaimer to provide notification is a strong indication that these entities are either unaware of or trying to circumvent the regulatory requirements. In both cases, these actions potentially increase the likelihood for environmental damage. Therefore, failure to notify should be regarded as more serious than a reporting violation and should remove the excluded status of the hazardous secondary materials.

Conversely, some commenters supported maintaining notification as a requirement, arguing that if an entity fails to notify, it does not necessarily indicate that the hazardous secondary materials were discarded and, therefore, should not automatically affect the excluded status of such materials.

At issue here are not the specifics of the notification in 40 CFR 260.42, but rather the

consequences an entity would face for failing to notify. Thus, if notification is a requirement under the authority of RCRA section 3007 of the exclusion, it means that failure to notify would constitute a violation of the notification regulations. On the other hand, if notification is a condition of the exclusion, it means failure to notify would potentially result in the loss of the exclusion for the hazardous secondary materials (i.e., the hazardous secondary materials would become solid and hazardous wastes and subject to full Subtitle C regulation).

In the 2008 DSW final rule, EPA considered the notification requirement as providing basic information to regulatory authorities, but determined that notification, in and of itself, did not allow regulatory authorities to directly determine that hazardous secondary materials were discarded. In other words, a generator or intermediate facility/reclaimer could fail to notify yet still be legitimately reclaiming (or storing the material prior to reclamation) their hazardous secondary materials according to the conditions of the exclusion (73 FR 64739, October 30, 2008).

However, the notification provision is also the only formal indication of a facility's intent to reclaim a hazardous secondary material under the conditional exemption and not discard it. For example, if during an inspection of a large quantity generator of hazardous waste, EPA were to discover a hazardous secondary material that had been stored on-site for more than 90 days without a RCRA permit (an act that would typically be a violation of the hazardous waste regulations), a previously filed notification would be an indication that the facility was planning to reclaim the hazardous secondary material under the conditions of the exclusion. Absent such a notification, it would be difficult for the facility to justify its true intentions for the hazardous secondary material. Failure to meet the notification provision would be a strong indication that the facility either did not intend to comply with or was unaware of the provisions of the

exclusion, since it failed to comply with the first step for claiming the exclusion. In both cases, the lack of notification could indicate that the hazardous secondary material may be mismanaged.

Making notification a condition of the rule would further discourage facilities from trying to evade enforcement by not notifying because the costs of not notifying could be significantly higher than if notification remains a requirement. Notification is important for informing regulators and the public about hazardous secondary materials activity and, without such notification, regulators are unable to effectively monitor compliance. Additionally, state commenters have argued that enforcement discretion is commonly used to distinguish between the unintentional administrative oversight of "not notifying" and a blatant attempt at evading enforcement. Making notification a condition of the exclusion provides states the ability to properly enforce against this latter group, while leaving the flexibility to tailor enforcement in appropriate cases. EPA is therefore proposing today to make the notification provision in § 260.42 a condition of the generator-controlled exclusion in § 261.4(a)(23). Additionally, we are also requesting comment on making notification a condition of the re-manufacturing exclusion and of the other recycling exclusions and exemptions (see Section XII "Request for Comment on Re-manufacturing Exclusion" and Section XIII "Request for Comment on Revisions to Other Recycling Exclusions and Exemptions").

3. Recordkeeping for Speculative Accumulation

In addition to the containment provision, hazardous secondary materials that are generated and legitimately reclaimed under the control of the generator are subject to the speculative accumulation provisions of 40 CFR 261.1(c)(8). If these hazardous secondary materials are speculatively accumulated, they are considered discarded. EPA did not propose

changes to the speculative accumulation provisions in the March 26, 2007, DSW proposal and has not reopened any substantive provision of the speculative accumulation requirement.

However, since implementation of the 2008 DSW final rule, EPA has received questions from regulatory authorities about enforcement of the speculative accumulation requirement. In particular, enforcement personnel have suggested that ease of enforcement would be greatly facilitated if persons subject to the speculative accumulation requirement were required to post a start date for the accumulation. In this way, inspectors and other regulatory authorities could quickly ascertain how long a facility has been storing an excluded hazardous secondary material, and, therefore, whether that facility was in compliance with the storage time limits of 40 CFR 261.4(a)(23)(iii) and 40 CFR 261.1(c)(8).

EPA agrees with this suggestion and is therefore proposing to amend 40 CFR 261.4(a)(23)(iii) to require persons operating under the generator-controlled exclusion to place a label on the storage unit indicating the first date that the excluded hazardous secondary material began to be accumulated. In cases where placing a label on the storage unit is not practicable (e.g., if materials are stored in a surface impoundment), we are proposing as an alternative to amend 40 CFR 261.4(a)(23)(iii) to require persons operating under the generator-controlled exclusion to document in an inventory log the first date that the excluded hazardous secondary material began to be accumulated. EPA also notes that we are not proposing any changes or otherwise reopening the substantive requirements of the speculative accumulation condition.

The Agency notes that placing labels on storage units or entering accumulation start dates in inventory logs is likely to already be part of normal business operations at many facilities. For this reason, we believe that this proposed requirement is not unduly burdensome and will provide a greater degree of clarity and certainty both to the regulated community and to regulatory

authorities who are trying to determine when excluded hazardous secondary materials began to be accumulated. EPA solicits comment on whether this proposed requirement will be effective in meeting this goal and on whether other methods of measuring storage durations and/or identifying start dates would be equally effective (such as a requirement to post accumulation start dates in storage areas, within a specified number of feet of the storage unit).

As proposed, this recordkeeping provision would only apply to the exclusion under 40 CFR 261.4(a)(23). However, the same arguments for tracking accumulation start dates could be made more broadly for all recycling subject to the speculative accumulation limits. Thus, EPA is also requesting comment on whether to add this recordkeeping requirement to the speculative accumulation provision in 40 CFR 261.1(c)(8) itself.

4. Tolling Provision

Under the 2008 DSW final rule, hazardous secondary materials are eligible for the generator-controlled exclusion if they are generated and reclaimed pursuant to a written agreement between a tolling contractor and toll manufacturer, if the tolling contractor certifies that it has entered into a contract with a toll manufacturer and that the tolling contractor retains ownership of, and responsibility for, the hazardous secondary materials generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process.

For purposes of this exclusion, a tolling contractor is a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. The toll manufacturer is the person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor. Under the 2008 DSW final rule, the tolling contractor must certify that it has a written

contract with the toll manufacturer to manufacture a product or intermediate made from specified unused materials, and that the tolling contractor will reclaim the hazardous secondary materials generated during the manufacture of the product or intermediate. The tolling contractor must also certify that it retains ownership of, and liability for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process at the toll manufacturer's facility. This certification should be made by an official familiar with the terms of the written contract and should be retained at the site of the tolling contractor.

However, there were no requirements to keep records of shipments of hazardous secondary materials sent or received pursuant to the written contract between the tolling contractor and the tolling manufacturer. Since implementation of the final rule, the Agency has received inquiries from regulatory authorities regarding the enforceability of the tolling provision. These authorities believe that it would be easier to determine if tolling contractors and manufacturers were in compliance with the requirements for the tolling exclusion if records were kept of these shipments. The Agency agrees with these suggestions and is therefore proposing to amend 40 CFR 261.4(a)(23)(ii) to add a recordkeeping requirement for tolling contractors and manufacturers.

The proposed language would require the tolling contractor to maintain at its facility for no less than three years records of all hazardous secondary materials received pursuant to the written contract with the tolling manufacturer. It would also require the tolling manufacturer to maintain at its facility for no less than three years records of all hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of

the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). EPA solicits comment on whether this proposed requirement would make the exclusion for hazardous secondary materials generated pursuant to a tolling contract easier to enforce. We also solicit comment on other information which would be appropriate for the recordkeeping requirements.

While not specifically raised by regulatory authorities, the same question of enforceability could be raised if a hazardous secondary material is generated and reclaimed at different facilities where both facilities are under the control of the generator. Therefore, EPA also solicits comments on whether the recordkeeping requirement should also apply to hazardous secondary materials reclaimed off-site at the same company under 40 CFR 261.4(a)(23).

Furthermore, the Agency is also soliciting comment on whether the specific tolling exclusion for hazardous secondary materials generated and reclaimed under the control of the generator should be retained or eliminated. We note that since implementation of the 2008 DSW final rule, no facilities have notified that they are operating under the tolling exclusion, which, in any event, applies only to a small subset of generators and reclaimers. The definitions under this exclusion (with its attendant certifications) are complicated and involve applying the exemption to companies other than the original generators and relying on contractual commitments to ensure generator control. If the exclusion is going to be only infrequently utilized, while possibly adding some additional risks of discard, it might be better for both the regulated community and regulatory authorities if it were not part of the exclusions granted to hazardous secondary materials generated and reclaimed under the control of the generator. Instead, persons operating under tolling arrangements would be eligible for the proposed alternative hazardous waste

regulations for hazardous recyclable materials transferred to a third-party for reclamation. These proposed alternative regulations are discussed in Section VIII of this preamble. If this approach were finalized, there would be no need for definitions and certifications that are specific to tolling arrangements. On the other hand, the tolling contractor conducting the reclamation might need to obtain a RCRA storage permit. Toll manufacturing can be an efficient method for material production and the Agency does not wish to unnecessarily discourage sustainable reclamation practices under these arrangements. EPA requests comment on the likelihood and extent to which generators expect to rely on toll manufacturing arrangements and on the risks and benefits of including tolling arrangements in our proposed alternative regulatory scheme, or on maintaining their eligibility under the generator-controlled exclusion.

5. Other Changes

The Agency is also proposing a number of structural changes to the regulations in the 2008 DSW final rule in order to make the generator controlled exclusion simpler and easier to understand. In the 2008 DSW final rule, the requirements for non-land-based units operating under the generator-controlled exclusion were found at 40 CFR 261.2(a)(2)(ii), while the requirements for land-based units operating under the same exclusion were found at 40 CFR 261.4(a)(23). Since the requirements for the two types of units are identical, we believe that all the requirements for units operating under the control of the generator should be placed in one regulatory provision. We are therefore proposing to move the requirements listed in 40 CFR 261.2(a)(2)(ii) to 40 CFR 261.4(a)(23). We believe this will provide more clarity and transparency to all users of the regulations.[24]

Another proposed change concerns the definitions of terms applicable to the generator-

[24] In making this change, we are still keeping the definition for land-based operating units since the notification requirement at 40 CFR 260.42 still will request whether or not the unit managing the hazardous secondary material is a land-based operating unit or a non-land-based operating unit.

controlled exclusion. In the 2008 DSW final rule, these definitions (including certification requirements) were found in 40 CFR 260.10. We are proposing today to move these definitions to 40 CFR 261.4(a)(23). We believe that placing all definitions applicable to the generator-controlled exclusion together with the requirements for that exclusion in the same regulatory section will make it easier to locate and understand this exclusion in a single reading.

X. Revisions to the Definition of Legitimacy

A. *Summary of Current Definition of Legitimacy*

Under the RCRA Subtitle C definition of solid waste, certain hazardous secondary materials, if recycled, are not solid wastes and, therefore, are not subject to RCRA's "cradle to grave" management system. The basic idea behind this principle is that recycling of these hazardous secondary materials often closely resembles industrial manufacturing rather than waste management. However, due to the economic incentives for managing hazardous secondary materials outside the RCRA Subtitle C regulatory system, there is a potential for some handlers to claim that they are recycling the hazardous secondary materials when, in fact, they are conducting waste treatment and/or disposal.

To guard against this, EPA has long articulated the need to distinguish between legitimate (i.e., true) recycling and sham recycling, beginning with the preamble to the 1985 regulations that discussed the definition of solid waste (50 FR 638, January 4, 1985) and continuing through the 2008 DSW final rule. The legitimacy provision that is required for the definition of solid waste final exclusions and non-waste determinations promulgated in the 2008 DSW final rule (40 CFR 260.43) is designed to distinguish between real recycling activities— legitimate recycling—and sham recycling, an activity undertaken by an entity to avoid the requirements of managing a hazardous secondary material as a hazardous waste. This provision is substantively

the same as the Agency's long-standing policy that has been expressed in our earlier preamble discussions and policy statements. The legitimacy provision applicable to these exclusions and non-waste determinations is based on the 2003 DSW proposal, the 2007 DSW supplemental proposal, the 2008 DSW final rule, and all relevant information available to EPA as contained in the rulemaking record for the 2008 DSW final rule. The preamble to the 2008 DSW final rule contains the operative discussion on the four legitimacy factors that should be used when making legitimate recycling determinations.

In the 2008 DSW final rule, hazardous secondary materials that are not legitimately recycled are discarded materials and, therefore, are solid wastes (40 CFR 260.43). This provision also states that any facility claiming an exclusion at § 261.2(a)(2)(ii), § 261.4(a)(23), § 261.4(a)(24), or § 261.4(a)(25) or using a non-waste determination at § 260.30(d) or (e) must be able to demonstrate that its recycling activity is legitimate.

The structure of the legitimacy standard in the 2008 DSW final rule has two parts. The first part includes a requirement that hazardous secondary materials being recycled must provide a useful contribution to the recycling process or to the product of the recycling process and a requirement that the product of the recycling process is valuable. These two factors make up the core of legitimacy and, therefore, a process that does not conform to them cannot be a legitimate recycling process, but would be considered sham recycling.

The second part of legitimacy in the 2008 DSW final rule includes two factors that must be considered, but not necessarily met, when a recycler is making a legitimacy determination. That is, EPA believed that these two factors that must be considered when making a legitimacy determination did not always need to be met. This was because the Agency is aware of a few situations in which a legitimate recycling process does not conform to one or both of these two

factors, yet the reclamation activity would still be considered legitimate.

EPA did not believe that this will be a common occurrence, but in recognition that legitimate recycling may still occur in these situations, EPA promulgated the factors that address the management of the hazardous secondary materials and the presence of hazardous constituents in the product of the recycling process as factors that must be considered in the overall legitimacy determination, but not factors that must always be met.

Following is a summary of the four legitimacy factors that were codified in the 2008 DSW final rule. The preamble to the 2008 DSW final rule includes a lengthy discussion of the four legitimacy factors that is the operative discussion for making legitimate recycling determinations (73 FR 64700, October 30, 2008).

Summary of the Four Factors in the 2008 DSW Final Rule

Factor 1—Useful Contribution: "Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product of the recycling process…The hazardous secondary material provides a useful contribution if it (i) contributes valuable ingredients to a product or intermediate; or (ii) replaces a catalyst or carrier in the recycling process; or (iii) is the source of a valuable constituent recovered in the recycling process; or (iv) is recovered or regenerated by the recycling process; or (v) is used as an effective substitute for a commercial product" (40 CFR 260.43(b)(1)).

This factor expresses the principle that hazardous secondary materials should contribute value to the recycling process. This factor is an essential element to legitimate recycling because real recycling is not occurring if the hazardous secondary materials being added or recovered do not add anything to the process or recycled product. This factor is intended to prevent the practice of adding hazardous secondary materials to a manufacturing operation simply as a

means of disposing of them, or of recovering only small amounts of a constituent, both of which EPA would consider sham recycling. For hazardous secondary materials to meet this factor, not every constituent or component of the hazardous secondary material has to make a contribution to the recycling activity. For example, a legitimate recycling operation involving precious metals might not recover all of the components of the hazardous secondary material, but would recover precious metals with sufficient value to consider the recycling process legitimate. In addition, the recycling activity does not have to involve the hazardous component of the hazardous secondary materials if the value of the contribution of the non-hazardous component justifies the recycling activity.

Factor 2—Valuable Product or Intermediate: "The recycling process must produce a valuable product or intermediate…The product or intermediate is valuable if it is (i) sold to a third-party or (ii) used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process" (40 CFR 260.43(b)(2)).

This factor expresses the principle that the product or intermediate of the recycling process should be a material of value, either to a third party who buys it from the recycler, or to the generator or recycler itself, who can use it as a substitute for another material that it would otherwise have to buy or obtain for its industrial process. This factor is an essential element of the concept of legitimate recycling because recycling cannot be occurring if the product or intermediate of the recycling process is not of use to anyone and, therefore, is not a real product. This factor is intended to prevent the practice of running hazardous secondary materials through an industrial process for the purpose of avoiding the costs of hazardous waste management, rather than for the purpose of using the product or intermediate of the recycling activity. Such a practice would be sham recycling.

Factor 3—Managed as a Valuable Commodity: "The generator and the recycler should manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material should be managed, at a minimum, in a manner consistent with the management of the raw material. Where there is no analogous raw material, the hazardous secondary material should be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded" (40 CFR 260.43(c)(1)).

This factor expresses the principle that hazardous secondary materials being recycled should be managed in the same manner as other valuable materials. This factor requires those making a legitimacy determination to look at how the hazardous secondary materials are managed before they enter the recycling process. In EPA's view, a recycler will value hazardous secondary materials that provide an important contribution to its process or product and, therefore, will manage those hazardous secondary materials in a manner consistent with how it manages a valuable feedstock. If, on the other hand, the recycler does not manage the hazardous secondary materials as it would a valuable feedstock, that behavior may indicate that the hazardous secondary materials may not be recycled, but rather will be released into the environment and discarded.

Factor 4—Comparison of Toxics in the Product: "The product of the recycling process does not (i) contain significant concentrations of any hazardous constituents found in Appendix VIII of part 261 that are not found in analogous products; or (ii) contain concentrations of any hazardous constituents found in Appendix VIII of part 261 at levels that are significantly elevated from those found in analogous products; or (iii) exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit" (40 CFR 260.43(c)(2)).

This factor expresses the principle that when making a legitimacy determination, one needs to look at the concentrations of the hazardous constituents found in the product made from the hazardous secondary materials and compare them to the concentrations of hazardous constituents in analogous products that were not made from hazardous secondary materials. Any of the following three situations could be an indicator of sham recycling: a product that contains significant levels of hazardous constituents that are not found in the analogous products; a product with significantly higher levels of hazardous constituents than were in the analogous products; or a product that exhibits a hazardous characteristic that analogous products do not exhibit.

Any of these situations could indicate that sham recycling is occurring because in lieu of proper hazardous waste disposal, the recycler could have incorporated hazardous constituents into the final product when they are not needed to make the product effective for its purpose. This factor, therefore, is designed to determine when toxics that are "along for the ride" are discarded in a final product and, therefore, the hazardous secondary materials are not being legitimately recycled. Evaluating the significance of levels of hazardous constituents in products of the recycling process may involve taking into consideration several variables, such as the type of product, how it is used and by whom, whether or not the elevated levels of hazardous constituents compromise the efficacy of the product, the availability of the hazardous constituents to the environment, and others.

In addition to promulgating the legitimate recycling provision in the 2008 DSW final rule, EPA included a discussion of how the current legitimacy policy continues to apply to existing recycling exclusions and how the four factors included in the legitimacy provision at 40 CFR 260.43 are substantively the same as the current legitimacy policy. The Agency included a

lengthy discussion of how it developed the legitimacy factors in 40 CFR 260.43 by closely examining the questions and sub-questions in its long-standing policy memo on the subject, OSWER Directive 9441.1989(19) (April 26, 1989), also known as the Lowrance Memo, and in the relevant Federal Register preambles, and converting this policy guidance into four direct factors. The detailed explanations of how each of the four factors is derived from the Lowrance Memo and other existing policy statements can be found at 73 FR 64708–64710, October 30, 2008.

B. *Proposed Changes to the Definition of Legitimacy*

1. Legitimacy Codified for All Recycling

In today's action, EPA is proposing to codify the legitimate recycling requirement for all hazardous secondary materials recycling.[25] In the October 28, 2003, proposal at 68 FR 61581–61588, EPA discussed its position on the relevance of legitimacy to hazardous secondary materials recycling in general and to the redefinition of solid waste specifically. At that time, we proposed to codify in the RCRA hazardous waste regulations four general criteria to be used in determining whether recycling of hazardous secondary materials is legitimate. In the supplemental proposal of March 26, 2007, at 72 FR 14197–14201, we proposed two changes to the 2003 proposed legitimacy criteria and asked for public comment on those changes. The changes were (1) a restructuring of the proposed criteria, called "factors" in that proposal, to make two of them mandatory, while leaving the other two as factors to be considered, and (2) additional guidance on how the economics of the recycling activity should be considered in a legitimate recycling determination.

EPA's 2008 DSW final rule codified legitimacy for the recycling covered by the

[25] This legitimate recycling requirement does not apply to non-hazardous secondary materials. For information on the legitimacy requirement for those materials, see the Identification of Non-Hazardous Secondary Materials that Are Solid Waste Final Rule (76 FR 15456, March 21, 2011).

exclusions and non-waste determinations in that rulemaking. However, at that time, EPA did not codify the legitimacy factors for other recycling exclusions/activities, but explained that the concept of legitimacy finalized in that rule as a restriction or a condition for the final exclusions and the non-waste determinations is not substantively different from the Agency's longstanding policy that has been expressed in our earlier preamble discussions and policy statements.

Upon further consideration of legitimacy, EPA believes that codifying the legitimacy factors for all recycling would provide a number of benefits. These benefits include ensuring that this important requirement is more readily accessible to the public, including the regulated community, by being published in the Federal Register and in the Code of Federal Regulations. EPA also expects that this action will prevent or minimize fraudulent or sham recycling, which will make the legitimacy provision a more enforceable standard for states and other entities implementing RCRA. In the Regulatory Impact Analysis for this proposed rule, we estimate that 5,321 facilities are currently recycling hazardous secondary materials in the U.S. For these facilities, this requirement that is currently implicit in the regulations and described in guidance would become an explicit regulatory requirement.

a. *What is the proposed scope of the legitimacy provision?* If codified for all recycling, the definition of legitimacy would apply to these types of hazardous secondary materials, in addition to the final exclusions and non-waste determinations promulgated in the 2008 DSW final rule:

- Hazardous recyclable materials that are managed under today’s proposed alternative Subtitle C regulations for hazardous recyclable materials.
- Hazardous secondary materials that, because they are recycled, are excluded or exempted from Subtitle C regulation under other regulatory provisions (e.g., see the exclusions from the definition of solid waste in 40 CFR 261.4(a)).

- Materials formally determined to be non-wastes under the procedures in 40 CFR 260.34.
- Recyclable hazardous wastes that are regulated under Subtitle C prior to recycling or subject to reduced regulation.

The concept of legitimate recycling is also used to determine if a unit is a recycling unit exempt from RCRA Subtitle C permitting or is a regulated waste treatment or storage unit subject to full RCRA Subtitle C permitting.[26] If finalized for all recycling, the legitimacy factors would apply to these situations as well.

One important note is that EPA has previously examined in depth a number of waste-specific and industry-specific recycling activities and has promulgated specific regulatory exclusions or provisions that address the legitimacy of these practices in much more specific terms than the general factors being promulgated today. Thus, there would be situations where today's proposed broadly applicable factors would overlap with these more specific legitimacy provisions.

One example is the regulation for zinc fertilizers made from recycled hazardous secondary materials. In the zinc fertilizer regulation, among the requirements established by EPA are specific numerical limits on five heavy metal contaminants and dioxins in the zinc fertilizer product exclusion at 40 CFR 261.4(a)(21). These limits would be the "comparable" standard for those contaminants when determining if the recycling meets legitimacy factor 4 (Comparison of Toxics in the Product). However, if fertilizer made from hazardous secondary materials contains other hazardous constituents that do not have specific numerical limits in 40 CFR 261.4(a)(21), then the generator or recycler would need to compare the levels of those hazardous constituents with those in an analogous fertilizer product not made from hazardous secondary materials.

[26] Certain exempt legitimate recycling facilities are still subject to RCRA air emission standards.

Other examples of more specific legitimacy provisions are found in the regulations for comparable fuels at § 261.38, the use constituting disposal provisions in part 266 subpart C, and the burning for energy recovery and material recovery provisions in part 266 subpart H.

In doing a legitimacy determination on a fuel made from hazardous secondary material under the comparable fuels exclusion, the regulations contain concentration limits for a comprehensive list of chemicals. If the fuel meets those limits, it would generally meet legitimacy factor 4 (unless it contains a hazardous constituent that is not on the list of chemicals in § 261.38 Table 1). However, the regulated entity would need to consider the other legitimacy factors as well in making an overall legitimacy determination on the hazardous secondary material being burned as a comparable fuel.

For hazardous secondary materials being used in a manner constituting disposal under 40 CFR part 266 subpart C, a person would need to determine if the hazardous secondary material being recycled in this way meets all four legitimacy factors in 40 CFR § 260.43, in addition to meeting the conditions of 40 CFR part 266 subpart C. Meeting the applicable treatment standards as required by § 266.20 would not substitute for meeting legitimacy factor 4 because those standards are technologically-based standards and are not based on a comparison to an analogous product. Those standards in some cases would be more stringent while in other cases, they may be less stringent.

The legitimacy provisions would also apply to hazardous secondary materials being burned either for energy recovery or material recovery under 40 CFR part 266 subpart H. For those materials being burned for metals recovery, meeting the concentration limits in 40 CFR 266.100(d)(2) would be considered comparable for the sake of legitimacy factor 4. The regulated entity would have to ensure that the recycling meets the other legitimacy factors as well to be in

compliance with the overall legitimate recycling provision.

EPA is proposing that these more specific provisions remain applicable and that the legitimacy factors would not replace them. That is, regulated entities would need to comply with both the specific regulatory conditions of their recycling exclusions, as well as any of the legitimate recycling factors not explicitly covered by the specific recycling exclusion. The Agency seeks public comment on the overlap between the general legitimacy provision and the specific recycling exclusions.

b. *Why is EPA proposing to codify legitimacy for all recycling?* In the 2008 DSW final rule, EPA explained that it was finalizing codified legitimacy factors only for the exclusions and non-waste determinations in that rule to avoid confusion among the regulated community and state and other implementing regulatory agencies about the status of recycling under existing exclusions. At the time, EPA did not expect members of the regulated community to revisit their previously-made legitimacy determinations.

After evaluating the comments in response to the May 27, 2009, public meeting notice (74 FR 25200) and concerns brought up in the subsequent public meetings, EPA has determined that the benefits from having identical codified legitimacy requirements outweigh concerns about making administrative changes to the requirement. One codified legitimacy standard will be less confusing and more clear to the regulated community, implementing agencies and the public.

EPA's environmental problems study documents a number of recycling damage cases that have resulted from sham recycling. For example, several cases of sham recycling detail cases of lead- and other metal-contaminated materials from secondary lead smelters and battery recyclers being used as fill in residential neighborhoods and as play sand for children.[27] These

[27] U.S. EPA, *An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials*, Appendix 2, EPA-HQ-RCRA-2002-0031-0358, Appendix 2, pp. 3-4, 238, 294-295, 298-299.

are clear cases of sham recycling, but can be difficult for states and other implementing agencies to enforce against because the requirement is not in the regulations. EPA believes that including legitimacy in the regulations for all recycling will make it easier to enforce these sham recycling cases and will help implementing agencies fulfill their mandate to protect human health and the environment.

EPA also believes that there will be benefits to the environment from requiring those who are recycling under existing exclusions and other provisions to do this kind of evaluation of their recycling process with legitimacy considerations in mind. EPA believes that codifying the legitimacy factors for all recycling and the requirement to document legitimacy determinations, as discussed below, will result in more thorough, accurate and consistent legitimacy determinations. However, as we discuss below, documentation of the legitimacy determination (i.e., how the hazardous secondary material meets the legitimacy factors) needs only to be available from the effective date of this rule.

EPA continues to believe that the four legitimacy factors we are proposing to codify for all recycling are substantively the same as the existing policy found in previous Federal Register preamble statements and its long-standing policy memo on the subject (i.e., the Lowrance Memo). An analysis that shows how the four factors are derived from and equivalent to the Lowrance Memo and other policy statements is in the 2008 DSW final rule preamble (73 FR 64708–64710). In addition, EPA continues to believe that the vast majority of recycling of hazardous secondary materials in the regulated community is currently legitimate and would already meet all four legitimacy factors.

It is the Agency's belief that it is an advantage for the regulatory agencies to have the regulatory requirements for legitimacy be identical for all recycling processes and to have the

legitimacy provision promulgated in the regulations. Because legitimacy is an inherent concept underlying all of the current recycling exclusions, the legitimate recycling standard already applies to all hazardous secondary materials recycling and hazardous waste recycling, whether such recycling remains under the hazardous waste regulations or is excluded from the definition of solid waste. Therefore, the change being proposed today would result in the details of an existing standard being added to the regulations and thereby being more publicly available.

It has been our long-standing policy and it is well understood throughout the regulated community and the implementing state regulatory agencies that recycling must be legitimate. EPA firmly believes that the legitimacy factors are a simplification and clarification of this existing policy and, as such, the large majority of existing determinations should not change or need to be revisited. We are reiterating today that simply codifying the legitimacy standard is not changing the underlying principles of legitimate recycling that have existed since the basic RCRA DSW structure was put in place in 1985.

We recognize that under some of the existing exclusions, certain conditions may fulfill certain legitimacy factors or considerations, but this is not universally the case for all of the recycling exclusions. Even under the existing exclusions, there remains the possibility of someone claiming an existing recycling exclusion as a means of discarding their hazardous waste. Thus, simply meeting the conditions of an exclusion does not automatically ensure that the recycling is legitimate and codifying the legitimacy factors for all recycling emphasizes this fact. The codified legitimacy factors would apply to all future recycling of hazardous secondary materials as well, unless we establish specific legitimacy conditions for a specific recycling practice that stand in for the more general factors.

EPA is asking for comments on this proposed approach to the legitimate recycling

requirement. EPA is particularly interested in examples of cases where it would not be appropriate for the legitimacy factors to be codified.

2. All Legitimacy Factors Being Mandatory

a. *What structure is EPA proposing for the legitimacy factors?* In this proposed rule, EPA is reconsidering the current legitimacy structure and proposing that all the legitimacy factors be mandatory. EPA is proposing also that a petition process be available if a legitimate recycling process can be shown to be legitimate even though it does not meet one or both of the factors that currently have to be considered.

As stated above, in the 2008 DSW final rule, EPA finalized a structure for legitimacy that included two factors that had to be met and two factors that had to be considered, but not necessarily met. We stated that we thought this approach would be clearer than the guidance for legitimacy being followed at that time, but would still provide some flexibility in those cases where recycling did not meet all the legitimacy factors, but the recycling activity was still legitimate.

In this proposal, EPA is reconsidering its position on this issue and now believes that it would be most appropriate for all legitimacy factors to be mandatory, with a petition process for those cases where the recycling process is legitimate, even though factor 3 or factor 4 or both are not met. EPA is proposing this administrative change in the structure of the legitimacy factors for several reasons. Comments in response to EPA's May 27, 2009, notice of a public meeting and comments provided at that public meeting on June 30, 2009, reiterated that most of the state agencies that would be responsible for implementing the DSW regulations when the state has adopted the program support an approach in which all legitimacy factors are mandatory. EPA also expects that making all of the legitimacy factors mandatory would be less complicated

across the overall RCRA Subtitle C program and would improve both the effectiveness and the protectiveness of the legitimacy provision.

Commenters also argued that the legitimacy provision does not effectively address EPA's expectation that most recycling should meet all four legitimacy factors and leaves too much leeway for potential sham operations. A structure with four mandatory factors and a petition process for an entity that believes that its recycling is legitimate despite not meeting factor 3 or factor 4 or both does convey EPA's belief that these exceptions to the legitimacy factors are rare.

In addition, EPA had believed that the two mandatory factors and two factors to be considered would be protective of human health and the environment because, under the regulations in 40 CFR 260.43, exceptions to all four factors being met would only happen in cases of recycling that was legitimate anyway—that is, cases where either factor 3 or factor 4 were not met would have to have valid reasons for still being legitimate. However, it is not clear that this result will always occur in practice. Continued confusion about how the regulations work and concerns from state agencies that are and will be responsible for the enforcement and implementation of this provision are making EPA revisit its previous decision that this structure would be protective.

Specifically, in the design of the legitimacy provision in the 2008 DSW final rule, EPA did not intend to make it possible for materials going for reclamation to be mismanaged or to allow recycled products that could pose a risk into the market. EPA heard in further comments, however, that states and implementing agencies remained concerned that the structure of the factors would lead to these outcomes. These comments about the protectiveness of the legitimacy structure received from those regulators during actual implementation of the 2008 DSW final rule are one of the main reasons that EPA is rethinking its approach.

EPA continues to believe that the majority of recycling currently taking place would meet all legitimacy factors, but recognizes that there may be instances where recycling may be legitimate, but not meet one or both of the two factors that were labeled "to be considered" in the 2008 DSW final rule. It is critical that the legitimacy regulations be flexible enough to allow for these situations, particularly if the regulations are going to apply to all recycling. Therefore, EPA is proposing a petition process for facilities that believe that their recycling processes are legitimate despite not meeting one or both of these two final factors. EPA's proposal for how this petition process would work is described later in this section.

Comments in response to the May 27, 2009, Federal Register notice also demonstrated that despite EPA's efforts to clarify what it meant by "factors to be considered" and how the Agency thought that structure would work in implementation of legitimacy, many commenters still found the requirement confusing and believed the regulated community as a whole would be confused as well. EPA believes that a structure where all factors must be met with a petition process for any exceptions would be more straightforward than the current two mandatory factors with two factors that have to be considered.

EPA notes that the ultimate determination of legitimacy would be the same under either approach (i.e., whether factors 3 and 4 "must be considered" or "must be met"). Under the current structure requiring the factors be considered, a person making a legitimacy determination regarding a recycling process that does not meet one or both of these factors (i.e., is not being managed as a valuable commodity or has elevated levels of hazardous constituents in the product) would need a strong reason for why the recycling is still legitimate and, in the case of an enforcement action, would be required to demonstrate that reason. Under the proposed restructuring of the factors, under the same scenario, the recycler would be required to

demonstrate legitimacy up front as part of a petition process and receive EPA approval before claiming an exemption. In other words, there would be no substantive distinction between the final legitimacy determination under the two approaches, but the administrative process for making that determination would be different.

One potential concern with the proposed new structure is that it will require all entities making a legitimacy determination to reassess whether they meet all four factors and, if a facility's recycling does not meet factor 3 or factor 4 or both, it would either have to reengineer the process or submit a petition for a legitimacy variance. However, under the revisions being proposed today, all recyclers of hazardous secondary materials would be required to consider the legitimacy of their recycling in order to document that their recycling is legitimate for their files. Therefore, under EPA's proposal, the only burden on top of that requirement would be in the instance where a facility would need to submit a petition of a legitimacy variance.

Finally, in designing the legitimacy factors that apply throughout the RCRA program, particularly in the various parts of the definition of solid waste, EPA is striving for consistency and cohesiveness. EPA's recent Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011) includes legitimacy factors for non-hazardous secondary materials that are burned in combustion units as fuels or used as ingredients. Despite the differences in the circumstances covered by that rule and this proposed rule, the legitimacy concepts are similar. EPA's non-hazardous secondary material rule mandates that all legitimacy factors must be met and in proposing to alter the legitimacy factors for hazardous secondary materials, EPA is proposing to line up these concepts in a consistent manner.

b. *Petition process for legitimacy.* As stated above, EPA believes it is critical that the legitimacy

requirement have flexibility for those situations where a facility is recycling legitimately, but is not meeting factor 3 and/or factor 4. The petition process being proposed would be a mechanism for that flexibility, while also allowing the implementing agency to review the site-specific nature of the recycling practice and ensure that it is legitimate. EPA is seeking comment on the various aspects of this proposed process. EPA believes that the situations that would warrant legitimacy variances are rare, but seeks comment again on specific recycling scenarios that are legitimate yet do not meet either legitimacy factor 3 and/or legitimacy factor 4.

Commenters to the 2007 DSW supplemental proposal suggested the idea of a petition process with four mandatory factors. EPA considered this option for the 2008 DSW final rule, but did not finalize it. However, after determining that an approach to legitimacy with all four factors being mandatory may be most appropriate, EPA is returning to the idea of a petition process to provide the needed flexibility and oversight to legitimacy determinations.

Information to be included in the petition

Of primary interest, the petition would need to include information on the hazardous secondary material being recycled and the recycling process itself in the context of the four legitimacy factors. EPA continues to believe that legitimacy factors 1 and 2—which state that the material being recycled has to provide a useful contribution to the recycling product or process and that the process must produce a valuable product or intermediate—have to be met for recycling to be considered legitimate. A facility would be eligible to submit a petition for a legitimacy variance to its implementing agency under § 260.43(c) if it has met legitimacy factors 1 and 2, but for some reason does not meet either factor 3, the requirement that the hazardous secondary material is managed as a valuable commodity, or factor 4, the requirement that the levels of any contaminants in the product of the recycling process be comparable to or lower than

an analogous product or both.[28]

Thus, the legitimacy variance petition would include a narrative description of how the facility's recycling process addresses each of the four legitimacy factors. For the factor or factors that the process does not meet, the petition would have to explain how the recycling process does not meet the factor(s), but why the recycling should nevertheless be determined to be legitimate. If, for example, the recycling process does not meet factor 3, the petition would include an in-depth description of how the hazardous secondary materials are managed and stored on-site and how analogous raw materials, if there are any, are stored on-site, as well as an explanation for why the storage of the hazardous secondary materials is different yet still indicative of management as a valuable product or intermediate. It may be appropriate to include photos or engineering specifications to illustrate the nature of the material storage. As described below, the Agency is also proposing to modify the language of this factor slightly to allow for situations where the hazardous secondary material is stored in a way that is different from the analogous raw material, but is stored in a manner equally protective. We are proposing that in those situations, a person would not have to petition for a legitimacy variance simply because the storage method was different than how the analogous raw material was stored.

For a recycling process that does not meet factor 4 because the levels of contaminants in the product of the recycling process are not comparable to or lower than the levels in an analogous product, the petition should include a description of the product and its uses and an explanation of why the recycling is legitimate despite the elevated contaminant levels from the hazardous secondary material. This explanation could include considerations such as the lack of plausible exposure pathways to humans and the environment from the product, the

[28] EPA is proposing to amend legitimacy factors 3 and 4 in this proposal. These are discussed below in X.B.3. and X.B.4.

bioavailability of the toxics in the product, or other factors, as appropriate. It may also be appropriate in this section to include relevant product specifications, either from the specific facility or industry-wide, as well as results from any toxicity testing of the product of the recycling process.

In the 2008 DSW final rule, EPA gave the following example of where recycling could still be considered legitimate, even though the contaminant levels could be considered significantly higher than an analogous product. The example of the reuse of lead contaminated foundry sands may or may not be legitimate, depending on the use. The use and reuse of foundry sands for mold making in a facility's sand loop using a non-thermal reclamation process under normal industry practices has been found to be legitimate because the sand is part of an industrial process where there is little chance of the hazardous constituents being released into the environment or causing damage to human health and the environment when it is kept inside, because there is lead throughout the foundry's process, and because there is a clear value to reusing the sand. However, in the case of lead contaminated foundry sand used as children's play sand, the same high levels of lead would disqualify this use from being considered legitimate recycling. In fact, the Agency is considering codifying the determination that the reuse of foundry sands for mold making in a foundry’s sand loop using a non-thermal reclamation process is legitimate recycling and thus, these facilities would not need to submit a legitimacy variance petition since the Agency has already examined the practice and determined it is legitimate recycling. The Agency requests comment on this and on whether there are other similar cases where existing legitimacy determinations should be codified.

In addition, the facility submitting a petition would also be required to include in its petition a detailed description of its process and its hazardous secondary materials, including,

where applicable, material flow charts or diagrams, or other information the implementing agency may request. Because of the case-by-case nature of legitimacy determinations, the implementing agency reviewing the petition will need this detailed information to make an accurate assessment of the legitimacy of the process.

Process for evaluating the petition

EPA is proposing that this petition process be managed by the state agencies where a state implements the RCRA Subtitle C program. In states where EPA implements Subtitle C, the petition process would be run by the appropriate EPA Regional office.

EPA is proposing that in responding to a legitimacy variance petition, the implementing agency would follow the same procedures already in place for variances from solid waste, variances to be classified as a boiler, and for non-waste determinations in § 260.33. After evaluating the petition for a legitimacy variance and, if necessary, visiting the requesting facility, the implementing agency would issue a draft notice tentatively granting or denying the application. Notification of the tentative decision would be provided by newspaper advertisement or radio broadcast in the locality where the recycler is located and be made available on EPA's Web site. The implementing agency would then accept comment on the tentative decision for at least 30 days and may also hold a public hearing. The implementing agency would issue its final decision after receipt of comments and after any public meetings.

Upon receiving a legitimacy variance, EPA is proposing that the facility include this information in the appropriate place of the RCRA Site ID Form (EPA Form 8700-12). EPA is proposing to revise this form to provide a place to check that a legitimacy variance has been received. The variance would not expire as long as the conditions relevant to the legitimacy variance described in the original petition do not change. The facility would be required to

confirm that its process has not changed by re-notifying every two years, also through the RCRA Site ID Form. The facility should keep records of its legitimacy variance as part of its legitimacy documentation.

EPA is seeking comment on the legitimacy petition process as proposed here and how the design of this process would work for both implementing agencies and facilities that may have to submit such a petition. In addition, EPA is seeking information on how many facilities may have to submit legitimacy petitions under this proposed requirement.

3. Proposed New Language for Legitimacy Factor 3 (Managed as a Valuable Commodity)

The 2008 DSW final rule codified four factors as part of the § 260.43 definition of legitimacy, as summarized above. Factor 3 addressed the management of the hazardous secondary materials before it is recycled. Specifically, the regulatory language for this factor reads as follows:

> "The generator and the recycler should manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material should be managed, at a minimum, in a manner consistent with the management of the raw material. Where there is no analogous raw material, the hazardous secondary material should be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded."

In making all legitimacy factors mandatory, the first sentence of the regulatory language would be revised to read as follows: "The generator and the recycler must manage the hazardous secondary material as a valuable commodity." In addition, the Agency is proposing that the language following that sentence be changed to the following to more closely reflect the intent of the provision: "Where there is an analogous raw material, the hazardous secondary material,

must be managed, at a minimum, in a manner consistent with the management of the raw material *or in an equally protective manner*." Thus, a generator or recycler would not have to submit a petition for a legitimacy variance if their hazardous secondary material is stored in a different manner than the analogous raw material, as long as that storage was as protective as the way the analogous raw material was stored. For example, a hazardous secondary material in powder form that is shipped in a woven super sack in good condition (i.e., that does not leak or spill) and stored in an indoor containment area would be considered managed "in an equally protective manner" as an analogous raw material that is shipped and stored in drums.

The entire new proposed paragraph at 40 CFR 260.43(a)(3) would read as follows: "The generator and the recycler must manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material must be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded."

In addition, EPA would like to clarify that managing a hazardous secondary material in a manner consistent with the management of an analogous raw material can include situations where the raw material and the hazardous secondary material (e.g., scrap metal) are both stored on the ground.

EPA requests comment on these changes to the language in factor 3.

4. Proposed New Language for Legitimacy Factor 4 (Comparison of Toxics in the Product)

The 2008 DSW final rule codified four factors as part of the § 260.43 definition of legitimacy, as summarized above. Factor 4 addressed the issue of toxics along for the ride in the

products made from hazardous secondary materials. Specifically, the regulatory language for this factor reads as follows:

> "40 CFR 260.43(c)(2): The product of the recycling process does not (i) contain **significant** concentrations of any hazardous constituents found in Appendix VIII of part 261 that are not found in analogous products; or (ii) contain concentrations of any hazardous constituents found in Appendix VIII of part 261 at levels that are **significantly elevated** from those found in analogous products; or (iii) exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit" (emphasis added).

The agency is proposing to change the wording within the regulatory language of this legitimacy factor from "significant" and "significantly elevated" to "comparable to or lower than" because it more clearly reflects the intent of this factor. The agency believes "comparable to or lower than" means that any contaminants present in the product made from hazardous secondary materials are within a small acceptable range. In making this change, we also are simplifying the regulatory text by combining subparagraphs (i) and (ii) since it is no longer necessary to separate those instances where the hazardous constituents are or are not present in the analogous product. This language is also consistent with the Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011). However, we are not changing the basic meaning of this factor. Operationally, the terms "comparable" and "not significant" or "not significantly elevated" are the same for hazardous secondary materials recycling and the examples the Agency provided in the 2008 DSW final rule preamble that explained how the Agency envisions this factor working are still appropriate. Those examples are repeated here.

For example, if paint made from reclaimed solvent contains significant amounts of cadmium, but the same type of paint made from virgin raw materials does not contain cadmium, it could indicate that the cadmium serves no useful purpose and is being passed though the recycling process and discarded in the product. Thus, the levels of cadmium would not be considered "comparable" and the paint would fail this legitimacy factor.

In a second example, if a lead-bearing hazardous secondary material was reclaimed and then that material was used as an ingredient in making ceramic tiles and the amount of lead in the tiles was significantly higher than the amount of lead found in similar tiles made from virgin raw materials, the recycler should look more closely at the factors to determine the overall legitimacy of the process. The significantly higher levels of lead would indicate that the recycled product is not comparable to an analogous product and, thus, the recycling process is really a sham.

Another example is if zinc galvanizing metal made from hazardous secondary materials that were reclaimed contains 500 parts per million (ppm) of lead, while the same zinc product made from raw materials typically contains 475 ppm. These levels would be considered comparable since they are within a "small acceptable range" and, thus, the product would meet this factor. If, on the other hand, the lead levels in the zinc product made from reclaimed hazardous secondary materials were considerably higher, these levels may not be comparable, and would require the recycler to look more closely at this factor since it may indicate that the product was being used to illegally dispose of the lead and that the activity is sham recycling, unless the recycler submits a petition and receives a determination from the implementing agency that other factors demonstrate otherwise and the recycling activity is determined to be legitimate.

In another example, if a "virgin" solvent contains no detectable amounts of barium, while

spent solvent that has been reclaimed contains a minimal amount of barium (e.g., 1 ppm), this difference would likely be considered comparable.

The new proposed language for 40 CFR 260.43(a)(4) would read as follows: "The product of the recycling process (i) must contain concentrations of any hazardous constituents found in Appendix VIII of part 261 at levels that are comparable to or lower than those found in analogous products or (ii) must not exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit.

EPA requests comment on these changes to the language in factor 4 and specifically, whether any commenters have examples of where this change in language would change the outcome of the legitimacy determination. If EPA were to receive specific information on numerous cases where the product of hazardous secondary material recycling had levels of hazardous constituents that were not comparable to those found in products made from raw materials, but the Agency still considered the recycling to be legitimate, such information would be important in EPA's final decision about whether factor 4 should be mandatory or should remain a factor "to be considered."

In addition, EPA requests comment on whether it would be helpful for the Agency to develop additional guidance on what constitutes "comparable" levels of hazardous constituents for certain products of hazardous secondary materials reclamation. For most types of hazardous secondary materials reclamation, EPA does not believe that additional guidance would be needed. For example, the three most common types of hazardous secondary materials reclamation—solvents recovery, metals recovery, and acid regeneration— are expected to result in recycled products that are easily compared to their non-recycled counterparts. This is because it is EPA's understanding that the products of solvents recovery, metals recovery, and acid

regeneration are generally indistinguishable from products made from raw materials. Users and recyclers of these common industrial materials are very familiar with the formulations of these commercial products and can easily identify whether there are hazardous constituents at elevated levels beyond what is typically found in these products. This could be informed by product specifications, where such specifications are available for the hazardous constituents. However, there may be some types of products from recycled hazardous secondary materials which are less common or more unusual for which guidance might be useful. EPA requests comment on whether such guidance would be useful and, if so, for which specific products made from hazardous secondary materials, and encourages commenters to submit data or identify which sources of data could be used to develop such guidance.

Commenters should also provide views, and related data, on what parameters may be used to characterize "comparable levels" for classes of hazardous secondary materials. EPA requests the data for specific hazardous secondary materials, including identification of the industrial process, industrial sector, and the specific use for the hazardous secondary material.

5. Documentation of Legitimacy

When the Agency codified the legitimacy standard in the 2008 DSW final rule, we did not require specific documentation regarding the legitimacy determination, although the regulatory language stated that persons claiming to be excluded from hazardous waste regulation because they are engaged in reclamation must be able to demonstrate that the recycling is legitimate. Specifically, 40 CFR 260.43 states that any facility claiming an exclusion at § 261.2(a)(2)(ii), § 261.4(a)(23), § 261.4(a)(24), or § 261.4(a)(25) or using a non-waste determination at § 260.30(d) or (e) must be able to demonstrate that its recycling activity is legitimate.

Although there was no specific recordkeeping requirement that went along with the ability to demonstrate legitimacy in the 2008 DSW final rule, EPA stated that we expected that in the event of an inspection or an enforcement action by an implementing agency, the recycler would be able to show how it made the overall legitimacy determination per § 261.2(f). Section 261.2(f) requires persons claiming that materials are not solid waste or are conditionally exempt from RCRA Subtitle C regulation to provide appropriate documentation of these claims. Under the 2008 DSW final rule, when a recycling process does not conform to one or both of the two non-mandatory factors under § 260.43(c), the Agency would expect the facility to show that it considered the factor(s) and why the recycling activity overall remains legitimate. Although § 261.2(f) will still apply in enforcement actions, we have since decided that it would be most useful to implementing agencies if the information documenting a recycling activity as legitimate was assembled in advance and available at all times.

After implementing the DSW exclusions in several states since its promulgation in 2008, we have determined that documentation of legitimacy is an important step in ensuring compliance with this provision and will make oversight and enforcement more effective. We are therefore proposing today to require that persons who perform the recycling include documentation in their paperwork to explain how their hazardous secondary materials are legitimately recycled. We generally expect that this documentation would be a narrative description, which could include photographs or other illustrations of how the recycling of their hazardous secondary materials meets all four factors of legitimate recycling. All recyclers of hazardous secondary materials would need to maintain this documentation on site where the recycling occurs for the duration of the recycling operations and for three years after the recycling operations cease. If the recycling occurs on-site at a generator's facility rather than at

the recycler's facility, then the documentation would be maintained at the generator's facility.

Written documentation would provide an easily-available explanation of the facility's rationale for the legitimacy of its process that is available to the implementing agency on regular inspections or as part of compliance assistance. In addition, generators sending materials to third-party recyclers could also ask for a copy of the recycler's legitimacy documentation to ensure that their materials are going to legitimate recycling.

This provision would require that persons claiming that their recycling activity is legitimate have the burden to provide written documentation showing how the hazardous secondary materials provide a useful contribution to the recycling process, how the product of the recycling activity—whether it is a product or process intermediate—is valuable, how the generator or the recycler manages the hazardous secondary materials as a valuable commodity, and how the levels of any hazardous constituents in the product made from hazardous secondary materials are comparable to or lower than those in analogous products made from virgin materials. If the hazardous secondary material recycler determines that one or both of the latter two factors were not met, it would need to produce documentation that it has petitioned the implementing agency for a legitimacy variance, as described above, and received a determination that the recycling was indeed legitimate, even though one or both of those factors were not met.

The Agency is not proposing any specific format for the documentation of legitimacy; however, we expect that the recycler would have written documentation describing the recycling process and how it meets each legitimacy factor. For example:

- Useful contribution legitimacy factor—the recycler would document how the hazardous secondary materials provide a useful contribution to the recycling process or to the product or intermediate of the recycling process. The regulatory

text for this factor provides five specific ways in which useful contribution can be achieved. The recycler would need to document how the hazardous secondary materials add value and/or are useful to the recycling process in one or more of these ways: (i) contributing valuable ingredients to a product or intermediate; (ii) replacing a catalyst or carrier in the recycling process; (iii) providing a valuable constituent to be recovered; (iv) being regenerated; or (v) being used as an effective substitute for a commercial product. For example, if the hazardous secondary material is a source of a valuable constituent, such as a precious metal, the document would explain the specific precious metals recovered and their value to the process.

- Valuable product or intermediate legitimacy factor—the recycler would explain how the product or intermediate made from hazardous secondary material is valuable, either in a monetary sense or through its intrinsic value. If the product made from hazardous secondary material is sold, the documentation of sale could be proof of the value of the material to a third party. Such documentation could be in the form of a selection of receipts or contracts and agreements that establish the terms of the sale or transaction. A recycler that has not yet arranged for the sale also could demonstrate value by showing that the product or intermediate can replace another product or intermediate that is available in the marketplace. Demonstrating intrinsic value may be less straightforward than demonstrating the value of products that are sold in the marketplace, but could involve an explanation of the industrial process that shows how the product of the recycling process or intermediate replaces an alternative product that would otherwise have

to be purchased.

- Managed as a valuable commodity legitimacy factor—the recycler would include a description of how the hazardous secondary material is managed and explain how this management is similar or provides equivalent protection to the management of an analogous raw material. That is, the documentation would describe how the hazardous secondary material is stored and handled prior to being inserted into the recycling process. Where there is no analogous raw material, the recycler would explain how the management of the hazardous secondary material ensures that the material is contained as proposed in 40 CFR 260.10.
- Comparison of toxics in the product legitimacy factor— the recycler would include any data or information that shows that the levels of hazardous constituents in the product are comparable to or lower than those found in analogous products. For example, if a recycling process produced paint, the levels of hazardous constituents in the paint would be compared to the levels of the same constituents found in a similar paint made from virgin raw materials. This comparison would be included in the documentation of this legitimacy determination. A recycler is also allowed to perform this evaluation by comparing the hazardous constituents in the hazardous secondary material feedstock with those in an analogous raw material feedstock. This may be easier in cases where the recycler knows that the hazardous secondary material is very similar in profile to the raw material. It may also be preferable in cases where the recycler creates an intermediate which is later processed again and may end up in two or more

products, where there is no analogous product or when production of the product of the recycling process has not yet begun.

As discussed above, the Agency is also proposing that the legitimacy standard be codified for all hazardous secondary material recycling, not only for the specific DSW exclusions promulgated in the 2008 DSW final rule. As part of ensuring that all hazardous secondary material recycling is legitimate, we are proposing that recyclers under these other exclusions and those recycling under the Subtitle C hazardous waste regulations (which often are subject to reduced regulatory requirements) also maintain documentation in their files of why their recycling is legitimate. This proposed administrative requirement would apply to all recycling that is ongoing after the effective date of the final rule adopting this requirement. We are interested in receiving public comment on this issue.

As far as how documentation would work for existing exclusions, as we noted in the 2003 DSW proposal, EPA has already examined in depth a number of waste-specific and industry-specific recycling activities and has promulgated specific regulatory exclusions or provisions that address the legitimacy of these practices in much more specific terms than the general factors that were finalized as part of the 2008 DSW exclusions and non-waste determination process. One example is the regulation for zinc fertilizers made from recycled hazardous secondary materials. In the zinc fertilizer regulation, among the requirements established by EPA are specific numerical limits on five heavy metal contaminants and dioxins in the zinc fertilizer product exclusion at 40 CFR 261.4(a)(21). We believe that data showing the zinc fertilizer product meets those numerical limits would be sufficient for documenting that the product meets legitimacy factor 4 (comparison of toxics in the product) for these contaminants. As noted earlier, if fertilizer made from hazardous secondary materials contains other hazardous

constituents that do not have specific numerical limits in 40 CFR 261.4(a)(21), then the generator or recycler would need to compare the levels of those hazardous constituents with those in an analogous fertilizer product not made from hazardous secondary materials. Other examples of existing exclusions where EPA has established specific conditions that are related to their legitimacy determinations are shredded circuit boards excluded under 40 CFR 261.4(a)(14), which must be free of mercury switches, mercury relays, and nickel-cadmium and lithium batteries, and comparable fuels excluded under 40 CFR 261.4(a)(16), which must meet specific levels for hazardous constituents (thus, meeting legitimacy factor 4).

The conditions developed for the recycling exclusions in § 261.4(a) were found to be necessary under material-specific rulemakings that determined when the particular hazardous secondary materials in question are not solid wastes. When EPA originally made the decision that these hazardous secondary materials are not solid waste, the Agency took into account the relevant factors about the hazardous secondary materials, including how the materials were managed and what toxic chemicals were present.

Thus, for those specific exclusions in § 261.4(a) that have conditions that relate directly to legitimacy, documentation that shows that the recycling facility meets those conditions would be what is necessary to show that the recycling of such material is meeting those specific legitimacy factors. However, a recycling facility would also have to include a description of how it meets the other legitimacy factors that may not be reflected in the waste-specific conditions of the exclusion, in its legitimacy documentation.

EPA is requesting comment on the requirement for documentation of legitimacy from facilities performing the recycling, for both the 2008 DSW exclusions and for the existing recycling exclusions. In particular, EPA is requesting comment on whether the proposed

documentation requirement is necessary for implementation and enforcement of the legitimacy provision.

XI. Revisions to Solid Waste Variances and Non-Waste Determinations

The Agency is also proposing today to modify the existing regulation of solid waste variances at 40 CFR 260.31(c), 40 CFR 260.33 and 40 CFR 260.34 to foster greater consistency on the part of implementing agencies and help ensure the protectiveness of the implementation of the solid waste variances and non-waste determinations. Specifically, EPA is proposing to do the following:

1. Revise 40 CFR 260.33(c) to require facilities to re-apply for a variance in the event of a change in circumstances that affects how a material meets the criteria upon which a solid waste variance has been based;
2. Add a provision at 40 CFR 260.33(d) stating that facilities receiving a variance or non-waste determination must provide notification as required by § 260.42 of this chapter;
3. Revise the criteria for the partial reclamation variance in 40 CFR 260.31(c) to more clearly explain when the variance applies and to require, among other things, that the criteria for this variance must be reviewed and evaluated collectively, since each criterion reinforces and supports other criterion;
4. Revise the criteria for the non-waste determination in 40 CFR 260.34 to require that petitioners explain or demonstrate why their hazardous secondary materials cannot meet, or should not have to meet, the existing DSW exclusions under §§ 261.2 or 261.4; and
5. Designate the Regional Administrator as the EPA recipient of petitions for variance and non-waste determinations.

Finally, EPA is requesting comment on other possible steps to help ensure national consistency and protectiveness in the implementation of variances and non-waste determinations.

In response to the May 27, 2009, Federal Register notice announcing the DSW public meeting, commenters identified issues with the implementation of the non-waste determination process, arguing that (1) determinations can lead to inconsistency among states and may negatively impact economies for states that are more stringent in their determinations; (2) determinations may require a large amount of state resources to review and process; and, (3) determinations that are indefinitely approved may not receive the proper level of oversight required to ensure that legitimate and safe reclamation is occurring.[29]

While these comments were focused on the non-waste determination petition process in the 2008 DSW final rule (which was the focus of the public meeting), they can apply equally to the solid waste variances as well, since the procedures in 40 CFR 260.33 are intended to apply to both. Thus, EPA is proposing to make changes that affect both the solid waste variances and the non-waste determinations.

A. Proposed Revisions to Procedures for Variances and Non-Waste Determinations Found in 40 CFR 260.33

Under the current regulatory framework, 40 CFR 260.30 provides the Administrator with the authority to grant a variance from the definition of solid waste or a non-waste determination on a case-by-case basis if materials are recycled in a particular manner. The practical effect of both the solid waste variances and the non-waste determinations is the same; once a petition is granted by EPA or the authorized state, the hazardous secondary material is not regulated as a solid or hazardous waste. The procedures for these variances and non-waste determinations are

[29] EPA stated in the public meeting notice that we did not expect to repeal the non-waste determination process and thus we did not explicitly ask for comment on the provision in the notice. However, in some cases, commenters did address this provision.

found in 40 CFR 260.33.

In today's proposed rule, EPA is proposing two changes to 40 CFR 260.33. First, EPA is proposing to make all variances subject to the provision in 40 CFR 260.33(c) that would require an applicant to re-apply for a variance in the event that the material no longer meets the relevant criteria. Second, EPA is proposing to make all variances and non-waste determinations subject to the biennial notification requirements in 40 CFR 260.42.

1. Requirement that an Applicant Re-apply in the Event the Material No Longer Meets the Relevant Criteria

The 2008 DSW final rule noted that once a non-waste determination has been granted, the applicant is obligated to ensure the hazardous secondary material continues to meet the criteria of the non-waste determination, including any conditions specified therein by the regulatory authority. If a change occurs that affects how the hazardous secondary materials meet the relevant criteria and (if applicable) any conditions as specified by the regulatory authority and the applicant fails to re-apply to the Administrator for a formal determination, the hazardous secondary materials may be determined to be solid and hazardous waste and subject to the RCRA Subtitle C hazardous waste requirements (73 FR 64712–13, October 30, 2008). This requirement was codified at 40 CFR 260.33(c).

The requirement that the hazardous secondary materials determined to not be a solid waste must continue to meet the relevant criteria of a solid waste variance or non-waste determination is inherent in the regulations. Failure to meet the criteria could indicate that the hazardous secondary materials are discarded and a solid waste and would trigger the need to re-examine the circumstances of the recycling. The 2008 DSW final rule codified this requirement in order to enhance clarity and assist in its implementation, but only focused on the non-waste

determination provisions because that was the scope of that rule.

EPA is now proposing to explicitly apply 40 CFR 260.33(c) to all the solid waste variances, as well as the non-waste determination provisions listed in 40 CFR 260.30 to ensure that if there are changes that may impact how hazardous secondary materials meet the relevant criteria, that such changes be considered by the regulatory authority to ensure that those criteria continue to be met. Codifying this requirement would help ensure clarity and consistency by providing an administrative procedure for reconsidering a variance in the event that the hazardous secondary material no longer meets the relative criteria for the variance.

2. Proposed Re-notification Requirement

The second proposed change to 40 CFR 260.33 is to require facilities receiving variances or non-waste determinations to re-notify EPA or the State Director, if the state is authorized for this aspect of the rule, every two years by March 1 of each even-numbered year and to notify within 30 days of stopping management of hazardous secondary materials under the variance or non-waste determination using EPA Form 8700-12 in compliance with 40 CFR 260.42. The current process cannot track variances or non-waste determinations at a national level and over time. This lack of tracking can lead to state-to-state inconsistency in determinations because one state cannot easily access information regarding similar determinations made by another state. Two commenters expressed specific concern over this inconsistency, arguing that variations in stringency can drive jobs out of more-stringent states and into less-stringent states. These commenters argued that more detailed or restrictive criteria and EPA oversight are necessary to ensure that non-waste determinations are issued consistently across states. One of the commenters also recommended increasing transparency by making the non-waste determinations available online. Additionally, lack of tracking inhibits effective oversight of facilities receiving

variances and non-waste determinations because it does not provide regulatory authorities with a mechanism for receiving updated information.

Amending the procedures for variances and non-waste determinations to require re-notification ensures that regulatory authorities are provided regularly updated information (such as information regarding quantities of hazardous secondary materials managed under the determination). Such updating enables better compliance with the criteria and with any stipulations of the variance or non-waste determination. Additionally, this information can be used to identify facilities which may have undergone changes to their reclamation process significant enough to trigger a review of the determination under 40 CFR 260.33(c).

This proposed change is also based on EPA's experience with the § 260.42 notification requirement. Since the 2008 DSW final rule became effective on December 29, 2008, EPA has received a number of notifications from facilities managing hazardous secondary materials under the generator-controlled and transfer-based exclusion and has judged the notification provision to have worked well in enabling regulatory authorities to monitor compliance of the facilities with the conditions of the exclusions. Regulatory authorities receive information on the name and location of the facilities operating under the exclusion and the types and quantities of hazardous secondary materials the facility is managing, which allows the regulatory authority to prioritize inspections, as well as create a list of facilities that would benefit from training and compliance assistance on the rule.

Additionally, notification has allowed regulatory authorities to follow up with facilities that appear to have misunderstood the regulations. For example, notification allows regulatory authorities to contact facilities that notified that they were operating under the exclusions but were, in fact, residing in a state that had not adopted the 2008 DSW final rule. Notification in

these instances allowed regulatory authorities to identify problems and to intervene early to prevent potential mismanagement. Based on experience with receiving notifications under the 2008 DSW final rule, EPA is convinced of the value of the notification provision in ensuring proper implementation of its rules and believes that such notification for variances and non-waste determinations would increase the transparency and oversight of facilities receiving a variance or non-waste determination.

In addition to re-notification, EPA also plans to increase the transparency of the variance and non-waste determination petition processes by providing online access to a list of facilities receiving variances and non-waste determinations, including any supporting documentation upon which a determination has been made. Ideally, this website would function as a clearinghouse of information so that the states could use each other's determinations to inform determinations within their own state borders. EPA believes this sharing of information would increase consistency in determinations across states. EPA plans to work with states to develop a process for collecting information regarding non-waste determinations so that EPA can include these facilities in its online database.

B. Proposed Revisions to Partial Reclamation Variance

The "partial reclamation" variance at 40 CFR 260.30(c) applies to materials that have been reclaimed, but must be reclaimed further before the materials are completely recovered (i.e., "partial reclamation"). In turn, 40 CFR 260.31(c) provides the specific standards that a material must meet in order to be eligible for a variance from classification as a solid waste.

Today, the Agency is proposing to revise the partial reclamation variance provision of 40 CFR 260.31(c) to clarify when partially-reclaimed materials are not solid waste because they are commodity-like. The objectives of these proposed revisions are to clarify the regulatory

language, foster consistent application of the variance criteria, and make clear that the variance should be granted only when partial reclamation has produced a commodity-like material. EPA's proposed modifications of 40 CFR 260.31(c) include (1) revising the introductory text to clarify when the variance applies; (2) revising the introductory text to require that all of the decision criteria must be met; (3) revising the language of all of the decision criteria; and (4) eliminating the sixth criterion "other relevant factors."

1. The Current Partial Reclamation Variance Provision

Under the current regulations, 40 CFR 260.30, 260.31, and 260.33 together provide variance mechanisms for three types of recycled materials which the Regional Administrator (or State Director, in an authorized state) may determine, on a case-by-case basis, are not solid waste if they meet specified criteria. One of the variances, found in 40 CFR 260.30(c), with associated criteria at 40 CFR 260.31(c), addresses materials that have been partially reclaimed but must be reclaimed further before the materials are completely recovered. Under current 40 CFR 260.31(c), the Regional Administrator may grant a request for a variance for such materials if, after initial reclamation, the resulting material is commodity-like. The determination that a partially reclaimed material is commodity-like is made using the following six factors:

(1) The degree of processing the material has undergone and the degree of further processing that is required;

(2) The value of the material after it has been reclaimed;

(3) The degree to which the reclaimed material is like an analogous raw material;

(4) The extent to which an end market for the reclaimed material is guaranteed;

(5) The extent to which the reclaimed material is handled to minimize loss; and

(6) Other relevant factors.

In the preamble to the 1985 Definition of Solid Waste final rule (January 4, 1985; 50 FR 655) where this provision was promulgated, EPA stated that "the Regional Administrator may weigh these factors as she sees fit, and may rely on any or all of them to reach a decision."

2. The Intent of the Partial Reclamation Variance

When the partial reclamation variance provision was promulgated in 1985, EPA's intent was to provide a mechanism for determining that a hazardous waste had undergone sufficient reclamation (a type of processing) to produce a material that was more like a commodity than a solid waste. The variance would be applicable if the material was commodity-like, even though some further reclamation was required before the material became a commercial product. EPA intended that the variance would be applied at the point that the commodity-like material was produced. After that point, the material would be managed as a commodity rather than as a solid and hazardous waste. Prior to the point that partial reclamation produced a commodity-like material, the material would have to be managed as a hazardous waste.

The following discussion illustrates how the Agency intended the variance to work for a typical treatment system involving three parties: (1) a generator of hazardous waste; (2) a partial reclamation facility that receives, stores, and partially reclaims the hazardous waste to produce a commodity-like material; and (3) a final reclaimer, or end market, that receives the commodity-like material and uses it as a substitute for products or intermediates in production processes that involve further reclamation.

First, the generator would manage and ship the hazardous waste following all of the applicable hazardous waste regulations, including waste quantity determinations, accumulation time limits, generator accumulation technical requirements, and hazardous waste manifest procedures for shipping. Second, the partial reclamation facility would receive the hazardous

waste under a hazardous waste manifest. The facility would also have a RCRA permit for management of the hazardous waste until the point that the partial reclamation process had produced a commodity-like material.

Once the partial reclamation process had produced a commodity-like material, a partial reclamation variance from classification as solid waste could be granted. Accordingly, management of the commodity-like material after that point would not be covered by the partial reclamation facility's RCRA permit. In addition, the partial reclamation facility would not be required to use a manifest to ship the commodity-like material to the final reclaimer.

Finally, the final reclaimer would receive the commodity-like material from the partial reclaimer without a manifest. The final reclaimer would not require a RCRA permit for management of the commodity-like material because the material is not a solid and hazardous waste.

The preceding discussion illustrates how the variance would apply to a typical three-facility, three-step process. However, the critical point is not how many steps or facilities are involved, but at what point the partial reclamation process has produced a commodity-like material as defined by the criteria in 40 CFR 260.31(c). Depending on the materials and processes in question, this point could occur at varying steps in the management of a hazardous waste, at varying facilities where it is managed.

3. Experience With the Current Partial Reclamation Variance Provision

EPA has become aware that authorized states across the country have interpreted and applied the variance provision inconsistently, even in similar circumstances. This inconsistency may be due to (1) the wide discretion allowed the regulatory authority to weigh any or all of the decision criteria in any way it sees fit; (2) lack of clarity in the decision criteria themselves; or

(3) the general sixth criterion "other relevant factors."

This inconsistency has resulted in variances being granted under 40 CFR 260.31(c) for some materials that are not yet commodity-like and that are still clearly hazardous waste. Therefore, EPA is proposing revisions to the variance criteria to address the inconsistency among authorized states, remove ambiguities, and clearly convey the original intent that only hazardous wastes that have been partially reclaimed to produce commodity-like materials are eligible for a variance from classification as solid waste. Consistent and appropriate application of the partial reclamation variance is necessary so that the hazardous waste program provides the level of protection of human health and the environment required by the RCRA statute in all communities in all areas of the country.

An illustration of how the revised variance provision would be applied to a commonly reclaimed hazardous waste example is included in the Background Document "F006 Reclamation." This document includes a detailed description of how the proposed revised variance provision would be used to make determinations about whether a variance would be appropriate for listed hazardous waste F006 (wastewater treatment sludges from electroplating operations) at various steps in the reclamation process.

4. Proposed Revisions to Clarify and Improve the Partial Reclamation Variance Provision

As stated above, EPA is proposing several revisions to 40 CFR 260.31(c). Each of the proposed revisions is discussed below.

a. Revision to clarify the introductory text of 40 CFR 260.31(c). EPA is proposing to revise the introductory text of 40 CFR 260.31(c) to clarify when a partial reclamation variance is applicable. The proposed revised text reads as follows:

(c) The Regional Administrator may grant requests for a variance from

> classifying as a solid waste those materials that have been partially reclaimed but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. To qualify for a variance the material must be legitimately recycled as specified in 40 CFR 260.43, must be partially-reclaimed as determined by meeting criterion 1 below, and must be commodity-like as determined by meeting criteria 2–5 below:

The revised text is intended to clarify that the variance is applicable at the point that partial reclamation has produced a commodity-like material. The revised text includes the phrase "has produced a commodity-like material" and "must be commodity-like." These changes clarify and reflect EPA's intent that the variance applies only after partial reclamation has produced a commodity-like material. The variance does not apply earlier in a process when a hazardous waste is still present. While not a new regulatory requirement, the proposed change also highlights that the commodity-like material must be legitimately recycled. The revised introductory text also replaces the term "reclaimed" with "partially reclaimed" to be more specific about when a variance would be applicable (i.e., after partial reclamation has produced a commodity-like material, rather than after full reclamation). Finally, the revised text clarifies that the first criterion is to be used to determine whether partial reclamation has occurred and the remaining criteria are to be used to determine whether a partially-reclaimed material is commodity-like.

EPA requests comment on whether the proposed revisions to the introductory text clarify the variance provision effectively and whether they will result in appropriate and consistent decisions about whether and when to grant a variance.

b. Revision to the introductory text of 40 CFR 260.31(c) to require that all criteria are met.

When the partial reclamation variance provision was originally promulgated in 1985, EPA stated that the Regional Administrator or authorized State Director could weigh the decision criteria "as she sees fit, and may rely on any or all of them to reach a decision." Based on experience with the variance provision, EPA is proposing to change the introductory text of 40 CFR 260.31(c) to require that all criteria must be satisfied before a variance is granted. EPA is proposing this change for several reasons. First, criterion 1 emphasizes that the material must have been substantially partially reclaimed to be eligible for a variance. (This is discussed further in the next section below.) Second, we believe that each of the proposed revised criteria numbers 2, 3, 4, and 5 appropriately reflects a fundamental and essential characteristic of a commodity-like material. Therefore, all criteria must be met for the material to be determined to be commodity-like. In addition, clarifying that all of the criteria must be met will result in more consistent application of the variance by different decision makers.

EPA requests comment on whether (1) the revised introductory text is more clear, (2) the revised criteria appropriately reflect the fundamental characteristics of a commodity-like material; and (3) requiring that all criteria must be met to grant a variance will foster appropriate and consistent variance decisions.

c. Revisions to all criteria of 40 CFR 260.31(c). EPA is proposing revisions to all of the criteria in 40 CFR 260.31(c). First, all of the criteria have been revised to begin with the word "whether" to make it clear that the regulatory authority must make a yes or no determination as to whether the material meets each criterion. In addition, all of the criteria have been revised to be clearer and to better reflect the fundamental characteristics of a commodity-like material. The proposed changes to each criterion are discussed below.

<u>1. The degree of processing the material has undergone and the degree of further processing that</u>

is required.

EPA is proposing to revise this criterion to read as follows:

(1) Whether the degree of partial reclamation the material has undergone is substantial.

This criterion examines the degree of reclamation the material has undergone to become commodity-like. The more substantial the partial reclamation step is, the more likely it is that the material generated by the partial reclamation step is commodity-like.

First, EPA is proposing to replace the general term "processing" with the more specific and accurate term "partial reclamation." Second, EPA is proposing to remove from the criterion the concept that the initial partial reclamation step that makes a material commodity-like should be compared to the further reclamation that occurs after the material has become commodity-like. Experience with the variance has clarified that the relevant question is whether the partial reclamation that has been completed is substantial and that the material produced is not the original hazardous waste. If the material has been substantially partially reclaimed, it then can be evaluated to determine whether it is commodity-like using the remaining criteria. The degree of reclamation that occurs in the final reclamation step is not indicative of whether the partially-reclaimed material is commodity-like. This criterion would be satisfied when the partial reclamation is substantial and has produced a material that is no longer the original hazardous waste.

EPA requests comment on whether the proposed revisions to this criterion clarify when a variance is applicable. EPA also requests comment on the appropriateness of removing the requirement to compare the degree of partial reclamation to the degree of final reclamation.

2. The value of the material after it has been reclaimed.

EPA is proposing to revise this criterion to read as follows:

(2) Whether the partially-reclaimed material has sufficient economic value that it will be purchased for final reclamation.

This criterion examines the first of four fundamental characteristics that indicates that a partially-reclaimed material is commodity-like, the value of the material produced by the partial reclamation step.

EPA is proposing to add the word "partially-" before the word "reclaimed" to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process. EPA is also proposing to revise this criterion to reflect the fundamental characteristic that a commodity-like material has positive economic value. A partially-reclaimed material that is commodity-like will be purchased by those who use it in manufacturing and production operations. EPA notes that the value of a material produced at a later stage of reclamation cannot be used to justify a variance for the partially-reclaimed material produced earlier in the process. In other words, the criterion must be applied to the material as it is at the specific point in the reclamation process where application of the variance is requested.

Evidence to support this criterion may include sales information; demand for the material; and business contracts (e.g., contracts specifying quantities of material sold, details of the transaction, and the effective price paid for the partially reclaimed material by purchasers (i.e., after subtracting transportation costs and any other goods or services rendered in exchange for the material purchased)).

EPA requests comment on whether the proposed revisions clarify the criterion and appropriately describe the fundamental economic value characteristic of a commodity-like material.

<u>3. The degree to which the reclaimed material is like an analogous raw material.</u>

EPA is proposing to revise this criterion to read as follows:

(3) Whether the partially-reclaimed material is a viable substitute for a product or intermediate, produced from virgin or raw materials, which feeds subsequent production steps.

This criterion reflects the second of four fundamental characteristics of a commodity-like material that must go through further reclamation before it becomes a final commercial product. In short, the material must be sufficiently analogous to a product or intermediate used in a manufacturing process to substitute for that product or intermediate.

First, as with other criteria, EPA is proposing to add the word "partially-" before the word "reclaimed" to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process. Second, EPA is proposing to replace the phrase "is like an analogous raw material" with the phrase "is a viable substitute for a product or intermediate, produced from virgin or raw materials, which feeds subsequent production steps." This revision is intended to more accurately describe the fundamental characteristic of a commodity-like material used in production, which is that it will be used as a viable substitute for a product or intermediate. A partially-reclaimed material would meet this criterion if it is analogous to, or, in other words, would replace, valuable products or intermediates in the manufacturing process that have been produced (i.e., partially reclaimed) from raw materials but require further processing (reclamation) steps before the manufacturing process is complete. Evidence to support this criterion would include a comparison of the physical and chemical characteristics of the partially-reclaimed material being considered for the variance to those of products or intermediates produced from virgin raw materials.

EPA requests comment on whether the proposed revisions clarify the criterion and appropriately describe the fundamental characteristic of a commodity-like material related to

substituting for a product or raw material in a production process.

4. The extent to which an end market for the reclaimed material is guaranteed.

EPA is proposing to revise this criterion to read as follows:

(4) Whether there is a guaranteed end market for the partially-reclaimed material.

This criterion addresses the third of four fundamental characteristics of a commodity-like material, whether there is an end market for the partially-reclaimed material. As with other criteria, EPA is proposing to add the word "partially-" before the word "reclaimed" to clarify that the criterion applies to the partially-reclaimed material for which the variance is sought. An end market for further reclaimed material produced at a later stage of reclamation cannot be used to justify a variance for a partially-reclaimed material. EPA requests comment on whether this proposed revision clarifies the criterion effectively.

In addition, although EPA is not proposing any other substantive changes to the criterion, based on experience with the variance provision, EPA believes that further explanation of this criterion is necessary. The criterion requires an evaluation of whether an end market is guaranteed for the material for which a variance is requested. For example, if a facility requests a variance for an incoming hazardous waste, the end market that would have to be evaluated is the market for the incoming hazardous waste itself. A demonstrated end market for materials the facility produces later from the incoming hazardous waste would not be relevant to the analysis for the incoming waste.

For an end market for a partially-reclaimed material to be guaranteed, there must be secure demand and long-term markets for the material. This would make it unlikely that large quantities of the material will be stockpiled for long periods of time, lost, or mismanaged due to insufficient demand. Assessing whether an end market is guaranteed for the partially-reclaimed

material requires that the applicant for the variance provide end market information for the material generated by the partial reclamation step. Evidence to support this criterion may include the material's value as an input to a production process, traditional usage of quantities of the material, contractual arrangements for use of the material, and the likely stability of markets for the material. Furthermore, the end market must be demonstrated by a record of multiple actual purchases of the partially-reclaimed material by other parties. Further reclamation that can only be conducted by the facility seeking the variance is not proof of an end market.

5. The extent to which the reclaimed material is handled to minimize loss.

EPA is proposing to revise this criterion to read as follows:

(5) Whether the partially-reclaimed material is handled to minimize loss.

This criterion addresses the fourth of four fundamental characteristics of a commodity-like material, whether the partially-reclaimed material is handled to minimize loss, or in other words, is handled similarly to a commodity. As with other criteria, EPA is proposing to add the word "partially-" before the word "reclaimed" to clarify that the criterion applies to the partially-reclaimed material for which the variance is sought. Management of materials produced at later stages of reclamation is not relevant to how the partially-reclaimed material itself is handled. EPA requests comment on whether this proposed revision clarifies the criterion effectively.

In addition, EPA's experience with the variance provision indicates that further explanation of this criterion is necessary. Specifically, this criterion requires evaluation of how the partially-reclaimed material is handled before it is further reclaimed. Handling a partially-reclaimed material to minimize loss indicates that the material is commodity-like. Generally, persons handling hazardous waste with little or no economic value do not have the same incentives to minimize loss as persons handling commodities. Evidence to support this criterion

may include documentation of facility procedures used to minimize loss (e.g., inspections, training), and storage and management equipment designed to minimize loss.

6. Revision to eliminate criterion six.

Finally, EPA is proposing to eliminate the sixth and final criterion, "(6) other relevant factors." When the partial reclamation variance was promulgated in 1985, EPA believed that this criterion could help determine whether a material is commodity-like. However, based on experience with the variance provision, EPA now believes that criteria numbers 2, 3, 4, and 5 (as proposed to be revised) together accurately and fully reflect the fundamental substantive characteristics of a commodity-like material for the situation where a material has been partially reclaimed but must go on for further reclamation before it is a final commercial product. We have not seen other essential characteristics of this type of commodity-like material identified in variances or applications. Thus, we are proposing to eliminate this criterion. We also believe that removing this general criterion will result in more consistent and appropriate decision-making for partial reclamation variances.

EPA requests comment on removing the sixth criterion and whether there are any additional characteristics that should be evaluated to assess whether a material is commodity-like. EPA also requests comment on whether one or more of the five remaining criteria should be consolidated.

C. Proposed Change to Non-Waste Determinations

EPA is also proposing to add a criterion to both non-waste determinations that require facilities applying for a non-waste determination to explain or demonstrate why they cannot meet, or should not have to meet, the existing DSW exclusions under §§ 261.2 or 261.4.[30]

[30] The two types of non-waste determinations are (1) a determination for hazardous secondary materials reclaimed in a continuous industrial process and (2) a determination for hazardous secondary materials that are indistinguishable

Because commenters to the 2009 DSW public meeting notice have argued that the non-waste determinations may be burdensome to states, EPA believes requiring applicants to formally consider and explain why they are not eligible for an existing DSW exclusion will reduce the burden on states. This criterion reduces burden on states in two ways: (1) it requires facilities to consider existing exclusions and standards first, before pursuing a non-waste determination, which can, in turn, lead to facilities discovering that their intended recycling fits under an existing exclusion and therefore a non-waste determination petition is not needed; and (2) this criterion informs the state why a facility believes it cannot meet an existing exclusion, which is likely to be the state's first question before evaluating a non-waste determination petition. Petitioners also would be allowed to seek non-waste determinations if they could show that they should not have to meet the conditions of another exclusion, but rather should be allowed to operate under a non-waste determination with fewer or different conditions. However, if EPA or the authorized state determines that an applicant may, in fact, use an existing solid waste exclusion under §§ 261.2 or 261.4, this may be grounds for denying a non-waste determination on the basis that regulatory relief has already been granted.

D. Designating the Regional Administrator to Receive Petitions

Lastly, we are proposing to change the word "Administrator" to "Regional Administrator" in 40 CFR 260.30, 260.31, 260.32, 260.33, and 260.34. Due to the case-specific nature of the variances and non-waste determinations, we believe these decisions should be made by the Regional Administrator because of his or her regional authority. We also note that although we propose to assign the decision-making authority to the Regional Administrator, it is common practice within EPA to work with other EPA offices, EPA Regions, EPA Headquarters on decisions that may affect national policy.

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in all relevant aspects from a product or intermediate.

E. Request For Comment On Other Possible Steps To Help Ensure National Consistency And Protectiveness In The Implementation Of Variances And Non-Waste Determinations

EPA is also requesting comment on other possible steps to help ensure national consistency and protectiveness in the implementation of variances and non-waste determinations.

First, EPA is requesting comment on whether to require variances and non-waste determinations to be renewed periodically, and, if so, what time period would be appropriate (e.g., two or five years). A renewal period would help ensures the hazardous secondary materials continue to meet the criteria and remain valid over time. To a certain extent, this concern would be addressed by the proposed revision to 40 CFR 260.33(c), which would require applicants to re-apply for a variance or non-waste determination in the event of a change in circumstances that affect how hazardous secondary materials meet the relevant criteria, and by the proposed biennial re-notification, which would require the applicant to review the management of their hazardous secondary materials. However, the proposed revision to 40 CFR 260.33(c) still relies on the applicant to recognize when there is a need to reconsider a variance and take action, while a specific renewal period would mandate a reconsideration. On the other hand, mandating a renewal period would be an additional burden to the states, and may not be necessary in all situations. Additionally, regulators could always stipulate time limits in specific determinations, if warranted. EPA requests comment on whether to require a renewal period and, if so, how to minimize the burden on the states.

The second possible change EPA is requesting comment on is whether to require states to share copies of the variance and non-waste determination petitions and the tentative decisions with EPA to allow the Agency to comment and to encourage collaboration and national consistency. EPA and the states share responsibility for environmental protection and work as

partners to solve the nation's environmental challenges. Because solid waste variances and non-waste determinations are made on a case-by-case basis, state governments are best situated to understand and evaluate the specific factors involved with the company submitting a petition. At the same time, EPA may be familiar with similar cases in other states or EPA Regions and can often provide additional expertise and a national perspective on issues that affect more than one location. As a general matter, the state and EPA frequently consult on such cases, helping to achieve the best results possible, taking full advantage of the unique strengths of each partner.

However, formalizing this type of collaboration would have the benefit of reinforcing this working relationship and would help ensure national consistency. Thus, EPA requests comment on whether to require authorized states to forward to EPA copies of solid waste variance and non-waste determinations petitions and tentative decisions on those petitions for review and comment.

XII. **Request for Comment on Re-Manufacturing Exclusion**

A. *Background*

In addition to the proposed changes to the definition of solid waste discussed in Sections VII–XI of this preamble, EPA is requesting comment on a focused exclusion from the definition of solid waste for certain types of higher-value hazardous secondary materials[31] which are being re-manufactured into commercial-grade products.

The goal of the re-manufacturing exclusion would be to encourage sustainable materials management by identifying specific types of transfers of hazardous secondary materials to third parties that, under appropriate conditions, do not involve discard and can result in extending the useful life of a commercial-grade chemical.

[31] "Higher-value" hazardous secondary materials are those who have a higher value than most types of hazardous secondary materials and can be used in manufacturing commercial-grade products.

Sustainable materials management, as discussed in more detail in Section V.J. of this preamble, considers system-wide impacts, and represents a shift away from end-of-life waste management and toward a more sustainable future that avoids unintended consequences. The benefits of sustainable materials management broadly include potential reductions in energy used, more efficient use of materials, more efficient movement of goods and services, conservation of water, reduced greenhouse gas and other air emissions, and reduced volume and toxicity of waste. In particular, when hazardous secondary materials can be kept in the manufacturing process, rather than disposed of, or used in a lower-value process such as cleaning or degreasing, substantial environmental benefits can be obtained.

As discussed in Section VII of this preamble, EPA is proposing to replace the transfer-based exclusion found in 40 CFR 261.4(a)(24) and (a)(25) with an alternative Subtitle C regulatory scheme because of the potential for adverse impacts to human health and the environment from discarded hazardous secondary materials. EPA believes that such a standard would be more appropriate for hazardous secondary material because (1) the Agency reasonably believes (as explained in detail in the 2008 DSW final rule) that, absent specific conditions, transfers of hazardous secondary materials to third-party reclaimers generally involve discard, and (2) the conditions of the 2008 DSW final rule have serious gaps, particularly the incentives to accumulate larger volumes of hazardous secondary materials, the reduction in oversight resulting from eliminating the permit requirement for storage, and the reduction in the public's access to information and the opportunity for public participation, that could create a potentially unacceptable likelihood of adverse effects to human health and the environment from such discarded material.

However, as also discussed in Section VII, EPA acknowledges that some specific types

of hazardous secondary materials are more like valuable commodities than solid wastes, and thus the act of transferring them to a third party under appropriate conditions does not necessarily involve discard. From a sustainable materials management perspective, these materials are the ideal candidates for focused regulatory changes that would address their life-cycle impacts and help extend their useful life. Many of the other exclusions in 40 CFR 261.4(a) were developed for these types of hazardous secondary materials, and the non-waste determination process under 40 CFR 260.34(c) provides an administrative process for additional hazardous secondary materials that are indistinguishable from a product to be determined to be non-wastes.

To further encourage sustainable materials management,, EPA is requesting comment on an exclusion for the transfer of higher-value hazardous secondary materials from one manufacturer to another, for the purpose of extending the useful life of the original material product by keeping such materials in commerce to reproduce a commercial grade of the original material product (a process that for the purpose of this preamble discussion EPA is defining as "re-manufacturing"). Re-manufacturing these higher-value hazardous secondary materials can have significantly lower environmental impact than creating these material products and using them one time in their virgin state and then transferring them for off-site treatment and disposal, especially with regards to non-renewable materials. Thus, re-manufacturing allows the material products to be used again, lowering their life-cycle environmental impacts significantly.

Specifically, EPA has reached a preliminary conclusion that, under appropriate conditions, the potential for discard in inter-company re-manufacturing transfers for certain higher-value spent solvents would be low because they will be incorporated into the manufacturing process rather than accumulated or disposed of. Once these solvents are re-manufactured to commercial grade, they can be used as replacements for virgin commercial

grade solvents. The economic incentive for a company receiving the spent solvents would be to sell or directly use (avoiding purchase of virgin product) the re-manufactured solvent products to realize an economic value. The company sending these higher-value hazardous secondary materials for re-manufacturing is expected to have little economic incentive to pay the receiving company more than a nominal amount of money, since it would already be transferring something of intrinsic market value (materials that can be easily re-manufactured for profit). So, unlike the RCRA-permitted waste handler which can charge a considerable fee for receiving discarded waste, the company receiving these higher-value hazardous secondary materials for re-manufacturing is expected to realize most of its profit from the sale or use of re-manufactured solvents.

Once re-manufacturing processes are in place, EPA expects that solvent re-manufacturers would be competitive with solvent manufacturers even in the event of a downturn in the sizable chemical markets. Companies would also have the flexibility to redirect re-manufacturing capacity to manufacturing should it ever make economic sense to do so, leaving little economic reason to accumulate unsold or unused re-manufactured solvents.

Although the following discussion focuses mainly on spent solvents, EPA would welcome information on other types of non-renewable hazardous secondary materials that could benefit from a focused regulatory change that would encourage sustainable materials management and be protective of human health and the environment.

B. *Conditions for the Re-Manufacturing Exclusion*

Given the wide variety of hazardous secondary materials and industrial processes, EPA believes it is reasonable to set conditions for the exclusion which there is supporting evidence that discard will be avoided and risk will be controlled. The supporting evidence that EPA is

relying on for defining the conditions of this exclusion has been gathered from some of the Agency's ongoing efforts to promote sustainability and resource conservation.

In particular, the Green Engineering Program within the Office of Chemical Safety and Pollution Prevention (OCSPP) has for several years been studying re-manufacturing scenarios for "once-used" solvents in several industry sectors that use solvents as chemical manufacturing and processing aids. By focusing on the life-cycle (cradle-to-grave) impact of the manufacture, process, and use of chemicals, and reviewing Toxics Release Inventory (TRI) production-related waste reporting, EPA has found that a large, but often hidden lifecycle environmental impact of a final consumer product is from the solvents used to produce the consumer product. For example, pharmaceutical manufacturers use at least 100 kg of solvents to make 1 kg of active pharmaceutical ingredient. The lifecycle impact of these solvent streams, which often are disposed after a single use under current regulatory conditions, is very high.EPA has determined that the environmental impacts from solvents used as manufacturing and processing aids could be significantly reduced if the product life of solvents used for these purposes were extended to more than a single use. [32]

Based on this information, EPA proposes that all of the following conditions would need to be satisfied for eligibility under a re-manufacturing exclusion. The purpose of these conditions is to ensure that the exclusion would focus on higher-value hazardous secondary materials that are being re-manufactured rather than discarded.

(1) The hazardous secondary material consists of one or more of the following solvents: toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane,

[32] U.S. EPA *Benefits of the Re-manufacturing Exclusion*, June 2011

dichloromethane, methyl isobutyl ketone, N,N-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and methanol;

(2) The hazardous secondary material originated from using one or more of the above-listed solvents in commercial grade for reacting, extracting, purifying, or blending chemicals in the pharmaceutical, organic chemical, or plastics and resins manufacturing sectors, or the paint and coatings sector;

(3) After re-manufacturing, the continuing use of the solvent is limited to reacting, extracting, purifying, or blending chemicals in the pharmaceutical, organic chemical, or plastics and resins manufacturing sectors, or the paint and coatings sector, or using them as ingredients in a product. These allowed continuing uses correspond to chemical functional uses enumerated under the proposed modification to the Inventory Update Rule of the Toxic Substances Control Act (40 CFR Parts 704, 710–711), including Industrial Function Codes U015 (solvents consumed in a reaction to produce other chemicals)[33] and U030 (solvents become part of the mixture).[34]

(4) After re-manufacturing, the continuing use of the solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Code U029 under the proposed modification of the Inventory Update Rule of the Toxics Substances Control Act);

[33] *U015 Intermediates: Chemical substances consumed in a reaction to produce other chemical substances for commercial advantage. A residual of the intermediate chemical substance which has no separate function may remain in the reaction product.*

[34] *U30 Solvents (which become part of product formulation or mixture): Chemical substance used to dissolve another substance (solute) to form a uniformly dispersed mixture (solution) at the molecular level. Examples include diluents used to reduce the concentration of an active material to achieve a specified effect and low gravity materials added to reduce cost.*

(5) Additionally, both the hazardous secondary material generator and the re-manufacturer would have to

a. Notify EPA or the State Director, if the state is authorized for the program, and update the notification every two years per 40 CFR 260.42;

b. Develop and maintain a re-manufacturing plan which includes information on the types and expected annual volumes of solvents to be re-manufactured, the processes and industry sectors that generate the solvents, the specific uses and industry sectors for the re-manufactured solvents and the legitimacy of the re-manufacturing process;

c. Maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;

d. Prior to re-manufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards that would be the same as those found in 40 CFR part 264 subparts I and J, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;[35] During re-manufacturing, and during storage of the hazardous secondary materials prior to re-manufacturing, ensure that there is effective control of hazardous air emissions by complying with all applicable NESHAP standards, and with the requirements of 40 CFR part 264 or 265 subparts AA, BB, CC; and

e. Meet the requirements prohibiting speculative accumulation per 40 CFR 261.1(c)(8).

The rationale for the data elements under each condition is provided below. EPA requests

[35] These standards would be specified in the regulatory language of this exclusion, but would be the same technical standards as those required in 40 CFR part 264 subparts I and J.

comment on each of the conditions, the specific data elements under each condition, and/or any other types of scenarios that might also meet EPA's proposed definition of re-manufacturing (i.e., the transfer of a higher-value secondary material from one manufacturer to another, for the purpose of keeping the hazardous secondary material in commerce to produce a commercial grade product). In addition, EPA requests comment on whether, as part of the re-manufacturing plan, the hazardous secondary materials generator and the re-manufacturer should be required to estimate the energy and environmental benefits of re-manufacturing versus the use of virgin feedstock.

1. Designated Solvents

EPA has identified 18 chemicals that could be included in the re-manufacturing exclusion. They are toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, N,N-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and methanol.[36]

EPA believes that including these 18 chemicals in a re-manufacturing exclusion is a good opportunity for reducing the risks associated with these chemicals at the present time. Risk is a function of hazard and exposure, and, from a hazard perspective, all of these chemicals have suspected or recognized hazardous health effects associated with their manufacture, processing, and use. [37] Although EPA and industry have been working to find substitutes for the more hazardous of these solvents, or find ways to use less of them, this has not yet been achieved. [38,39]

[36] U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Re-manufacturing Exclusion*, June 2011
[37] Allen, D., Shonnard, D, *Green Engineering: Environmentally Conscious Design of Chemical Processes, Risk Concepts*, chapter 2, pgs 35-62, Austin, S., US EPA Editor, Published by Prentice-Hall, 2001.
[38] For information on U.S. EPA's Green Chemistry Program, see http://www.epa.gov/gcc/
[39] Information on the American Chemical Society's Green Chemistry Institute's Pharmaceutical Roundtable is available via the ACS website http://portal.acs.org/portal/acs/corg/content

With respect to the pharmaceutical sector in particular, complex chemical processes already registered with the Food and Drug Administration are involved, and EPA has found this a very challenging area to address. In addition, some of these solvents are building block and primary intermediate chemicals, making them difficult to replace. Until lower-risk substitutes for these solvents are found, it is helpful from a health risk standpoint to minimize the volume of solvents manufactured and to limit exposure to those already manufactured. This is something that the re-manufacturing exclusion can help achieve.

The exclusion can help reduce exposure to these solvents in three ways. First, the exclusion would extend the useful life of existing solvents, which would reduce the health risks associated with their manufacture by slowing the rate at which they are manufactured. Second, the exclusion would reduce exposure to solvents already manufactured by reducing the fuel blending of spent solvents. Re-manufacturing a spent solvent will eliminate the need for blending it with another spent solvent to satisfy the fuel-ratio requirements of incinerators and cement kilns. This, in turn, will reduce the fugitive emissions associated with unloading and loading containers of volatile solvents at fuel-blending facilities. All solvents are volatile, and virtually all spent solvents must go through the fuel-blending process prior to disposal.[40] Third and finally, the exclusion can reduce the potential exposure from any transportation incidents, since it is likely spent solvents can be transported shorter distances for re-manufacturing purposes than they can for disposal purposes.[41]

These 18 solvents are used in large volumes as chemical manufacturing aids, chemical processing aids, and chemical formulation aids (generally referred to as “processing aids” for the purpose of this rule). The “processing aids” solvents assist in the reaction, extraction,

[40] U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Re-manufacturing Exclusion*, June 2011
[41] Id.

purification, and blending of ingredients and reactive products, but are not themselves reacted. These processing aid solvents, once used, can then be re-manufactured to commercial grade again. These higher-value solvents were selected because there are existing markets for all these solvents to be re-manufactured to serve similar purposes to those of the original commercial-grade materials.

Note that, as explained below, these hazardous spent solvents would only be eligible if their originating use was of a specific type, and if they are re-manufactured to serve certain types of commercial functions. This restriction would help limit the exclusion to higher-value materials and processes that resemble manufacturing more than waste management.

EPA believes that spent solvents are particularly appropriate for the re-manufacturing exclusion because they are derived from a non-renewable resource (petroleum), and they are manufactured in the industrial chemicals sector, which, according to EPA's report on sustainable materials management, ranks third overall as far as direct adverse overall impact to the environment.[42] EPA requests comment on whether these solvents are appropriate for inclusion in the re-manufacturing exclusion, and whether there are other solvents, chemicals or other types of hazardous secondary materials that should be included in the re-manufacturing exclusion. In particular, EPA requests comment on opportunities for re-manufacturing other types of non-renewable hazardous secondary materials, such as metal catalysts or other types of metal-bearing hazardous secondary materials.

2. Chemical Functions

EPA believes that the re-manufactured chemical product should serve a similar functional purpose as the original commercial-grade material so that it can substitute for virgin product,

[42]U.S. EPA. *2020 Vision Report: Sustainable Materials Management: The Road Ahead*, Table 1, page 25. .www.epa.gov/waste/inforesources/pubs/vision.htm. The other top ranked sectors are electric services (#1) and cotton production (#2).

since it is this substitution that displaces some manufacturing of virgin product and fosters a system where the original solvent remains in commerce and is not discarded. EPA has identified the following chemical functions for possible inclusion in the re-manufacturing exclusion: chemical manufacturing aid (reacting, extracting, blending and/or purifying chemicals), and chemical processing aid (extracting, blending and purifying chemicals).[43] The solvents used for these functions can be separated readily from the other reaction components and therefore do not get contaminated as do solvents used for cleaning or degreasing operations, which are more likely to become discarded.

More environmental benefits will be obtained by maximizing the number of times a chemical product can be used at high-purity grade as an aid to chemical manufacturing and processing, before it is used for at lower-purity as a cleaner or degreaser. While it is possible to extend the product life of a used chemical as a cleaner/degreaser, it takes significantly less energy to bring solvents used as chemical manufacturing aids back to commercial grade than to bring solvents used as cleaners and degreasers back to lower grade functionality, making re-manufacturing of the higher-value solvents more economically feasible.

Accordingly, the functions that the re-manufactured chemical products should serve would be the same as those enumerated above, plus the use in the formulation of the final product (a function which causes the solvent to remain in the product), or use as a chemical intermediate (a function which causes the solvent to be consumed in a chemical reaction).

With respect to the hazardous secondary material generator, this exclusion would focus on the functions of aiding chemical manufacturing and processing because the solvents performing these functions retain their original physical and chemical properties. In these functions, the solvents do not get contaminated by substances from which they are difficult to

[43] U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Re-manufacturing Exclusion*, June 2011

separate, such as inks and greases, but only get mixed with pure product ingredients, from which they can be separated readily in a commercially feasible manner. Furthermore, manufacturing and processing operations can be more easily controlled in terms of exposure and releases, whereas the spent solvents from downstream uses such as degreasing and cleaning operations are of inherently lower-value and these downstream operations result in more widespread exposure and releases and a higher potential for discard.

EPA requests comment on whether these chemical functions are appropriate for inclusion in the exclusion and whether there are other chemical functions that should also be included in the re-manufacturing exclusion.

3. Manufacturing Sectors

EPA intends that any exclusion would be limited to companies whose primary business is manufacturing, rather than waste management, as indicated by particular NAICS codes. EPA has identified the operations of four manufacturing sectors as candidates for the re-manufacturing exclusion: pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510). Manufacturers within these four sectors all use one or more of the eighteen identified solvents as chemical manufacturing, processing, and formulation aids in high volumes. Based on the Toxics Release Inventory information, these four sectors are also closely associated with the chemical functions identified in the exclusion and currently use a high volume of the solvents for the functional purposes included in this exclusion. Therefore, these four sectors seem to be good candidates for inclusion in the exclusion.[44]

As discussed earlier, companies whose primary business is the sale of a commercial

[44] U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Re-manufacturing Exclusion*, June 2011

product do not operate under the same market forces as commercial recyclers, whose profit depends on maximizing the amount of hazardous secondary material accepted, creating a perverse market incentive to over-accumulate hazardous secondary material, resulting in discard. It is not intended that the exclusion could be utilized by a commercial recycler even if it undertook reclamation operations involving the chemicals and chemical functions described above. Commercial recyclers are best regulated by the RCRA hazardous waste standards since waste handling is their primary business and RCRA standards are the primary governing standards for this line of business.

EPA requests comment on whether these sectors are appropriate for inclusion in the exclusion, and whether there are other industry sectors that should be included in the re-manufacturing exclusion. In particular, while the re-manufacturing exclusion on which EPA is requesting comment focuses on those industry sectors that generate large volumes of spent solvents, we also are interested in other industry sectors that would generate other materials, especially other types of non-renewable materials, such as metal-bearing hazardous secondary materials. For example, the "2020 Vision Report" identifies industry sectors that could be evaluated and for which significant environmental gains could be realized through sustainable materials management. Thus, EPA requests comment on which sectors provide the most opportunity for reducing overall environmental impact by encouraging sustainable materials management through re-manufacturing.[45]

4. Additional Exclusion Conditions

EPA has identified the following additional conditions as necessary for the proper implementation of a re-manufacturing exclusion and to ensure that the hazardous secondary

[45]For an analysis of materials, products and services ranked by overall environmental impact, see U.S. EPA. *2020 Vision Report: Sustainable Materials Management: The Road Ahead*, Table 1, page 25. .www.epa.gov/waste/inforesources/pubs/vision.htm.

materials are managed in a way that does not involve discard.

a. *Notification.* Notification under a re-manufacturing exclusion would serve the same purpose and operate similarly to the notification provision found at 40 CFR 260.42. In other words, hazardous secondary material generators and re-manufacturers would have to submit a notification prior to operating under the exclusion and by March 1 of each even-numbered year thereafter using EPA form 8700-12 to the EPA Regional Administrator or the State Director, in an authorized state. Additionally, these facilities would have to notify within 30 days of stopping management of hazardous secondary materials under the exclusion. The notification would include:

- The name, address and EPA ID number (if applicable) of the facility;
- The name and telephone number of a contact person;
- The NAICS and TRI code of the facility;
- When the facility expects to begin managing the hazardous secondary material in accordance with the re-manufacturing exclusion;
- A list of the hazardous secondary materials that would be managed according to the new standard (reported as the EPA hazardous waste numbers that would apply if the materials were managed as hazardous waste);
- The quantity of each hazardous secondary material solvents to be managed annually; and
- The certification signed and dated by an authorized representative of the facility.

The intent of the notification requirement is to provide basic information to the regulatory agencies about who will be managing hazardous secondary materials under the re-manufacturing exclusion. The specific information included in the notification requirement enables regulatory agencies to monitor compliance and to ensure hazardous secondary materials are managed in

accordance with the exclusion and not discarded.

b. Re-manufacturing plan. A key issue for a re-manufacturing exclusion would be how the facilities operating under the exclusion would demonstrate that they meet the requirements (e.g., that the hazardous secondary materials, functions, and manufacturing sectors are those identified in the exclusion). A straightforward method would be to require a re-manufacturing plan to be prepared and maintained by both the hazardous secondary material generator and re-manufacturer that includes information on the types and expected annual volumes of solvents to be excluded, the processes and industry sectors that generate the chemicals, the specific uses and industry sectors—for the re-manufactured solvents, and the legitimacy of the re-manufacturing process (see Section X for further discussion on legitimacy). The hazardous secondary material generator would also be required to make arrangements with the re-manufacturer to jointly develop this plan and to verify the appropriateness of the hazardous secondary materials for the re-manufacturing process before claiming the exclusion, thus helping ensure that the hazardous secondary material will be re-manufactured and not discarded.

c. Record of shipments and confirmations of receipts. Under a re-manufacturing exclusion, generators and re-manufacturers would need to maintain at the facility records of shipments of hazardous secondary materials for a period of three years. Specifically, for each shipment of hazardous secondary material, the generator and re-manufacturer would need to maintain documentation of when the shipment occurred, who the transporter was, and the type and quantity of the hazardous secondary materials in the shipment. This recordkeeping requirement may be fulfilled by ordinary business records, such as bills of lading. However, EPA requests comment on whether for ease of implementation and enforcement, it should require more standardized record-keeping, such as the use of a standardized bill of lading.

In addition, generators would need to maintain confirmations of receipt for all off-site shipments of hazardous secondary materials in order to verify that the hazardous secondary materials reached their intended destination and were not discarded. These receipts must be maintained at the facility for a period of three years from when they were created. Specifically, the documentation of receipt would include the name and address of the re-manufacturer, and the type, quantity, and date of hazardous secondary materials received. The Agency might not require a specific template or format for confirmation of receipt since routine business records (e.g., financial records, bills of lading, copies of Department of Transportation (DOT) shipping papers, and electronic confirmation of receipt) would contain the appropriate information sufficient for meeting this requirement. However, documented information must be verifiable. Therefore, EPA requests comment on whether for ease of implementation and enforcement, it should require more standardized record-keeping, such as requiring a standard method of confirmation of receipt and/or keeping this information in a readily accessible file.

This provision is being proposed in order that all parties responsible for the excluded hazardous secondary materials would be able to demonstrate that the materials were in fact sent for re-manufacturing and arrived at the intended facility and were not discarded in transit.

d. Management in tanks and containers. Solvents, whether virgin or spent, are best stored in tanks or containers that possess inherent controls to address issues such a volatile air emissions, leaks, and fires or explosions. As discussed in Section VI of this preamble, spent solvents present particular management challenges associated with the storage of liquids containing volatile organic chemicals and include both halogenated and non-halogenated organic chemicals, which represent a broad range of chemicals and associated hazards.

EPA believes that by focusing on higher-value spent solvents going to re-manufacturing,

a re-manufacturing exclusion reduces the chance of mismanagement of the spent solvents. However, given the history of solvent mismanagement, as demonstrated in the damage cases found in environmental problems study,[46] EPA also believes it would be appropriate to make an explicit condition that spent solvents excluded under a re-manufacturing exclusion be labeled or otherwise have an immediately available record of the material being stored and be stored prior to re-manufacturing in tanks or containers that meet technical standards that will ensure that the solvents will go to re-manufacturing and will not be discarded via leaks, spills or explosions.

For ease of implementation, EPA requests comment on establishing explicit tank and container standards which meet the technical standards that would be the same as those found in 40 CFR part 264 subparts I and J. The tank and container standards of 40 CFR part 264 were developed for hazardous wastes, but an analysis of the full set of technical requirements under subparts I and J shows that they are comparable to product storage standards from a number of sources, including regulations promulgated under the Occupational Safety and Health Act (OSHA), DOT, and industry standards, and may also be appropriate standards for storage prior to re-manufacturing.[47] Establishing technical standards equivalent to subparts I and J has the benefit of using standards that the regulated community are already familiar with, and which are designed to prevent the spent solvents from being discarded through leaks or explosions. EPA also believes that during re-manufacturing and storage prior to re-manufacturing, there should be effective controls of hazardous air emissions. This can be ensured by requiring that equipment, vents, and tanks meet the technical standards of the National Emission Standards for Hazardous Air Pollutants (NESHAP) applicable to the sector, or absent such standards for the particular operation or piece of equipment covered by the exemption, then the standards equivalent to those

[46]U.S. EPA *An Assessment of Environmental Problems Associated With Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0355).
[47] U.S EPA *Equivalent Containment Standards for the Re-manufacturing Exclusion*, June 2011

found in 40 CFR part 264 or 265 subparts AA (vents), BB (equipment) and CC (tank storage).

EPA requests comment on using these standards or other alternative standards that would be appropriate for helping to demonstrate that the excluded spent solvents under the re-manufacturing exclusion are being managed as a commodity rather than being discarded.

e. No speculative accumulation. In addition to the other conditions, hazardous secondary materials under a re-manufacturing exclusion would still be subject to the speculative accumulation restrictions in 40 CFR 261.1(c)(8), which includes both a time limitation and a requirement that the facility be able to show that there is a feasible means of recycling/recovering the hazardous secondary material. This helps ensure that the materials are re-manufactured and not discarded.

EPA requests comment on whether these conditions are appropriate and whether there are additional conditions that should be also included in any re-manufacturing exclusion.

C. *Benefits of Re-Manufacturing Exclusion*

The solvents identified as possible candidates for a re-manufacturing exclusion are highly energy-intensive and carbon-intensive at their creation and destruction. Therefore, any step towards extending the useful life of these solvents (e.g., re-manufacturing via distillation) significantly reduces the energy use and carbon release associated with these solvents, as well as other pollutants associated with their manufacturing and disposal.[48] Using solvents multiple times instead of once means fewer solvents need to be produced and destroyed, which reduces the energy consumed for solvent production and destruction. That is, less fuel is needed to re-manufacture solvents than to produce solvents from virgin materials. The reduction in fuel for manufacturing is significant because solvent manufacture is energy intensive due to a combination of the high and low temperature manufacturing steps involved. Also, less fuel is

[48] U.S. EPA *Benefits of the Re-manufacturing Exclusion,* June 2011

needed to destroy solvents (at very high temperatures) if fewer solvents are being destroyed. Lastly, less pollution, including carbon, is released from the solvents themselves when incinerated or burned as fuel at the end of their useful life if fewer solvents are being incinerated or burned.[49]

There is also a benefit of reduced transportation impacts associated with extending the useful life of solvents. EPA research indicates that in numerous instances the transport involved in transferring a quantity of spent solvents for purposes of re-manufacturing (including any delivery to secondary users) is measurably less than the transport required for an equal quantity of solvents disposed of and replaced with new solvents.[50] In addition, transportation impacts of virgin feedstocks would also be reduced. Thus, allowing hazardous secondary material generators to re-manufacture solvents is also likely to reduce the risks to communities by reducing the likelihood of transportation accidents involving hazardous materials, as well as reducing other adverse environmental impacts from fuel consumed in transportation.

Further, reduced manufacturing of virgin solvents would reduce the quantity of ingredients needed and the toxic and hazardous pollutant releases associated with solvent manufacture. Moreover, a re-manufacturing exclusion would create a business-case incentive for hazardous secondary material generators to re-manufacture solvents. Reducing the economic barriers to solvent re-manufacturing (in particular, avoiding the costs associated with RCRA permitting) would make it commercially feasible for more chemical manufacturers to re-manufacture solvents, and would thus serve to encourage chemical manufacturers to reduce the overall environmental impacts of solvent manufacturing and use.

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[49] U.S. EPA *Benefits of the Re-manufacturing Exclusion,* June 2011
[50] U.S. EPA *Benefits of the Re-manufacturing Exclusion,* June 2011

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Finally, the benefit of limiting the functions of re-manufactured material to those performed by chemical manufacturers, processors, and formulators is that there are existing commercial purposes for re-manufactured solvents, which would limit or prevent the over-accumulation of the spent solvents, which also reduces the likelihood for discard.

D. *Potential Rulemaking Variance Process to Add Candidates for Re-Manufacturing Exclusion*

EPA is requesting comment in today's proposal on a re-manufacturing exclusion that is narrowly defined to apply to 18 solvents used for specific functions within four industry sectors. However, it is possible that other hazardous secondary materials, industry sectors, and/or functional uses may also be suitable candidates for the re-manufacturing exclusion if they involve the transfer of a higher-value hazardous secondary material from one manufacturer to another, for the purpose of re-manufacturing a material with significant commercial value. If the Agency were to promulgate a re-manufacturing exclusion, EPA is requesting comment on whether to also include a specific petition process where petitioners may apply to EPA to request a hazardous secondary material, industry sector, and/or functional use be added to the exclusion.

The petition process would be similar to 40 CFR 260.20, where any person may petition the Administrator to modify or revoke any provisions of the hazardous waste rules. Thus, in the context of a re-manufacturing exclusion, any person would be able to petition the Administrator to add or remove hazardous secondary materials, industry sectors, and/or specific use functions to the list of hazardous secondary materials qualifying for this exclusion. To be successful, the petitioner would need to demonstrate to the satisfaction of the Administrator that the proposed regulatory amendment (1) meets the goal of the re-manufacturing exclusion, which is to encourage sustainable materials management by extending the productive life of a hazardous secondary material; (2) involves the transfer of a higher-value hazardous secondary material

from one manufacturer to another for the purpose of re-manufacturing the hazardous secondary material to produce a product of significant commercial value; and, (3) results in neither the hazardous secondary materials nor the products recovered being discarded when the conditions of the exemption are followed. The application could be required to include (1) the petitioner's name and address; (2) a statement of the petitioner's interest in the proposed action; (3) a description of the proposed action, including the specific hazardous secondary material, industry (i.e., NAICS code) and functional use (i.e., industrial functional code listed in 40 CFR 710.52(c)(4)(i)(C)); and (4) a statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.

Under this possible petition process, the Administrator would make a tentative decision to grant or deny a petition and then publish notice of such tentative decision, either in the form of an advanced notice of proposed rulemaking, a proposed rule, or a tentative determination to deny the petition, in the Federal Register for written public comment. The Administrator could, at his discretion, hold an informal public hearing to consider oral comments on the tentative decision.

After evaluating all public comments, the Administrator would make a final decision by publishing in the Federal Register a regulatory amendment or a denial of the petition.

E. *Other Issues Related to a Possible Re-Manufacturing Exclusion*

A re-manufacturing exclusion, as described above, would be based on a direct business arrangement between the hazardous secondary material generator of spent solvents and the re-manufacturer, such that the spent solvents would be shipped directly from the generator to the re-manufacturer. Therefore, EPA does not believe that it would be necessary or appropriate to include intermediate storage facilities in the exclusion. We also believe that including such intermediate storage facilities would make it harder to keep track of the hazardous secondary

materials and would increase storage time frames, potentially increasing the likelihood that the hazardous secondary materials will not be safely recycled. However, the Agency also recognizes that not allowing intermediate storage facilities to be part of the transaction may have an adverse impact on small businesses since such intermediate storage facilities would allow small businesses to ship their spent solvent, that are likely generated in limited quantities, to the intermediate facility for consolidation before they go to the re-manufacturer. Thus, EPA requests comment on this issue.

Similarly, EPA anticipates that re-manufacturing arrangements would be made within the United States, so that the companies involved would be governed by the same set of laws and regulations as far at their re-manufacturing agreements are concerned. EPA requests comment on limiting the re-manufacturing exclusion to the United States, or requiring the generator to notify the receiving country through EPA and obtain consent from that country before shipment of the hazardous secondary materials takes place. These notice and consent requirements, which would be the same as those currently required under the transfer-based exclusion (see 40 CFR 261.4(a)(25)), would provide notification to the receiving country so that it can ensure that the hazardous secondary materials are reclaimed rather than disposed of or abandoned. As an additional benefit, these requirements would allow the receiving country the opportunity to consent or refuse consent based on its analysis of whether the re-manufacturing facility can properly manage the hazardous secondary materials in an environmentally sound manner within its borders.

EPA also requests comment on other possible conditions that could be added to any re-manufacturing exclusion. In particular, EPA requests comment on whether it should require the re-manufacturer to have financial assurance. EPA required financial assurance for recyclers

under the transfer-based exclusion. Since the re-manufacturing exclusion will be limited to higher-value solvents going to manufacturers with a greater flexibility than commercial recyclers to adjust to unstable markets, there may be less of a need for financial assurance under this proposed exclusion. However, EPA requests comment on whether financial assurance should nevertheless be included as a condition to best ensure against discard. EPA also requests comment on whether it should add public participation requirements and/or a regulatory agency approval (short of a RCRA permit) before a re-manufacturer may start handling hazardous secondary materials sent from another company. EPA received input during its environmental justice review of the 2008 DSW final rule that the absence of an opportunity for public input was a deficiency of the transfer-based exclusion. However, since the re-manufacturing exclusion will be limited to manufacturing facilities, typically at their already existing locations, and actually may reduce the environmental impacts at such facilities, the need for public participation may be less. However, EPA requests comment on whether it should nevertheless require a public participation process to ensure that neighbors of a facility are aware that it will be handling hazardous secondary materials sent from other companies, and have input about how the protective conditions required by the proposed exclusion will be met. Finally, EPA requests comment on whether companies should be required to keep records and/or report to EPA about the environmental benefits (e.g., reduced air emissions, energy savings, reduced transportation impacts) that are realized through their use of the re-manufacturing exclusion. EPA could then use this information to measure performance of the exclusion, enable public reporting of results, and facilitate information transfer in which other companies can learn how to achieve similar benefits. Additionally, we note that many companies already take advantage of reporting tools in

order to track progress towards corporate sustainability goals and thus we believe that reporting would not pose an undue burden on facilities.

XIII. Request for Comment on Revisions to Other Recycling Exclusions and Exemptions

A. *Background Information on Other Recycling Exclusions and Exemptions*

As part of the 2008 DSW rulemaking, EPA developed a report, "An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials" (environmental problems study), which analyzed 218 recycling damage cases.[51] The goal of the environmental problems study was to identify and characterize environmental problems that have been attributed to hazardous secondary materials recycling activities. EPA then used the findings from this study to craft a number of conditions for the 2008 DSW final rule, which were specifically designed to target the major causes of damage and thus help define "discard" of hazardous secondary materials. These conditions, however, were applied only to the 2008 DSW exclusions. In developing today's proposal, we are interested in whether these conditions should be codified for the pre-2008 recycling exclusions and exemptions.

As part of the "Environmental Justice Analysis of the Definition of Solid Waste Rule" (EJ analysis), EPA reviewed and analyzed each damage case in the environmental problems study, including five additional damage cases that were identified after the 2008 DSW final rule was promulgated, and determined the regulatory provision that likely, or potentially, governed the management of the hazardous secondary materials. This analysis was based on the type of

[51] The original environmental problems study, published January 11, 2007, reviewed 208 damage cases. Based on information submitted by commenters, EPA reviewed an additional 10 recycling damage cases in an addendum to the environmental problems study, published July 14, 2008.An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials, U.S. EPA, January 11, 2007 and addendum.
Report: http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064801f3efb
Addendum (July 2008):
http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064806b5741 , Addendum (June 2011) found in today's docket.

hazardous secondary material and the date of the damage case (related to the effective date of the regulatory provision), the results which can be found in the docket for this rulemaking.[52]

From this analysis, we conclude that over half of the damage cases in this study were associated with hazardous secondary materials that were likely excluded or exempted from Subtitle C under an existing (pre-2008) regulatory provision. For example, 52 damage cases (23%) are associated with scrap metal that is likely excluded under 261.4(a)(13) and/or 261.6(a)(3)(ii). Drum reconditioning accounted for 23 damage cases (10%), in which the residuals are likely excluded under 40 CFR 261.7. Additionally, 35 damage cases (16%) were associated with recycling of batteries that are likely managed under 40 CFR 273.2 and/or 40 CFR part 266 subpart G. Based on these results, and given that many of the pre-2008 recycling exclusions specify limited or no conditions, we believe that these provisions may not be adequately enforceable in order to protect human health and the environment. Thus, we are requesting comment today on codifying specific conditions for these recycling exclusions.

EPA emphasizes that we are not reopening comment on any substantive provisions of the regulatory exclusions or exemptions. The inclusion of requirements for legitimacy, containment, and notification are strictly meant as means to better enforce the regulations. Moreover, EPA believes that the containment condition—as with the legitimacy criteria—is implicit in all of the regulations to which it would apply. If secondary material is not contained when it is being recycled, it is simply being discarded.

As part of the 2008 DSW final rulemaking, we reviewed the recycling studies and public comments in order to develop conditions that defined discard of hazardous secondary materials. Four conditions required for the generator-controlled exclusion in 40 CFR 261.4(a)(23)—

[52] U.S. EPA *Correlation of Recycling Damage Cases with Regulatory Exclusions, Exemptions or Alternative Standards.*

legitimate recycling, no speculative accumulation, containment, and notification—constitute what we believe to be the minimum requirements necessary to define when recycled hazardous secondary materials are not discarded. Therefore, it seems prudent to review past exclusions and exemptions to ensure these regulatory provisions clearly require these newly codified standards.

Specifically, we are requesting comment on codifying the legitimate recycling standard in 40 CFR 260.43, additional recordkeeping requirements in the speculative accumulation standard in 40 CFR 261.1(c)(8), the contained standard in 40 CFR 260.10, and the notification provision in 40 CFR 260.42 for 32 regulatory provisions that exclude or exempt certain types of recycling from full Subtitle C regulation. A list of these 32 regulatory provisions can be found below. The new legitimacy standard would apply to all regulatory provisions except for 40 CFR 261.7, because it involves determining whether residues in containers are regulated, and no hazardous secondary material is being reclaimed. The contained standard and notification condition would apply to all provisions, although facilities operating under provisions that already contain specific regulatory requirements would have to continue meeting those requirements. The additional recordkeeping requirements for speculative accumulation would only apply to those regulatory provisions already subject to speculative accumulation (i.e., hazardous secondary material being used or reused per 261.2(e), characteristic by-products and sludges being reclaimed as noted in 40 CFR 261.2 Table 1, and the recycling-related exclusions in 40 CFR 261.4(a)), but would not apply to commercial chemical products being reclaimed (see 40 CFR 261.2 Table 1) or to recycling provisions that apply to recycling of solid or hazardous wastes (as noted in the chart below).

#	Citation	Description

260 & 261 Definition of Solid Waste		
1	260.30	Procedures for variances and non-waste determinations
2	261.2 (e)	Use/Reuse
3	261.2 Table 1	Characteristic sludges being reclaimed
4	261.2 Table 1	Characteristic by-products being reclaimed
5	261.2 Table 1	Commercial chemical products being reclaimed
261.4(a) Exclusions from the Definition of Solid Waste		
6	261.4(a)(6)	Pulping Liquors
7	261.4(a)(7)	Spent Sulfuric Acid
8	261.4(a)(8)	Closed-Loop Recycling
9	261.4(a)(9)	Spent Wood Preservatives
10	261.4(a)(10)	Coke By-Product Wastes
11	261.4(a)(11)	Splash Condenser Dross Residue
12	261.4(a)(12)	Hazardous Oil-Bearing Secondary Materials and Recovered Oil from
13	261.4(a)(13)	Processed Scrap Metal
14	261.4(a)(14)	Shredded Circuit Boards
15	261.4(a)(16)	Comparable Fuels
16	261.4(a)(17)	Mineral Processing Spent Materials
17	261.4(a)(18)	Petrochemical Recovered Oil
18	261.4(a)(19)	Spent Caustic Solutions from Petroleum Refining
19	261.4(a)(20)	Hazardous Secondary Materials Used to Make Zinc Fertilizers
20	261.4(a)(21)	Zinc Fertilizers Made from Recycled Hazardous Secondary Materials

21	261.4(a)(22)	Used Cathode Ray Tubes (CRTs)
261.4(b) Solid wastes which are not hazardous wastes		
22	261.4(b)(12)	Spent Chlorofluorocarbon Refrigerants
23	261.4(b)(14)	Used Oil Distillation Bottoms used to manufacture asphalt products
261.6 Requirements for recyclable materials (hazardous wastes)		
24	261.6(a)(3)(ii)	Scrap metal
25	261.6(a)(3)(iii)	Waste-derived fuels from refining processes
26	261.6(a)(3)(iv)	Unrefined waste-derived fuels and oils from petroleum refineries
27	261.6(c)(2)	Reclaimers that do not store
261.7 Residues of hazardous waste in empty containers		
28	261.7	Residues of hazardous waste in empty containers
Part 266 Standards for the Management of Specific Hazardous Wastes		
29	266 Subpart C	Recyclable Materials Used in a Manner Constituting Disposal
30	266 Subpart F	Materials Utilized for Precious Metal Recovery
31	266 Subpart G	Spent Lead-Acid Batteries Being Reclaimed
32	266 Subpart H	Hazardous Waste Burned in Boilers and Industrial Furnaces

Note that the possible changes discussed below would be in addition to the proposed application of the definition of legitimacy to all recycling, discussed in Section X of this preamble, and the request for comment on additional recordkeeping for speculative accumulation, discussed in Section IX.B.2 of this preamble.

B. *Possible Changes to Other Exclusions and Exemptions*

1. Contained Standard

Under the 2008 DSW final rule, hazardous secondary materials must be contained, whether they are stored in land-based units or non-land-based units. Generally, such material is considered "contained" if it is placed in a unit that controls the movement of the hazardous secondary material out of the unit and into the environment. Hazardous secondary materials that are released to the environment are not destined for recycling and are clearly discarded. Additionally, hazardous secondary materials that are not contained, and have not been immediately recovered, are not being managed as valuable commodities, which is relevant to determining whether the recycling process is legitimate. Lastly, requiring that hazardous secondary materials be contained ensures that the materials are managed in a manner protective of human health and the environment.

In the environmental problems study, mismanagement of hazardous secondary materials was determined to be the cause, or one of the causes, in 11 percent of the damage cases. Since many of these damage cases have been associated with a pre-2008 recycling provision, we believe it appropriate to close this gap by specifically requiring compliance with the contained standard in 40 CFR 260.10. Of course, facilities operating under provisions that already contain management requirements would have to continue meeting those requirements.

2. Notification

Under the 2008 DSW final rule, facilities managing hazardous secondary materials are required to submit a notification prior to operating under the exclusions and by March 1 of each even-numbered year thereafter to the EPA Regional Administrator or State Director, if a state is authorized for the program, using the Site ID form, EPA Form 8700-12. The intent of this notification requirement is to provide basic information to regulatory authorities in order to

enable adequate compliance monitoring and to ensure hazardous secondary materials are managed according to the exclusion and are not discarded. For example, in the notification, EPA requires facilities to include the quantity of hazardous secondary materials that will be managed under each exclusion and disclose whether certain types of hazardous secondary materials will be managed in land-based units. This information can be used to assist RCRA inspectors in determining which facilities may warrant greater oversight and provides a basis for setting enforcement priorities. Furthermore, requiring facilities to notify when they have stopped managing hazardous secondary materials allows states to follow up at those facilities and ensure that the hazardous secondary materials have not been discarded.

Notification information is collected in EPA's RCRAInfo database, which is the national repository of all RCRA Subtitle C site identification information, whether collected by a state or EPA. EPA provides public access to this information through EPA's public website.[53]

The 2008 DSW final rule differed from other prior exclusions because it required facilities claiming the exclusion to notify EPA, or the authorized state, using an established EPA form (i.e., the Site ID form) and required facilities to re-notify every two years. Together, these requirements provide regulatory authorities with regularly updated data in a consistent format that enables them to collect, store, access, use, and publicly share information about these facilities. In contrast, many of the pre-2008 DSW recycling exclusions and exemptions do not contain any notification requirement and the few provisions that do require notification do not require a specific format for submitting the information or periodic updates. This results in facilities providing information in various forms, such as letters, which makes it difficult for regulatory authorities to share and use the information.

Additionally, a one-time notification requirement has limited value. With a one-time

[53] http://www.epa.gov/epawaste/hazard/dsw/impresource.htm

notification approach, there is no assurance that the information collected in EPA's databases over time will accurately reflect facilities that are managing hazardous secondary materials according to the exclusions. Therefore, the Agency can imagine instances where extensive resources are required to be spent on 'cleaning up' the data before regulatory authorities can use it to identify facilities who are currently managing hazardous secondary materials under the exclusions. With a one-time notification, we can also foresee problems where regulatory agencies spend time and resources monitoring compliance at facilities that have since stopped managing hazardous secondary materials at some point in the past. This inefficient use of resources would lower the overall effectiveness of regulators' ability to monitor compliance and could potentially increase the risk of environmental damage from abuse.

In the time since the 2008 DSW final rule became effective, we have received more than 40 notifications from facilities managing hazardous secondary materials under the generator-controlled and/or transfer-based exclusions. This information has directly enabled regulatory authorities to monitor compliance and assist implementation via guidance materials and training. Additionally, notification has had the added benefit of identifying facilities that planned to manage hazardous secondary materials under the rule, but were, in fact, ineligible for the exclusions. (For example, we have received notifications from facilities located in a state that had not adopted the 2008 DSW final rule.) Notification in these instances allowed regulatory authorities to identify problems and to intervene early to prevent potential mismanagement.

In the case of the many of the pre-2008 recycling exclusions and exemptions, we do not require notification (and even in those instances where we require notification, it is a one-time notification) and thus have no reliable or efficient way to receive information that enables regulatory authorities to adequately monitor these exclusions and exemptions. We believe this

gap increases the risk of environmental damage stemming from improper management of hazardous secondary materials being recycled. We, therefore, are requesting comment on whether to require notification for those facilities operating under pre-2008 recycling exclusions and exemptions.

Specifically, we are requesting comment on codifying notification under § 260.42 for facilities managing hazardous secondary materials under the pre-2008 recycling provisions. For those exclusions and exemptions that already require a one-time notification, notification under § 260.42 would replace, and not duplicate, the one-time notification requirement.

XIV. Effect of this Proposal on Other Programs

A. *Effect on Permitted and Interim Status Facilities*

In the 2008 DSW final rule, EPA discussed how that rule would affect permitted and interim status facilities. Specifically, the Agency explained that permitted and interim status disposal facilities that manage hazardous wastes excluded under the 2008 DSW final rule are affected by the final rule in a number of ways, depending on the situation at the facility. (74 FR 64715-7) If a permitted facility seeks to either terminate its operating permit or to remove units from its permit as a result of the 2008 DSW final rule, a facility must submit a Class I permit modification request with prior Agency approval; however, the obligation to address facility-wide corrective action remains in effect. Similarly, for facilities operating under interim status, the owner or operator retains responsibility for unaddressed corrective action obligations at the facility.

However, if EPA finalizes today's proposal to replace the transfer-based exclusion with an alternative Subtitle C regulatory approach, EPA anticipates that the number of permitted and interim status facilities that are able to take advantage of the exclusion would be significantly

reduced, because most of the permitted and interim status facilities affected by the 2008 final rule are excluded under the transfer-based exclusion. Furthermore, if EPA finalizes the re-manufacturing exclusion discussed in Section XII of this preamble, the Agency would not expect TSDFs to be affected, since that exclusion would be limited to manufacturers. Regardless of the ultimate scope of the exclusion, however, facilities with units covered by the exclusion should continue to refer to the preamble in the 2008 final rule (at FR 64715-17) for a discussion of the effect of the exclusion on permitted and interim status facilities.

B. *Effect on CERCLA*

In 1999, Congress enacted the Superfund Recycling Equity Act (SREA), explicitly defining those hazardous substance recycling activities that may be exempted from liability under CERCLA (CERCLA section 127). Today's proposal, if finalized, would not change the universe of recycling activities that could be exempted from CERCLA liability pursuant to CERCLA section 127. The proposal would only change the definition of solid waste for purposes of the RCRA Subtitle C requirements. The proposal also would not limit or otherwise affect EPA's ability to pursue potentially responsible persons under section 107 of CERCLA for releases or threatened releases of hazardous substances.

C. *Effect on the Derived-From Rule*

In the 2008 DSW final rule (October 30, 2008, 73 FR 64692), EPA notes that the "derived from" rule articulated in 40 CFR 261.3(c)(2) does not apply to residuals from the reclamation of hazardous secondary materials excluded under the generator-controlled and transfer-based exclusions. These residuals are a new point of generation for the purposes of applying the hazardous waste determination requirements of 40 CFR 262.11. If the residuals exhibit a hazardous characteristic, or they themselves are a listed hazardous waste, they would be

considered hazardous wastes (unless otherwise exempted) and would have to be managed accordingly. If they did not exhibit a hazardous characteristic, or were not themselves a listed hazardous waste, they would have to be managed in accordance with applicable state or federal requirements for non-hazardous wastes. EPA believes that in most cases, this would not be an issue because residuals from hazardous secondary material reclamation that may be of concern would either themselves be listed hazardous waste (i.e., still bottoms from the reclamation of solvents listed in 40 CFR 261.31) or would exhibit a characteristic (i.e., residuals from metals reclamation with hazardous metals concentrations above the toxicity characteristic in 40 CFR 261.24). EPA requests comment, including for any available data, on the hazardousness of reclamation residuals and whether the derived-from rule would need to be modified to regulate these residuals as hazardous waste.

D. *Effect on Spent Petroleum Catalysts*

In the 2008 DSW final rule, EPA deferred the question of whether spent petroleum catalysts should be eligible for the exclusions pending further consideration of the pyrophoric properties of the spent petroleum catalysts (73 FR 64714). EPA noted that the Agency was planning to propose—in a separate rulemaking from the 2008 DSW final rule—an amendment to its hazardous waste regulations to conditionally exclude from the definition of solid waste spent hydrotreating and hydrorefining catalysts generated in the petroleum refining industry when these hazardous secondary materials are reclaimed. Spent hydrotreating and hydrorefining catalysts generated in the petroleum refining industry are routinely recycled by regenerating the catalyst so that it may be used again as a catalyst. When regeneration is no longer possible, these spent catalysts are either treated and disposed of as listed hazardous wastes or sent to RCRA-permitted reclamation facilities, where metals, such as vanadium, molybdenum, cobalt, and

nickel are reclaimed from the spent catalysts. EPA originally added spent hydrotreating and hydrorefining catalysts (waste codes K171 and K172) to the list of RCRA hazardous wastes found in 40 CFR 261.31 on the basis of toxicity (i.e., these materials were shown to pose unacceptable risk to human health and the environment when mismanaged) (63 FR 42110, August 6, 1998). In addition, EPA based its decision to list these materials as hazardous due to the fact that these spent catalysts can at times exhibit pyrophoric properties (i.e., can ignite spontaneously in contact with air).

It was largely because of these pyrophoric properties that the petroleum catalysts exhibit that EPA deferred the question of whether spent petroleum catalysts should be included in the 2008 DSW final rule exclusions. While spent petroleum catalysts can be a valuable source of recoverable metals, the risk of these hazardous secondary materials spontaneously igniting when in contact with air is not a property that most metal recyclers would be expected to address, and thus, present additional risks that are not presented by other types of metal-bearing hazardous secondary materials and are therefore may be most appropriately managed as hazardous waste when recycled.

Under today's proposal, EPA is proposing to replace the transfer-based exclusion with an alternative Subtitle C regulatory approach, and if finalized, would make the question of the eligibility of most types of spent catalyst recycling for the 2008 DSW final rule exclusions moot.[54] However, EPA is also proposing to add a regulatory definition of the "contained" standard which includes a requirement to address the risk of fires and explosions. This provision, if properly implemented, could address the pyrophoric properties of the spent petroleum catalysts (as well as other types of ignitibility or reactivity). EPA requests comment on whether this

[54] The spent catalysts would be eligible for the alternative Subtitle C regulations discussed in Section VIII of this preamble.

provision would adequately address the potential for discard of spent petroleum catalysts due to fire and explosions, thereby allowing EPA to remove the ineligibility of K171 and K172 from the DSW exclusion, and on other regulatory options, including adding more conditions (such as specific container standards) specific to pyrophoric materials to the exclusion.

XV. Implementation Issues with 2008 DSW Final Rule

The 2008 DSW final rule became federally effective on December 29, 2008. The rule was effective immediately in states and territories for which EPA manages the RCRA program, specifically Alaska, Iowa, the U.S. Virgin Islands, the Northern Mariana Islands, American Samoa, and tribal lands. The rule does not go into effect in states that are authorized to manage their own RCRA programs unless and until the state adopts the rule. Currently, four states—Idaho, Illinois, New Jersey, and Pennsylvania—have adopted the rule. Within the states and territories where the 2008 DSW final rule is effective, more than 40 facilities have notified that they are managing hazardous secondary materials under the generator-controlled and/or the transfer-based exclusion.

EPA believes that it is important to support effective implementation of the 2008 DSW final rule in order to ensure that hazardous secondary materials are properly managed and not discarded. Our goal is to reduce the risk of mismanagement of hazardous secondary materials that may occur from misunderstanding the regulations and incorrect implementation of the requirements and conditions. To this end, we have worked with the EPA Regions and states to provide training and guidance materials for regulators and the regulated community. Since the 2008 DSW final rule was codified, there have been number of questions from states and the regulated community regarding how the rule should be implemented and how it operates in special circumstances.

Today, we are taking the opportunity to clarify these issues in the context of the 2008 DSW final rule. It should be noted that some of these implementation issues are specific to the transfer-based exclusion found at 40 CFR 261.4(a)(24), which EPA is proposing to replace with alternative management standards under Subtitle C of RCRA. If EPA finalizes this change, some of these issues would become moot.

A. *Mixing Of Hazardous Secondary Materials Excluded Under 40 CFR 261.4(a)(24) With Similar Hazardous Wastes*[55]

One issue regards whether hazardous secondary materials excluded under 40 CFR 261.4(a)(24) can be mixed with other similar hazardous wastes within permitted units or exempt recycling units and how such mixing would affect the requirements of the generator and the reclaimer. Under § 261.4(a)(24), which covers hazardous secondary materials transferred off-site for reclamation, hazardous secondary material generators may send their materials to a facility that operates under a RCRA Part B permit or interim status standards. In this case, generators are not required to conduct reasonable efforts on the reclaimer as long as the RCRA Part B permit extends to the management of the hazardous secondary materials in question. We believe Part B permits or the interim status standards provide adequate assurance that the hazardous secondary materials will be well managed, specifically because the hazardous secondary materials are managed in units that are subject to stringent design and operating standards, the reclaimer must demonstrate financial assurance, and the materials are subject to the corrective action requirements in the event of environmental problems.

[55] This section restates our policy on this issue, which is published in the "*Guidance for Mixing Hazardous Secondary Materials Received Under the 40 CFR 261.4(a)(24) Exclusion from the Definition of Solid Waste with Regulated Hazardous Wastes*." This guidance can be found in RCRAOnline and on our DSW Implementation website at http://www.epa.gov/epawaste/hazard/dsw/impresource.htm.

EPA understands that some reclaimers are receiving the same type of hazardous secondary materials for reclamation from multiple generators, with some amount excluded under § 261.4(a)(24) and some amount regulated as hazardous waste. The regulatory status of the material depends on how the generator who sent the materials chose to manage and transfer the materials off site. We also understand that reclaimers are interpreting § 261.4(a)(24) to mean that hazardous wastes and hazardous secondary materials must be stored in separate units and reclaimed independently of each other in order to preserve the regulatory status of the excluded material and the exclusion for the generators that transferred the hazardous secondary materials to the reclaimer.

It is clear in the 2008 DSW final rule that EPA allows hazardous secondary materials that are excluded from full Subtitle C regulation to be managed under a RCRA Part B permit or interim status standards. Managing hazardous secondary materials under a RCRA Part B permit affords further assurance that the hazardous secondary materials will be properly managed and reclaimed. Additionally, we believe that taking advantage of the existing recycling infrastructure both improves efficiency under the rule and increases opportunities for recycling.

Section 261.4(a)(24) states that the exclusion applies if the hazardous secondary materials are generated and transferred "for the purpose of reclamation." Thus, a reclaimer mixing excluded hazardous secondary materials with regulated hazardous wastes of the same type may only mix the materials for the purpose of reclamation (and not for the purpose of, for example, burning for energy recovery or disposal).

Prior to mixing, the reclaimer must manage the excluded hazardous secondary materials under § 261.4(a)(24) up to the point that they mix the excluded materials with similar materials that are regulated hazardous waste. The reclaimer must comply with all applicable conditions of

§ 261.4(a)(24) because it is receiving hazardous secondary materials transferred for the purpose of reclamation and excluded from the definition of solid waste. The reclaimer must therefore meet the applicable conditions of the § 261.4(a)(24) exclusion, including legitimate reclamation, recordkeeping, financial assurance, containment of hazardous secondary materials, notification, and the prohibition on speculative accumulation.

A reclaimer may only mix hazardous secondary materials excluded under § 261.4(a)(24) with regulated hazardous waste for the purpose of reclamation. This can be satisfied by mixing in units that are dedicated for reclamation, such as storage units that are connected to reclamation units by hard pipes or other conveyance; storage units that are solely used to store materials prior to the reclamation process; and recycling units. Additionally, a reclaimer is not mixing for the purpose of reclamation if the reclaimer first mixes the materials and then makes a determination whether the mixture should be reclaimed or sent for burning or disposal. This determination must be made prior to mixing the excluded hazardous secondary materials with regulated hazardous wastes.

After mixing the excluded hazardous secondary materials with regulated hazardous waste, the reclaimer must manage the entire mixture as hazardous waste for the purpose of reclamation. Excluded hazardous secondary materials cannot be mixed with regulated hazardous waste and still maintain the exclusion from the definition of solid waste. If excluded hazardous secondary materials are mixed with hazardous waste, the resulting mixture is a hazardous waste. This follows the general principle that RCRA applicability cannot be avoided by mixing a hazardous waste with another material.[56] Therefore, the reclaimer must comply with the standard hazardous waste regulations applicable to hazardous waste managed by an off-site reclaimer (i.e., 40 CFR 261.6(c) and (d) or 40 CFR part 264 or 265). The mixture must be stored and

[56] Horsehead Resource Development Co., Inc. v. EPA, 16 F3d 1246 (February 1994).

managed in compliance with the hazardous waste regulations applicable to hazardous waste managed by an off-site reclaimer (i.e., 40 CFR 261.6(c) and (d) or 40 CFR part 264 or 265). If a reclaimer mixes hazardous secondary materials and other similar hazardous wastes in a recycling unit, the mixture would be considered hazardous waste, but the unit would be generally exempt from regulation under 40 CFR 261.6(c)(2).

Mixing by the reclaimer of excluded hazardous secondary materials received under 40 CFR 261.4(a)(24) with regulated hazardous wastes does not affect the requirements applicable to generators who shipped the hazardous secondary materials, provided that the hazardous secondary materials are transferred for the purpose of reclamation and the reclaimer complies with all applicable conditions of § 261.4(a)(24) prior to mixing. Excluded hazardous secondary materials mixed with regulated hazardous wastes of the same type become hazardous waste at the point of mixing and must be managed as such after that point. Therefore, generators transferring hazardous secondary materials under § 261.4(a)(24) to a reclaimer who mixes may manage the hazardous secondary materials under the § 261.4(a)(24) exclusion (e.g., longer storage times, shipping without a manifest) because the hazardous secondary materials have not yet been mixed with regulated hazardous wastes. (Of course, the generator and the reclaimer must meet all applicable conditions of § 261.4(a)(24) prior to mixing.)

B. *Rejected Loads*

A second issue regards shipments of hazardous secondary material transferred off-site by the generator for reclamation, but that are subsequently rejected by the reclaimer (otherwise known as “rejected loads”). Because 40 CFR 261.4(a)(24) states that the exclusion applies if the hazardous secondary material is generated and transferred "for the purpose of reclamation,” EPA has received questions regarding how generators and reclaimers should handle rejected loads.

Although EPA did not explicitly address rejected loads in the preamble to the 2008 DSW final rule, we offered some guidance in our Response to Comments document for that action. Specifically, we state that if hazardous secondary materials transferred off-site for reclamation are subsequently rejected by the reclaimer, the generator can choose to send the hazardous secondary materials to another reclamation facility, provided the generator continues to comply with the conditions of the exclusion, including the speculative accumulation limits.

Prior to arranging for transport to an alternate reclamation facility, hazardous secondary material generators must make reasonable efforts to ensure the alternate reclamation facility intends to properly and legitimately reclaim the hazardous secondary material and must keep records of the off-site shipment and confirmation of its receipt as required under the 2008 DSW final rule. If a hazardous secondary material generator is unable to reclaim the hazardous secondary material in compliance with the speculative accumulation provision and the other terms of the exclusion, it must manage the materials as solid and hazardous waste according to the RCRA Subtitle C hazardous waste regulations. Furthermore, we believe the recordkeeping conditions (records of all off-site shipments and confirmations of receipt) are sufficient to ensure the hazardous secondary materials are properly managed if a rejected shipment must be returned to the hazardous secondary material generator or sent to an alternate reclamation facility.

In the event of a rejected load, generators and reclamation facilities should contact their regulatory authority in order to receive instructions on a case-by-case basis. Reclamation facilities should document their rejected loads, including information such as the EPA ID number, name, and address of the generator, the date the facility received the hazardous secondary material, a description and quantity of the material, the ultimate destination and disposition of the material, and an explanation of why the load was rejected. Additionally, we

note that efforts to prevent rejected loads may help to avoid this issue altogether, for example, by sending test samples of the hazardous secondary material to a reclaimer to ensure that legitimate reclamation can be performed prior to sending the first shipment.

C. *Interstate Transport*

A third implementation issue regards the transport of excluded hazardous secondary materials from or to a state that has adopted the 2008 DSW final rule to or from a state that has not adopted the rule and what conditions would apply in each state. Specifically, if the originating state has adopted the 2008 DSW final rule, but the receiving (or transfer) state has not adopted the rule, the hazardous secondary materials (1) are subject to the hazardous waste requirements of the receiving state that has not adopted the rule upon reaching the border of that state (e.g., manifesting requirements); (2) must go to a RCRA-permitted facility (or other authorized designated facility), and, if stored, materials must be managed in permitted storage units (or when applicable under interim status requirements); and (3) cannot go to an unpermitted recycling facility which is not a designated facility in a state that has not adopted the rule because such a facility would not meet the conditions of the exclusion (e.g., financial assurance) and since the receiving state would not have adopted the exclusion.

If the originating state has not adopted the rule, but the receiving state has adopted the rule, the hazardous secondary materials (1) must be managed as regulated hazardous waste not only in the originating state, but also in the receiving state that has adopted the rule (e.g., may be sent to a permitted recycling facility, in the receiving state, which has notified that it is operating under the exclusion, but must then be stored only in permitted units at that facility) and (2) would not be eligible for the exclusion because the generator in the originating state that has not adopted the rule would not meet the conditions and requirements of the exclusion. In particular,

the fact that the generator would not have notified EPA that it is sending the hazardous secondary material to an excluded reclamation facility, and would not have performed a "reasonable efforts" audit under 40 CFR 261.4(a)(24)(v)(B) to ensure that the hazardous secondary material will be safely and legitimately reclaimed could undermine the proper implementation of the 2008 DSW exclusion.

As noted in written comments submitted in response to the May 2009 public meeting Federal Register Notice, some states that do not plan on adopting the 2008 DSW final rule in full would like the generators in their states to be able to send their hazardous secondary materials to facilities without RCRA permits that are operating under the 40 CFR 261.4(a)(24) transfer-based exclusion in states that have adopted the rule.[57] One possible solution for such a state might be to adopt the requirements applicable to generators in the 2008 DSW final rule (found in 40 CFR 261.4(a)(24)(i–v and vii)), in addition to the state's hazardous waste requirements, for those generators that wish to ship to reclaimers without RCRA permits whose operations are covered by the exclusion. In most cases, a generator following the generating state's hazardous waste requirements would also meet the 2008 DSW final rule requirements (i.e., no speculative accumulation, meeting DOT transport requirements, containment, records of shipments), since the state's RCRA program requirements (e.g., 90 and 180 day storage limits, manifesting requirements) would be equally or more stringent than the 2008 DSW final rule requirements), but the generator would also need to ensure that the hazardous secondary material meets the codified definition of legitimacy under 40 CFR 260.43, perform a "reasonable efforts" audit of the reclaimer and keep a copy of the audit for three years per 40 CFR 261.4(a)(24)(v)(B) and (C), and provide notification per 40 CFR 260.42. Thus, the hazardous secondary material would

[57]Generators in states that have not adopted the 2008 DSW final rule are able to send their materials to RCRA-permitted reclaimers under hazardous waste regulations

be covered both by the state hazardous waste program in the generating state that has not adopted the 2008 DSW final rule, and by the DSW transfer-based exclusion in the reclaiming state that has adopted the 2008 DSW final rule.

As discussed earlier, EPA has proposed to replace the transfer-based exclusion with an alternative Subtitle C regulation, which would possibly render this issue moot. However, EPA is interested in and requests comments on these issues of how interstate transportation should be handled, particularly whether states are interested in such a solution, if the transfer-based exclusion is retained or not, and whether it is an issue for any of the other exclusions EPA is proposing to retain or is asking for comment on today. For example, should EPA allow for the shipment of hazardous secondary materials from a state which does not adopt the 'under the control of the generator' exclusion to a state that has adopted that exclusion. If so, what additional requirements would the generating state have to adopt in order to allow for such shipments. Similarly, if a re-manufacturing exclusion is adopted, should EPA allow for the shipment of hazardous secondary materials from a state that does not adopt that exclusion to a state that adopts that exclusion. Again, what additional requirements would the generating state have to adopt in order to allow for such shipments.

D. *Regulatory Status of Solvent Still Bottoms*

A fourth implementation issue is whether still bottoms from the reclamation of solvents can be burned for energy recovery without invalidating the 2008 DSW final rule exclusions, which specifically does not include burning for energy recovery. Still bottoms from the reclamation of the solvents listed in 40 CFR 261.31(a) as F001–F005 are themselves listed hazardous waste and are not products of solvent reclamation. These still bottoms are a new point

of generation, and they may be burned for energy recovery under the hazardous waste regulations without invalidating the exclusion.

XVI. State Authorization

A. *Applicability of Rules in Authorized States*

Under section 3006 of RCRA, EPA may authorize a qualified state to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state. A state may receive authorization by following the approval process described in 40 CFR 271.21 (see 40 CFR part 271 for the overall standards and requirements for authorization). EPA continues to have independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. An authorized state also continues to have independent authority to bring enforcement actions under state law.

After a state receives initial authorization, new federal requirements promulgated under RCRA authority existing prior to the 1984 Hazardous and Solid Waste Amendments (HSWA) do not apply in that state until the state adopts and receives authorization for equivalent state requirements. In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new federal requirements and prohibitions promulgated pursuant to HSWA provisions take effect in authorized states at the same time that they take effect in unauthorized states. As such, EPA carries out HSWA requirements and prohibitions in authorized states, including the issuance of new permits implementing those requirements, until EPA authorizes the state to do so. Authorized states are required to modify their programs only when EPA enacts federal requirements that are more stringent or broader in scope than the existing federal requirements. [58] RCRA section 3009 allows the states to impose standards more stringent than those in the federal

[58] EPA notes that decisions regarding whether a state rule is more stringent or broader in scope than the federal program are made when the Agency authorizes state programs.

program (see also 40 FR 271.1(i)). Therefore, authorized states are not required to adopt federal regulations, both HSWA and non-HSWA, that are considered less stringent than previous federal regulations or that narrow the scope of the RCRA program.

B. *Effect on State Authorization of Proposed Rule*

Today's notice proposes regulations that, if finalized, would not be promulgated under the authority of HSWA. Thus, the standards, if finalized, would be applicable on the effective date only in those states that do not have final authorization of their base RCRA programs. Moreover, authorized states are required to modify their programs only when EPA promulgates federal regulations that are more stringent or broader in scope than the authorized state regulations. For those changes that are less stringent, states are not required to modify their program. This is a result of section 3009 of RCRA, which allows states to impose more stringent regulations than the federal program.

The revisions to the definition of solid waste being proposed today are more stringent than those promulgated under the 2008 DSW final rule, so those states which have adopted the 2008 DSW final rule would be required to modify their programs if these standards are finalized. However, when compared to the federal program that was in place when the 2008 DSW final rule was finalized, many of today's proposed revisions would be considered less stringent (e.g., the revised generator-controlled exclusion and the potential re-manufacturing exclusion) or are neither more nor less stringent (i.e., the alternative Subtitle C regulations for reclaimed hazardous recyclable materials). Therefore, authorized states that have not adopted the 2008 DSW final rule would not be required to modify their programs to adopt these standards, if finalized.

However, the potential revisions to the other recycling exclusions and exemptions

discussed in Section XIII of this preamble that EPA is currently requesting comment on, including codifying the legitimacy criteria for other exclusions as discussed in Section X of the preamble, would be more stringent than the current federal hazardous waste program, and all authorized states would be required to modify their programs to adopt equivalent, consistent and no less stringent requirements. Also, the proposed changes to the standards and criteria for variances from classification as a solid waste discussed in Section XI would be more stringent than the current federal hazardous waste program, and all authorized states which have adopted the underlying § 260.31 variance procedures would be required to modify their programs to adopt equivalent, consistent and no less stringent requirements.

XVII. Administrative Requirements for This Rulemaking

A. Executive Orders 12866 and 13563: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it is likely to "raise novel legal or policy issues" under section 3(f)(4) of Executive Order 12866. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

In addition, EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is contained in EPA's Regulatory Impact Analysis (RIA) document titled "EPA's 2011 Proposed Revisions to Industrial Recycling Exclusions of the RCRA Definition of Solid Waste" which is available for public download from the docket for this action. The RIA is briefly summarized here.

The RIA evaluates the potential future impacts of the seven proposed revisions (i.e.,

Options 1 to 7 in the RIA) to the DSW regulatory exclusions for industrial hazardous secondary materials recycling. Six of the seven proposed revisions (i.e., RIA Options 1 thru 6) could affect EPA's 2008 DSW recycling exclusions (three exclusions) involving between 662 and 3,671 facilities currently recycling or disposing industrial hazardous wastes regulated under RCRA Subtitle C without exclusions, while three of today's proposed revisions (i.e., RIA Options 4, 5, and 7) in part or in whole could affect EPA's pre-2008 recycling exclusions involving an estimated 5,321 industrial facilities engaged in current RCRA-excluded recycling activities (32 exclusions).

The RIA presents a qualitative description of three categories of expected future environmental and economic benefits for the proposed revisions: (1) reduction in future environmental damage cases associated with industrial hazardous secondary materials recycling; (2) increased environmental compliance; and (3) reduced liability, less regulatory uncertainty, and lower legal and credit costs for recycling facilities.

In aggregate, the RIA estimates the future average annualized costs to industry to comply with the seven proposed revisions at between $7.2 million to $13.1 million per year under a lower-bound state adoption scenario, which results in 13% of recycling facilities implementing the revisions, and between $7.4 million to $47.5 million per year under an upper-bound state adoption scenario, which results in 74% of recycling facilities implementing the revisions (2011$ @7% discount rate). Based on the 13% implementation scenario, netting out the $7.2 million to $13.1 million average annual future costs for the seven proposed revisions, from the 2011-updated DSW regulatory cost savings baseline of $86.7 million per year (consisting of $79.3 million per year cost savings to industry associated with the pre-2008 DSW exclusions, plus $7.4 million cost savings per year for the 13% adoption rate of the 2008 DSW recycling exclusions),

yields a future average annual net cost savings for all DSW exclusions of $73.6 million to $79.5 million per year (@7% "base case" discount rate over 50-years 2015 to 2064).

These two alternative future implementation scenarios represent EPA's uncertainty about the future total count of state government RCRA-authorized programs which may ultimately adopt today's proposal when finalized. The lower-bound cost estimate represents an average annual future implementation rate by facilities based on the actual state government adoption rate associated with the 2008 DSW final rule. As of April 2011, four states (ID, IL, NJ, PA) have adopted the 2008 DSW final rule, five other states and territories (AK, AS, IA, NMI, VI) have adopted by EPA Regional Office administration of the RCRA regulatory program in those areas, and a total of 49 facilities have notified EPA they are managing hazardous secondary materials under the 2008 DSW final rule exclusions (divided over the 2.3 years between the date of today's action and the December 2008 effective date of the October 2008 DSW final rule, this 49 total facility count represents an average annual implementation rate of about 21 facilities per year). The upper-bound cost estimate represents hypothetical future non-adoption by all 12 authorized states that commented unfavorably on the transfer-based exclusion in the 2007 DSW proposed rule.[59] The rule was assumed to go into effect in all other states and territories. Updated information about the identity of state governments which have adopted the 2008 DSW final rule, and the total count and identity of industrial facilities which have notified EPA they are managing hazardous secondary materials under the 2008 DSW final rule exclusions, is available at EPA's "*DSW Final Rule: Resources for Implementation*" Web page at http://www.epa.gov/waste/hazard/dsw/impresource.htm.

[59] The identity of the 12 states which commented unfavorably as potential adopters of the 2008 DSW final rule are listed in Exhibit 12A (pages 136 to 138) of EPA's "Regulatory Impact Analysis" for the 2008 DSW final rule, which is available from EPA's "DSW Rulemakings" webpage at http://www.epa.gov/epawaste/hazard/dsw/rulemaking.htm#2008, or from the Federal regulatory docket as Document ID nr. EPA-HQ-RCRA-2002-0031-0602 at http://www.regulations.gov.

B. Paperwork Reduction Act (Information Collection Request)

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number 2310.02. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

The information requirements proposed for this action help ensure that (1) entities operating under the regulatory exclusions included in today's proposal are held accountable to the applicable requirements and (2) state and EPA inspectors can verify compliance when needed.

EPA estimates the total annual burden to respondents under the new paperwork requirements to be 84,590 hours and $4,456,294 in O&M costs ($10,277,107, including labor costs). Burden and costs continuing from the 2008 ICR include 1,046 hours and $187 O&M ($72,614, including labor costs), respectively. The total annual burden and O&M costs comparable to the 2008 ICR inventory would be 85,635 hours and $4,456,481, or 256,905 hours and $13,369,443 over three years. EPA estimates that the proposed 2011 revisions to the DSW final rule will also affect other related ICRs, increasing their annual burden and costs by 1,240 hours and $8,648 O&M ($79,392, including labor costs), respectively. The total annual respondent burden and cost as a result of the proposed rule, including impacts continuing from the 2008 ICR and impacts to associated ICRs, would be 86,876 hours and $4,465,129 O&M ($10,429,113, including labor costs), respectively.

In addition, EPA estimates the total annual burden to the government under the new paperwork requirements to be 43,863 hours and $1,707 in O&M costs ($2,385,917, including labor costs). Burden and costs continuing from the 2008 ICR include 1,107 hours and $27 in O&M ($60,225, including labor costs), respectively. The total annual burden and O&M costs comparable to the 2008 ICR inventory would be 44,971 hours and $1,734 in O&M costs, or 134,913 hours and $5,202 in O&M costs over three years. EPA estimates that the proposed 2011 revisions to the DSW rule will also affect other related ICRs, increasing their annual burden to the government by 12 hours ($481 labor costs), but no new O&M costs. The total annual burden and cost to the government as a result of the proposed rule, including impacts continuing from the 2008 ICR and impacts to associated ICRs, would be 44,982 hours and $1,734 O&M ($2,444,889, including labor costs), respectively.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, EPA has established a public docket for this rule, which includes this ICR, under Docket ID number EPA-HQ-RCRA-2010-0742. Submit any comments related to the ICR to EPA and OMB. See ADDRESSES section at the beginning of this notice for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after [Insert date of publication in the Federal Register.], a comment to OMB is best assured of having its full effect if OMB receives it by [Insert date 30 days after publication in the Federal Register]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purpose of assessing the impacts of today's proposed rule on small entities, small entity is defined as (1) a small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

As presented in EPA's RIA for today's proposal, the types of small entities which could potentially be directly regulated are in a wide range of up to 620 industries. For purposes of analysis, the RIA evaluated potential small business impacts in 27 NAICS code industries with the largest number of facilities potentially affected. This RIA identified the 27 industries by first looking at the count of facilities by 6-digit NAICS codes for the current population of facilities recovering hazardous secondary materials, including (1) 323110 Commercial Lithographic Printing; (2) 324110 Petroleum Refineries; (3) 325188 All Other Basic Inorganic Chemical

Manufacturing; (4) 325199 All Other Basic Organic Chemical Manufacturing; (5) 325211 Plastics Material and Resin Manufacturing; (6) 325412 Pharmaceutical Preparation Manufacturing; (7) 325510 Paint and Coating Manufacturing; (8) 325998 All Other Miscellaneous Chemical Product and Preparation Mfg; (9) 326199 All Other Plastics Product Manufacturing; (10) 331111 Iron and Steel Mills; (11) 331492 Secondary Smelting, Refining & Alloying of Nonferrous Metal (except Copper, Aluminum); (12) 332312 Fabricated Structural Metal Manufacturing; (13) 332812 Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers; (14) 332813 Electroplating, Plating, Polishing, Anodizing and Coloring; (15) 332999 All Other Miscellaneous Fabricated Metal Product Manufacturing; (16) 333415 Air Conditioning, Warm Air Heating Equipment, and Commercial and Industrial Refrigerator Equipment Manufacturing, (17) 334412 Bare Printed Circuit Board Manufacturing; (18) 334413 Semiconductor and Related Device Manufacturing; (19) Printed Circuit Assembly, (20) 336399 All Other Motor Vehicle Parts Manufacturing; (21) 336412 Bare Printed Circuit Board Manufacturing; (22) 336413 Other Aircraft Part and Auxiliary Equipment Manufacturing; (23) 541710 Research & Development in the Physical, Engineering, and Life Sciences; (24) 562211 Hazardous Waste Treatment and Disposal; (25) 611310 Colleges, Universities and Professional Schools; (26) 622110 General Medical and Surgical Hospitals; (27) 928110 National Security.

The estimated potential average annual impact (i.e., added regulatory cost) on small entities is estimated to be significantly less than 1% of annual sales for all affected small entities. The RIA estimates that under the 13% base-case adoption scenario 910 small entities could be affected by today's proposal (if promulgated) out of a total 6,497 affected small plus non-small entities (i.e., 14%), and 1,274 small entities could be affected out of a total 9,102 potentially

affected small plus non-small entities (i.e., 14%) under the 74% upper-bound adoption scenario. These counts include facilities currently operating under the pre-2008 DSW recycling exclusions (32 exclusions), plus additional current RCRA hazardous waste recyclers which in the future could potentially operate under the 2008 DSW recycling exclusions (3 exclusions). However, these facility count estimates are based on analyses presented in EPA's RIA involving EPA's Toxic Release Inventory (TRI) database for the pre-2008 exclusions, and EPA's RCRA Hazardous Waste Biennial Report database for potential adoption of the 2008 DSW exclusions, and both databases have limitations which may make these facility count estimates inaccurate. Specifically, some of the facilities identified using the TRI database may be RCRA conditionally-exempt small quantity generators (CESQGs) which will not be affected by today's proposal (and thus may contribute to over-estimating in the RIA both small and total small plus non-small entities affected under the pre-2008 exclusions), and the BR database does not include comprehensive data on RCRA small quantity generators (SQGs) which may contribute to under-estimating in the RIA both small and total small plus non-small entities.

Based on the RIA's small entity "sales test" impact evaluation method, the highest estimated potential impact on any single small entity as a percentage of annual business revenues (i.e., the "sales test" method) is estimated at 0.41%. The total number of small businesses impacted at this level is estimated at 21 small entities under the 13% base-case adoption scenario, and 30 small entities under the 74% adoption scenario, which represents 2.3% to 2.4%, respectively, of the 910 (13% scenario) to 1,274 (74% scenario) small entities which could be impacted by today's proposal.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities, we continue to be interested in the potential impacts of the proposed

rule on small entities and welcome comments on issues related to such impacts and suggestions on how to reduce such impacts.

D. Unfunded Mandates Reform Act

This rule does not contain 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 one year. Potential future annual added direct costs to state, local, and tribal governments could include 11 administrative activities associated with a number of the options, including (1) receive, review and file biennial notifications (RIA Options 2, 4, 6, & 7); (2) receive, review and file reclamation plan (RIA Option 2); (3) receive, Review and approve emergency plans (RIA Option 2); (4) receive, review and file notification of compliance regarded affected release area (RIA Option 2); (5) review RCRA permit applications and enter into database (RIA Option 2); (6) evaluate legitimacy petitions (RIA Option 4); (7) evaluate legitimacy documentation (RIA Options 4); (8) receive, review, and file re-application for variance or non-waste determination (RIA Option 5); (9) EPA provides online public access to a list (including documentation) of facilities receiving non-waste determinations (RIA Option 5); (10) petition process for re-manufacturing exclusion (RIA Option 6); and (11) other state paperwork requirements under existing paperwork requirements covering 2008 revisions to the RCRA definition of solid waste, RCRA hazardous waste manifest system requirements, hazardous waste generator standards, hazardous waste specific unit requirements and special waste processes and types, and air emission standards for tanks, surface impoundments and containers.

See the RIA for a complete description of the options and the various administrative activities. The RIA estimates that the state government share of future average annualized direct costs for the above seven implementation requirements ranges between $8.5 million and $9.1

million per year. No impacts are expected for local or tribal governments. Because these direct costs are well below the $100 million annual direct cost threshold, this proposed rule is not subject to the requirements of sections 202 or 205 of UMRA. This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It 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, as specified in Executive Order 13132. The RIA for today's action presents an evaluation of whether the proposed regulatory revisions could "impose substantial direct compliance costs" on state or local governments. For purpose of quantitative analysis, the RIA applied a numerical method known as the "$25 million test." The analysis evaluated whether annualized direct compliance costs to state or local governments potentially exceed $25 million per year. Potential future annual added direct costs to state or local governments could include 11 administrative activities associated with a number of the options, including (1) receive, review and file biennial notifications (RIA Options 2, 4, 6, & 7); (2) receive, review and file reclamation plan (RIA Option 2); (3) receive, Review and approve emergency plans (RIA Option 2); (4) receive, review and file notification of compliance regarded affected release area (RIA Option 2); (5) review RCRA permit applications and enter into database (RIA Option 2); (6) evaluate legitimacy petitions (RIA Option 4); (7) evaluate legitimacy documentation (RIA Options 4); (8) receive, review, and file re-application for variance or non-waste determination (RIA Option 5); (9) EPA provides online public access to a list (including documentation) of facilities receiving non-waste

determinations (RIA Option 5); (10) petition process for re-manufacturing exclusion (RIA Option 6); and (11) other state paperwork requirements under existing paperwork requirements covering 2008 revisions to the RCRA definition of solid waste, RCRA hazardous waste manifest system requirements, hazardous waste generator standards, hazardous waste specific unit requirements and special waste processes and types, and air emission standards for tanks, surface impoundment and containers. See the RIA for a complete description of the Options and the various administrative activities. The RIA estimates that the maximum state government share of future average annualized direct costs for these implementation tasks ranges between $8.5 million and $9.1 million per year. No impacts are expected for local governments. Because these direct costs are well below the $25 million test threshold, we conclude that Executive Order 13132 does not apply to this action. However, in the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and state and local governments, EPA specifically solicits comment on this proposed action from state and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Subject to the Executive Order 13175 (65 FR 67249, November 9, 2000), EPA may not issue a regulation that has tribal implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by tribal governments, or EPA consults with tribal officials early in the process of developing the proposed regulation and develops a tribal summary impact statement.

EPA has concluded that this action may have tribal implications. However, it will neither

impose substantial direct compliance costs on tribal governments, nor preempt tribal law. Under the RCRA statute, the federal government implements hazardous waste regulations directly in Indian Country. Thus, the changes to the hazardous waste regulations proposed today would not impose any direct costs on tribal governments. In addition, currently there are no facilities operating on land controlled by tribal governments, but if such facilities did locate in such areas, then this action could have tribal implications, to the extent that the proposed rule is intended to address potential adverse impacts of the 2008 DSW final rule.

EPA consulted with tribal officials early in the process of developing this regulation to ensure they had an opportunity for meaningful and timely input into its development. Tribal representatives participated in the public meetings EPA held on the draft environmental justice methodology and noted that the census data used as the basis for the demographic analysis can undercount indigenous populations. EPA has noted this limitation in the analysis and has committed to working independently with the tribal governments as the rulemaking moves forward to ensure their concerns have been met. EPA specifically solicits additional comment from tribal officials on this proposed action and any tribal implications.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in Executive Order 12866. EPA has determined that this proposed rule will not have an adverse impact to children's health because it increases the level of environmental protection for all affected populations, including children. This action's health assessment are contained in Section VI of this preamble (as the hazard characterization portion of the environmental justice analysis). The public is invited to submit

comments or identify peer-reviewed studies and data that assess effects of early life exposure to hazardous secondary materials being reclaimed.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. As defined in Executive Order 13211, a "significant energy action" is any action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking that: (1) is a significant regulatory action under Executive Order 12866 or any successor order and is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by OMB as a significant energy action. This rule does not involve the supply, distribution, or use of energy and is not a significant regulatory action under Executive Order 12866. Thus, Executive Order 13211 does not apply to this rule.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

J. Executive Order 12898: Environmental Justice

Executive Order 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. The purpose of this proposal is to revise the 2008 DSW final rule in such a way that reduces potential adverse impacts, including potential disproportionate impacts to minority and low-impact communities. See Section VI. for further discussion of the environmental justice analysis that was conducted for this proposed rule, a copy of which is included in the docket to today's proposed rule. In addition, the environmental justice analysis was subject to peer review. Copies of the peer review comments that EPA received, as well as how EPA responded to those comments are also in the docket to this proposal. EPA requests comments on EPA's environmental justice analysis, and whether there remains any potential adverse impacts of the proposed rule, including disproportionate impacts to minority and low-income communities, that is within the Agency's discretion to address.

List of Subjects

40 CFR Part 260

Environmental protection, Administrative practice and procedure, Hazardous waste, Reporting and recordkeeping requirements

40 CFR Part 261

Environmental protection, Hazardous waste, Solid Waste, Recycling

40 Part 266

Environmental protection, Hazardous Waste, Recycling

Dated: JUN 30 2011

Lisa P. Jackson,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

- 1. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6935, 6937, 6938, 6939 and 6974.

Subpart B—Definitions

- 2. Amend section 260.10 as follows:
    a. Remove the definition of "hazardous secondary material generated and reclaimed under the control of the generator,"
    b. Add in alphabetical order the definition of "contained" to read as follows:

§ 260.10 Definitions

* * * * *

Contained means a unit (including a land-based unit as defined in this subpart) that meets the following criteria: (1) the unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials

in the unit; and (3) the unit does not hold incompatible materials and addresses any potential risks of fires or explosions. Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are considered to be contained.

* * * * *

Subpart C—Rulemaking Petitions

- 3. Section 260.30 is amended by revising the introductory paragraph to read as follows:

§ 260.30 Non-waste determinations and variances from classification as a solid waste.

In accordance with the standards and criteria in § 260.31 and § 260.34 and the procedures in § 260.33, the Regional Administrator may determine on a case-by-case basis that the following recycled materials are not solid wastes:

* * * * *

- 4. Amend § 260.31 as follows:
    a. Revise the introductory text of paragraphs (a) and (b);
    b. Revise paragraph (c).

§ 260.31 Standards and criteria for variances from classification as a solid waste.

(a) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or

transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The Regional Administrator's decision will be based on whether the hazardous secondary material is legitimately recycled as specified in § 260.43 and the following criteria:

* * * * *

(b) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on whether the hazardous secondary material is legitimately reclaimed as specified in § 260.43 and the following criteria:

* * * * *

(c) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that have been partially reclaimed but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. A determination that a partially reclaimed material for which the variance is sought is commodity-like will be based whether the hazardous secondary material is legitimately recycled as specified in §260.43 and on whether all of the following decision criteria are satisfied:

(1) Whether the degree of partial reclamation the material has undergone is substantial;

(2) Whether the partially-reclaimed material has sufficient economic value that it will be purchased for final reclamation;

(3) Whether the partially-reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials which feeds subsequent production steps;

(4) Whether there is a guaranteed end market for the partially-reclaimed material;

(5) Whether the partially-reclaimed material is handled to minimize loss.

- 5. Section 260.32 is amended by revising the introductory paragraph to read as follows:

§ 260.32 Variances to be classified as a boiler.

In accordance with the standards and criteria in § 260.10 (definition of "boiler"), and the procedures in § 260.33, the Regional Administrator may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in § 260.10, after considering the following criteria:

* * * * *

- 6. Section 260.33 is amended by revising the introductory paragraph and paragraphs (a), (b), and (c) and by adding paragraph (d) to read as follows:

§ 260.33 Procedures for variances from classification as a solid waste, for variances to be classified as a boiler, for legitimacy variances, or for non-waste determinations.

The Regional Administrator will use the following procedures in evaluating applications for variances from classification as a solid waste, applications to classify particular enclosed

controlled flame combustion devices as boilers, applications for legitimacy variances, or applications for non-waste determinations.

(a) The applicant must apply to the Regional Administrator for the variance or non-waste determination. The application must address the relevant criteria contained in § 260.31, § 260.32, § 260.34, or § 260.43 as applicable.

(b) The Regional Administrator will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement or radio broadcast in the locality where the recycler is located, and be made available on EPA's Web site. The Regional Administrator will accept comment on the tentative decision for 30 days, and may also hold a public hearing upon request or at his discretion. The Regional Administrator will issue a final decision after receipt of comments and after the hearing (if any).

(c) In the event of a change in circumstances that affect how a hazardous secondary material meets the relevant criteria contained in § 260.31, § 260.32, § 260.34 or § 260.43 upon which a variance or non-waste determination has been based, the applicant must re-apply to the Regional Administrator for a formal determination that the hazardous secondary material continues to meet the relevant criteria and therefore is not a solid waste.

(d) Facilities receiving a variance or non-waste determination must provide notification as required by § 260.42 of this chapter.

- 7. Amend § 260.34 as follows:

a. Revise the introductory text of paragraph (a);

b. Revise the introductory text of paragraph (b) and (b)(4);

c. Revise the introductory text to paragraph (c) and (c)(5).

§ 260. 34 Standards and criteria for non-waste determinations.

(a) An applicant may apply to the Regional Administrator for a formal determination that a hazardous secondary material is not discarded and therefore not a solid waste. The determinations will be based on the criteria contained in paragraphs (b) or (c) of this section, as applicable. If an application is denied, the hazardous secondary material might still be eligible for a solid waste variance or exclusion (for example, one of the solid waste variances under § 260.31). Determinations may also be granted by the State if the State is either authorized for this provision or if the following conditions are met:

* * * * *

(b) The Regional Administrator may grant a non-waste determination for hazardous secondary material which is reclaimed in a continuous industrial process if the applicant demonstrates that the hazardous secondary material is a part of the production process and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in § 260.43 and on the following criteria:

(1) * * *

(2) * * *

(3) * * *

(4) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under § 261.2 or § 261.4 of this chapter.

(c) The Regional Administrator may grant a non-waste determination for hazardous secondary material which is indistinguishable in all relevant aspects from a product or intermediate if the applicant demonstrates that the hazardous secondary material is comparable to a product or intermediate and is reclaimed and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in §260.43 and on the following criteria:

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(5) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under § 261.2 or § 261.4 of this chapter.

- 8. Amend § 260.42 as follows:
    a. Revise the introductory text to paragraph (a) and (a)(1), (a)(4), (a)(5), (a)(6), (a)(7), (a)(8) and (a)(9);
    b. Remove (a)(10);
    c. Revise paragraph (b).

§ 260.42 Notification requirement for hazardous secondary materials.

(a) Facilities managing hazardous secondary materials or hazardous recyclable materials under §§ 260.30, 261.4(a)(23) or part 266 subpart D must send a notification prior to operating under the regulatory provision and by March 1 of each even-numbered year thereafter to the Regional Administrator using EPA Form 8700-12 that includes the following information:

(1) The name, address, and EPA ID number of the facility;

(2) * * *

(3) * * *

(4) The regulation under which the hazardous secondary materials will be managed;

(5) When the facility began or expects to begin managing the hazardous secondary materials in accordance with the regulation;

(6) A list of hazardous secondary materials that will be managed according to the exclusion (reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous wastes);

(7) For each hazardous secondary material, whether the hazardous secondary material, or any portion thereof, will be managed in a land-based unit;

(8) The quantity of each hazardous secondary material to be managed annually; and

(9) The certification (included in EPA Form 8700-12) signed and dated by an authorized representative of the facility.

(b) If a facility managing hazardous secondary materials has submitted a notification, but then subsequently stops managing hazardous secondary materials in accordance with the regulation(s) listed above, the facility must notify the Regional Administrator within thirty (30) days using EPA Form 8700-12. For purposes of this section, a facility has stopped managing hazardous secondary materials if the facility no longer generates, manages and/or reclaims hazardous secondary materials under the regulation(s) above and does not expect to manage any amount of

hazardous secondary materials for at least one year.

- 9. Section 260.43 is amended by revising the section heading and paragraphs (a), (b) and (c) to read as follows:

§ 260.43 Legitimate recycling of hazardous secondary materials.

(a) Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from the hazardous waste regulations or alternate regulatory standards must be legitimate. Hazardous secondary material that is not legitimately recycled is discarded material and is a solid waste. In determining if their recycling is legitimate, persons must address all the requirements of this paragraph.

(1) Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process. The hazardous secondary material provides a useful contribution if it

(i) Contributes valuable ingredients to a product or intermediate; or

(ii) Replaces a catalyst or carrier in the recycling process; or

(iii) Is the source of a valuable constituent recovered in the recycling process; or

(iv) Is recovered or regenerated by the recycling process; or

(v) Is used as an effective substitute for a commercial product.

(2) The recycling process must produce a valuable product or intermediate. The product or intermediate is valuable if it is

(i) Sold to a third party; or

(ii) Used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

(3) The generator and the recycler must manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material must be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded.

(4) The product of the recycling process

(i) Must contain concentrations of any hazardous constituents found in Appendix VIII of part 261 of this chapter at levels that are comparable to or lower than those found in analogous products; or

(ii) Must not exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit.

(b) Persons performing the recycling of hazardous secondary materials for the purpose of obtaining exclusions or exemptions from the hazardous waste regulations or alternative regulatory standards must maintain documentation of their legitimacy determination on-site.

(1) Documentation must be either a written description of how the recycling meets all four factors in § 260.43(a) or a copy of a legitimacy variance received from the person's implementing agency.

(2) Documentation must be maintained for three years after the recycling operation has ceased.

(c) An applicant may petition the Regional Administrator for a formal determination that a recycling process is legitimate without meeting the requirements under § 260.43(a)(3) or § 260.43(a)(4). The Regional Administrator will use the procedures in § 260.33 in evaluating petitions for legitimacy variances.

(1) In making a determination on a petition for a legitimacy variance, the Regional Administrator will evaluate all factors and consider legitimacy as a whole. In determining whether a process that does not meet one or both of the requirements under § 260.43(a)(3) or § 260.43(a)(4) is still legitimate, the Regional Administrator can consider the protectiveness of the storage methods, exposure from toxics in the product, the bioavailability of the toxics in the product, and any other relevant considerations.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

10. The authority citation for Part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y) and 6938.

Subpart A—General

- 11. Section 261.2 is amended by removing paragraph (a)(2)(ii) and by revising the introductory text to paragraph (e).

§ 261.2 Definition of Solid Waste

* * * * *

(e) *Materials that are not solid waste when recycled.* (1) Materials are not solid wastes when they can be shown to be legitimately recycled as specified in § 260.43 by being:

* * * * *

- 12. Amend § 261.4, as follows:
  a. Republish the introductory text of paragraph (a);
  b. Revise paragraphs (a)(6) and (a)(7);
  c. Revise the introductory text to paragraph (a)(8);
  d. Revise paragraphs (a)(9)(i) and (a)(9)(ii);
  e. Revise paragraphs (a)(10) and (a)(11);
  f. Revise the first sentence of (a)(12)(i);
  g. Revise the first sentence of (a)(12)(ii);
  h. Revise paragraph (a)(13);
  i. Revise the introductory text of paragraph (a)(14);
  j. Revise paragraph (a)(17)(i);
  k. Revise the introductory text to (a)(18);
  l. Revise paragraph (a)(19);

m. Revise the introductory text to paragraph (a)(20) and the introductory text to paragraph (a)(21);

n. Revise paragraph (a)(22)(ii);

o. Revise paragraph (a)(23);

p. Remove paragraphs (a)(24) and (a)(25);

q. Republish the introductory text of paragraph (b);

r. Revise paragraphs (b)(12) and (b)(14).

§ 261.4 Exclusions.

(a) Materials which are not solid wastes. *The following materials are not solid wastes for the purpose of this part:*

* * * * *

(6) Pulping liquors (*i.e.*, black liquor) that are legitimately reclaimed as specified in §260.43 of this chapter in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in §261.1(c) of this chapter.

(7) Spent sulfuric acid legitimately used to produce virgin sulfuric acid as specified in §260.43 of this chapter, unless it is accumulated speculatively as defined in §261.1(c) of this chapter.

(8) Secondary materials that are legitimately reclaimed as specified in §260.43 of this chapter and returned to the original process or processes in which they were generated where they are reused in the production process provided:

* * * * *

(9)(i) Spent wood preserving solutions that have been legitimately reclaimed as specified in §260.43 of this chapter and are reused for their original intended purpose; and

(ii) Wastewaters from the wood preserving process that have been legitimately reclaimed as specified in §260.43 of this chapter and are reused to treat wood.

* * * * *

(10) EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in section 261.24 of this part when, subsequent to generation, these materials are legitimately recycled as specified in §260.43 of this chapter to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before legitimate recovery as specified in §260.43 of this chapter.

(12)(i) Oil-bearing hazardous secondary materials (*i.e.* , sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are legitimately recycled as specified in §260.43 of this chapter by being inserted into the petroleum refining process (SIC code 2911—including, but not limited to, distillation, catalytic cracking, fractionation, gasification (as defined in 40 CFR 260.10) or thermal cracking units (i.e., cokers)) unless the

material is placed on the land, or speculatively accumulated before being so recycled. * * *

(ii) Recovered oil that is legitimately recycled as specified in §260.43 of this chapter in the same manner and with the same conditions as described in paragraph (a)(12)(i) of this section. * * *

(13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being legitimately recycled as specified in §260.43 of this chapter.

(14) Shredded circuit boards being legitimately recycled as specified in §260.43 of this chapter provided that they are:

* * * * *

(17) * * *

(i) The spent material is legitimately recycled as specified in §260.43 of this chapter to recover minerals, acids, cyanide, water or other values;

* * * * *

(18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is legitimately recycled as specified in §260.43 of this chapter by being inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided:

* * * * *

(19) Spent caustic solutions from petroleum refining liquid treating processes legitimately used as a feedstock as specified in § 260.43 of this chapter to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in §261.1(c).

(20) Hazardous secondary materials legitimately used as specified in § 260.43 to make zinc fertilizers, provided that the following conditions specified are satisfied:

* * * * *

(21) Zinc fertilizers legitimately made from hazardous wastes, or hazardous secondary materials that are excluded under paragraph (a)(20) of this section as specified in §260.43 of this chapter, provided that:

* * * * *

(22) * * *

* * * * *

(ii) Used, intact CRTs as defined in §260.10 of this chapter are not solid wastes when exported for legitimate recycling as specified in §260.43 of this chapter provided that they meet the requirements of §261.40.

* * * * *

(23) Hazardous secondary material generated and legitimately reclaimed under the control of the generator provided that it complies with (i) and (ii) below:

(i) (A) The hazardous secondary material is generated and reclaimed at the generating facility (for purposes of this definition, generating facility means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator) or

(B) The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in § 260.10 of this chapter, and if the generator provides one of the following certifications: "on behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], which is controlled by [insert generator facility name] and that [insert the name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material". For purposes of this paragraph, "control" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in § 260.10 of this chapter shall not be deemed to "control" such facilities, or

(C) The hazardous secondary material is generated pursuant to a written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies the following: "on behalf of [insert tolling contractor name], I certify that [insert tolling contractor name] has a written contract with [insert toll manufacturer name] to manufacture [insert name of product or intermediate] which is made from specified unused materials, and that [insert tolling contractor name] will reclaim the hazardous secondary materials generated during this manufacture. On behalf of [insert tolling contractor name] I also

certify that [insert tolling contractor name] retains ownership of, and responsibility for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process". The tolling contractor must maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer must maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). For purposes of this paragraph, tolling contractor means a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. Toll manufacturer means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

(ii) (A) The hazardous secondary material is generated and reclaimed within the United States or its territories.

(B) The hazardous secondary material is contained as defined in § 260.10 of this chapter. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in

a unit with leaks or other continuing releases of the hazardous secondary material is discarded and a solid waste.

(C) The hazardous secondary material is not speculatively accumulated, as defined in § 261.1(c)(8), and the material is placed in a storage unit with a label indicating the first date that the excluded hazardous secondary material began to be accumulated. If placing a label on the storage unit is not practicable, the first date that the excluded hazardous secondary material began to be accumulated must be entered in an inventory log.

(D) Notice is provided as required by § 260.42 of this chapter.

(b) *Solid wastes which are not hazardous wastes.* The following solid wastes are not hazardous wastes:

* * * * *

(12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use in a manner that is legitimate as specified in §260.43 of this chapter.

* * * * *

(14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products in a manner that is legitimate as specified in §260.43 of this chapter.

* * * * *

- *13. Amend § 261.6 as follows:*

  a. Revise paragraph (a)(1);

  b. Revise the introductory text to paragraph (a)(2) and add paragraph (a)(2)(v);

  c. Revise the introductory text to paragraph (a)(3);

  d. Revise paragraph (c)(1) and the introductory text to (c)(2).

§ 261.6 Requirements for recyclable materials.

(a)(1) Hazardous wastes that are legitimately recycled as specified in §260.43 of this chapter are subject to the requirements for generators, transporters, and storage facilities of paragraphs (b) and (c) of this section, except for the materials listed in paragraphs (a)(2) and (a)(3) of this section. Hazardous wastes that are legitimately recycled will be known as "recyclable materials."

(2) The following recyclable materials are not subject to the requirements of this section when legitimately recycled as specified in §260.43 of this chapter but are regulated under subparts C through N of part 266 of this chapter and all applicable provisions in parts 268, 270, and 124 of this chapter.

* * * * *

(v) Hazardous recyclable materials transferred for reclamation (40 CFR part 266, subpart D)

(3**)** The following recyclable materials are not subject to regulation under parts 262 through parts 268, 270, or 124 of this chapter and are not subject to the notification requirements of section 3010 of RCRA when legitimately recycled as specified in §260.43 of this chapter:

* * * * *

(c) (1) Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of subparts A though L, AA, BB, and CC of parts 264 and 265, and under parts 124, 266, 267, 268, and 270 of this chapter and the notification requirements under section 3010 of RCRA, except as provided in paragraph (a) of this section. (The recycling process itself is exempt from regulation as long as the recycling is legitimate as specified in §260.43 of this chapter, except as provided in §261.6(d).)

(2) Owners or operators of facilities that recycle recyclable materials without storing them before they are legitimately recycled are subject to the following requirements, except as provided in paragraph (a) of this section:

* * * * *

Subpart E—Exclusions/Exemptions

- 14. Section 261.38 is amended by adding paragraph (b)(17) to read as follows:

§ 261.38 Exclusion of comparable fuel and syngas fuel.

* * * * *

(b) * * *

* * * * *

(17*) Legitimate recycling.* Excluded fuel must be legitimately recycled as specified in §260.43 of this chapter.

* * * * *

- 15. Section 261.39 is amended by revising the introductory paragraph to read as follows:

§ 261.39 Conditional Exclusion for Used, Broken Cathode Ray Tubes (CRTs) and Processed CRT Glass Undergoing Recycling.

Used, broken CRTs are not solid wastes if they are legitimately recycled as specified in §260.43 of this chapter and meet the following conditions:

* * * * *

- 16. Section 261.40 is amended by being revised to read as follows:

§ 261.40 Conditional Exclusion for Used, Intact Cathode Ray Tubes (CRTs) Exported for Recycling.

Used, intact CRTs exported for legitimate recycling as specified in §260.43 of this chapter are not solid wastes if they meet the notice and consent conditions of §261.39(a)(5), and if they are not speculatively accumulated as defined in §261.1(c)(8).

- 17. Section 261.41 is amended by revising paragraphs (a) and (b) to read as follows:

§ 261.41 Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse.

(a) Persons who export used, intact CRTs for legitimate reuse as specified in §260.43 of this chapter must send a one-time notification to the Regional Administrator. The notification must include a statement that the notifier plans to export used, intact CRTs for reuse, the notifier's name, address, and EPA ID number (if applicable) and the name and phone number of a contact person.

(b) Persons who export used, intact CRTs for legitimate reuse as specified in §260.43 of this chapter must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least three years from the date the CRTs were exported.

Subpart H—Financial Requirements for Management of Excluded Hazardous Secondary Materials

- 18. Part 261 is amended by removing Subpart H (261.140 through 261.151).

Subpart H (§261.140–§261.151) [removed]

PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

- 19. The authority citation for part 266 continues to read as follows:

Authority: 42 U.S.C 1006, 2002(a), 3001–3009, 3014, 3017, 6905, 6906, 6912, 6921, 6922, 6924–6927, 6934, and 6937.

Subpart C—Recyclable Materials Used in a Manner Constituting Disposal

- 20. Section 266.20 is being amended by revising the introductory text to paragraph (a), paragraph (b), and paragraph (d)(2) to read as follows:

§ 266.20 Applicability.

(a) The regulations of this subpart apply to recyclable materials that are applied to or placed on the land, provided they are legitimately recycled as specified in §260.43 of this chapter:

* * * * *

(b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in subpart D of part 268 (or applicable prohibition levels in §268.32 or RCRA section 3004(d), where no treatment standards have been established) for each recyclable material (*i.e.*, hazardous waste) that they contain, provided they are legitimately recycled as specified in §260.43 of this chapter.

* * * * *

(d) * * *

* * * * *

(2) They meet the applicable treatment standards in subpart D of Part 268 of this chapter for each

hazardous waste that they contain and provided they are legitimately recycled as specified in §260.43 of this chapter.

- 21. Section 266 is being amended by adding Subpart D to read as follows:

Subpart D — Hazardous Recyclable Materials

§266.30 Applicability

(a) The regulations of this subpart apply to hazardous recyclable materials that are reclaimed as defined in §261.1(a)(4). For the purposes of this subpart, a hazardous recyclable material is a hazardous waste this is being recycled.

(b) A hazardous recyclable material generator may accumulate hazardous recyclable material on-site for one year or less without a permit or without having interim status, provided that:

(1) The hazardous recyclable material generator provides notification as required by

§ 260.42 of this chapter;

(2) The hazardous recyclable material generator makes and documents advance arrangements for reclamation prior to operating under this subpart in a reclamation plan that (i) describes the hazardous recyclable material and identifies the reclamation facility where the material will be sent, (ii) includes written confirmation from the facility that they are able to reclaim the hazardous recyclable material (iii) documents the amount of hazardous recyclable material expected in each shipment and the anticipated frequency of shipments, and (iv) documents that the reclamation is legitimate per 40 CFR 260.43;

(3) While hazardous recyclable materials are being accumulated on-site, each container and tank is labeled or marked clearly with the words, “Hazardous recyclable material”;

(4) The hazardous recyclable material generator complies as applicable either with all requirements applicable to large quantity generators or all requirements applicable to small quantity generators, except for the 90 day storage time limit for large quantity generators and the 180 day (or 270 day) storage time limit for small quantity generators, and except that tanks and containers need not be labeled as containing “hazardous waste” if they instead are labeled as containing “hazardous recyclable materials.”

(c) Persons who transport or who store hazardous recyclable materials other than at the site of generation, prior to reclamation are subject to all applicable requirements of §§263–265 and §268.

Subpart F—Recyclable Materials Utilized for Precious Metal Recovery

- 22. Section 266.70 is being amended by revising paragraph (a) to read as follows:

§ 266.70 Applicability and requirements.

(a) The regulations of this subpart apply to recyclable materials that are legitimately reclaimed as specified in §260.43 of this chapter to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

* * * * *

Subpart G—Spent Lead-Acid Batteries Being Reclaimed

- 23. Section 266.80 is being amended by revising paragraph (a) to read as follows:

§ 266.80 Applicability and requirements.

(a) Are spent lead-acid batteries exempt from hazardous waste management requirements? If you generate, collect, transport, store, or regenerate lead-acid batteries for legitimate reclamation purposes as specified in §260.43 of this chapter, you may be exempt from certain hazardous waste management requirements. Use the following table to determine which requirements apply to you. Alternatively, you may choose to manage your spent lead-acid batteries under the "Universal Waste" rule in 40 CFR part 273.

* * * * *

Subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces

- 24. Section 266.100 is being amended by revising paragraph (a) to read as follows:

§ 266.100 Applicability.

(a) The regulations of this subpart apply to hazardous waste burned or processed in a boiler or industrial furnace (as defined in §260.10 of this chapter) irrespective of the purpose of burning or processing, except as provided by paragraphs (b), (c), (d), (g), and (h) of this section. In this subpart, the term "burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient. The emissions standards of §§266.104, 266.105, 266.106, and 266.107 apply to facilities operating under interim status or under a RCRA permit as specified in §§266.102 and 266.103. Burning for energy recovery and processing for materials recovery or as an ingredient must be legitimate recycling as specified in §260.43 of this chapter.

* * * * *