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The Assistant Administrator for Chemical Safety and Pollution Prevention signed the following *Federal Register* document on September 21, 2015:

Title: Mercury; TSCA Section 21 Petition; Reasons for Agency Response

FRL: 9934-71

Docket No.: **EPA-HQ-OPPT-2015-0626**

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Chapter I

EPA-HQ-OPPT-2015-0626; FRL-9934-71

Mercury; TSCA Section 21 Petition; Reasons for Agency Response

AGENCY: Environmental Protection Agency (EPA).

ACTION: Petition; reasons for Agency response.

SUMMARY: This document provides the reasons for EPA's denial of a petition it received under Section 21 of the Toxic Substances Control Act (TSCA). The TSCA section 21 petition was received from the Natural Resources Defense Council (NRDC) and the Northeast Waste Management Officials' Association (NEWMOA) on June 24, 2015. The petitioners requested EPA to "promulgate a TSCA section 8(a) rule that requires persons who manufacture, process, or import into the United States mercury, mercury compounds, or mercury-added products to keep records of and submit information to EPA concerning such manufacture, processing, or importation of mercury." After careful consideration, EPA denied the TSCA section 21 petition for the reasons discussed in this document.

DATES: EPA's response to this TSCA section 21 petition was signed September 21, 2015.

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Thomas Groeneveld, National Program Chemicals Division (7404M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; telephone number: 202-566-1188; email address:

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SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

This action is directed to the public in general. This action may, however, be of interest to those persons who manufacture, process, or distribute in commerce mercury, mercury compounds, or mercury-added products. Since other entities may also be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action.

B. How Can I Access Information About this Petition?

The docket for this TSCA section 21 petition, identified by docket identification (ID) number EPA-HQ-OPPT-2015-0626, is available at <http://www.regulations.gov> or at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave., NW., 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 is (202) 566-1744, and the telephone number for the OPPT Docket is (202) 566-0280. Please review the visitor instructions and additional information about the docket available at <http://www.epa.gov/dockets>.

II. TSCA Section 21

A. What is a TSCA Section 21 Petition?

Under TSCA section 21 (15 U.S.C. 2620), any person can petition EPA to initiate a rulemaking proceeding for the issuance, amendment, or repeal of a rule under TSCA section 4, 6, or 8 or an order under TSCA section 5(e) or 6(b)(2). A TSCA section 21 petition must set forth the facts that are claimed to establish the necessity for the action requested. EPA is required to grant or deny the petition within 90 days of its filing. If EPA grants the petition, the Agency must promptly commence an appropriate proceeding. If EPA denies the petition, the Agency must publish its reasons for the denial in the **Federal Register**. A petitioner may commence a civil action in a U.S. District Court to compel initiation of the requested rulemaking proceeding within 60 days of either a denial or the expiration of the 90-day period.

B. What Criteria Apply to a Decision on a TSCA Section 21 Petition?

Section 21(b)(1) of TSCA requires that the petition “set forth the facts which it is claimed establish that it is necessary” to issue the rule or order requested. 15 U.S.C. 2620(b)(1). Thus, TSCA section 21 implicitly incorporates the statutory standards that apply to the requested actions. In addition, TSCA section 21 establishes standards a court must use to decide whether to order EPA to initiate rulemaking in the event of a lawsuit filed by the petitioner after denial of a TSCA section 21 petition. 15 U.S.C. 2620(b)(4)(B). Accordingly, EPA has relied on the standards in TSCA section 21 and in the provisions under which actions have been requested to evaluate this TSCA section 21 petition.

III. Summary of the TSCA Section 21 Petition

A. What Action Was Requested?

On June 24, 2015, NRDC and NEWMOA petitioned EPA to “promulgate a TSCA section 8(a) rule that requires persons who manufacture, process, or import into the United States mercury, mercury compounds, or mercury-added products to keep records of and submit information to EPA concerning such manufacture, processing, or importation of mercury” (Ref. 1). In describing the framework for the envisioned rule, the petitioners offer definitions for various terms and modifications to exemptions to TSCA section 8(a) information-gathering rules (see 40 CFR 704.5); describe persons who would be required to report in the envisioned information collecting and reporting apparatus; explain why existing quantity- and sales-based reporting thresholds should or should not apply to the persons who must report; establish the minimal amounts of information EPA should request via sets of example questions applicable to mercury, mercury compounds, mixtures containing mercury, and mercury-added products; and set forth their preferred frequency and format for reporting, as well as certification and recordkeeping requirements (Ref. 1).

B. What Support Do the Petitioners Offer?

The petitioners state that a “lack of comprehensive data on mercury production and use in the United States has been acknowledged by virtually all of the federal and state agencies involved in tracking or regulating the chemical in commerce” (Ref. 1). The petitioners state that there is “no mechanism in place to obtain such data,” which is underscored by describing data gaps in the Interstate Mercury Education Reduction Clearinghouse (IMERC) and discussing the limitations of Agency resources, including the September 2014 “EPA Strategy to Address Mercury-Containing Products” (EPA Strategy or Strategy) (Ref. 2), the Toxics Release Inventory (TRI) program (Ref. 3), and

the Chemical Data Reporting (CDR) Rule (Ref. 4). Collecting comprehensive data is necessary, the petitioners say, to “prevent unreasonable risks of injury to human health and the environment created by the ongoing manufacture, processing, and importation of mercury and mercury compounds” (Ref. 1). As such, the petitioners argue that a TSCA section 8(a) rule is “warranted” because available data are inadequate to determine whether mercury used in products and processes, in fact, creates unreasonable risk and, if so, the appropriate means to reduce such risk (Ref. 1). The petitioners also point to the obligations of the Minamata Convention on Mercury (Minamata Convention), which the United States signed and joined on November 6, 2013, that they believe will go unfulfilled without the collection of comprehensive data. In addition, the petitioners argue that “incomplete and non-comprehensive data hampers EPA’s ability to effectively assess risks from exposure to mercury” and, therefore, the TSCA section 8(a) rule envisioned “would result in substantial benefits” (Ref. 1). Based on these assertions, as well as a discussion of the toxicity, exposure pathways, and risks associated with mercury used in products and processes, the petitioners state that “there is a reasonable—indeed, an ample—basis to conclude that a section 8(a) reporting rule for mercury is necessary to protect health and the environment against an unreasonable risk of injury to health and the environment from ongoing domestic uses of mercury in products and processes” (Ref. 1).

IV. Disposition of TSCA Section 21 Petition

A. What is EPA’s Response?

After careful consideration, EPA denied the petition. EPA found that the continued implementation of its published EPA Strategy (Ref. 2) is sufficient to carry out

TSCA, as well as preferable for achieving the goal it shares with the petitioners: to acquire the information needed to allow EPA to better understand continuing uses of mercury, to further reduce such uses, and to prevent potential exposure and risk to human health and the environment linked to releases of mercury into the environment. A copy of the Agency's response, which consists of a letter to the petitioners, is available in the docket for this TSCA section 21 petition.

B. What is EPA's Reason for this Response?

EPA agrees with many aspects of the petition. The Agency agrees that mercury poses potential risks to human health and the environment and that there is value in gathering additional information to better understand continuing uses of mercury, to further reduce such uses, and to prevent potential risks to human health and the environment from mercury exposure. However, EPA believes that continued implementation of its EPA Strategy is a faster, more efficient pathway towards achieving our shared goals and is confident that the actions contemplated under the Strategy are both sufficient to carry out TSCA and preferable to the requested rulemaking.

1. Background on TSCA section 8. TSCA section 8(a) (15 U.S.C. 2607(a)) authorizes EPA to promulgate rules under which manufacturers (including importers) and processors of chemical substances must maintain records and submit such information as the EPA Administrator may reasonably require. TSCA section 8(a) also authorizes EPA to promulgate rules under which manufacturers and processors of mixtures must maintain records and submit information to the extent the EPA Administrator determines the maintenance of records or submission of reports, or both, is necessary for the effective enforcement of TSCA. TSCA section 8(a) generally excludes small manufacturers and

processors of chemical substances or mixtures from the reporting requirements (see 15 U.S.C. 2507(a)). However, EPA is authorized by TSCA section 8(a)(3)(A)(ii) to require TSCA section 8(a) reporting from small manufacturers and processors with respect to any chemical substance or mixture that is the subject of a rule proposed or promulgated under TSCA section 4, 5(b)(4), or 6, or that is the subject of an order in effect under TSCA section 5(e), or that is the subject of relief granted pursuant to a civil action under TSCA section 5 or 7. TSCA section 8(a) also provides that, to the extent feasible, the EPA Administrator must not require reporting under TSCA section 8(a)(1) that is unnecessary or duplicative. If the Agency denies a petition submitted under TSCA section 21, judicial review for TSCA section 8(a) requires the petitioner to show by a “preponderance of the evidence that . . . there is a reasonable basis to conclude that the issuance of such a rule or order is necessary to protect health or the environment against an unreasonable risk of injury” (15 U.S.C. 2620(b)(4)(B)(ii)).

2. *State of domestic mercury marketplace.* The United States has seen a strong downward trend of more than 97 percent in the domestic use of mercury in products over the past three decades. In 1980, the United States used more than 1,800 metric tons of mercury annually; in 2010, the continued annual use of mercury in manufactured or imported products was approximately 52 metric tons. Likewise, the use of mercury in industrial processes, such as chlor-alkali manufacturing, has also fallen dramatically from 358 metric tons in 1980 to an estimated 38 metric tons in 2001. This shifting landscape can be attributed to a number of factors, including market trends leading to the voluntary reduction of use of mercury in products and processes; federal, regional, state, and local programs that encourage the use of effective and economically feasible non-mercury

substitutes; state laws or regulations that prohibit or reduce the use of mercury in products; and Congressional actions that banned the sale of a range of mercury batteries and prohibited the export of mercury (e.g., the Mercury-Containing and Rechargeable Battery Management Act of 1996 (Pub. L. 104-142) and the Mercury Export Ban Act of 2008 (MEBA) (Pub. L. No. 110-114)). The United States also negotiated and joined the Minamata Convention, which contains requirements aimed at reducing the use of mercury. The convergence of such historic trends and actions, as well as continued downward trends in mercury use in products in more recent years, helped identify categories of mercury-added products of greatest concern and guided the development of the EPA Strategy.

3. The EPA Strategy: development and implementation. In developing the EPA Strategy, the Agency did not believe it made sense to promulgate a comprehensive information-gathering rule for mercury, on top of the existing regulatory and statutory information collection requirements applicable to chemical substances generally. Rather, EPA decided to adopt a more targeted approach and to create a framework that was flexible and adaptive to observed trends in the use of mercury. As a result, the EPA Strategy seeks to build on the “demonstrated success for more than three decades of reducing mercury use in traditional product and process categories . . . to further reduce mercury use in products and certain processes in order to prevent future releases to the environment” (Ref. 2).

The EPA Strategy consists of five phases: (1) update EPA’s information on mercury products and certain processes; (2) analyze updated mercury use information; (3) plan and prioritize mercury reduction activities; (4) take non-regulatory actions to

reduce use; and (5) take regulatory actions to reduce use, if needed (Ref. 2). The Strategy is structured to provide a logical progression from the gathering of information to taking actions to reduce the use of mercury and, as necessary, mercury compounds. However, the Strategy is also intended to allow for proceeding immediately to such use reduction options should information warrant such actions, as well as reassessment of an intended course of action (e.g., methodology for gathering information) at any point during its implementation.

The EPA Strategy specifically targets updating data regarding mercury quantities in “new products entering the market, with particular attention to switches and relays” and “as appropriate, processes that use mercury as a catalyst” (Ref. 2). For example, the use of mercury in switches and relays (including thermostats) sold in the United States decreased from approximately 68 metric tons in 2001 to approximately 18 metric tons in 2010 – a nearly 74 percent decrease in under a decade. However, at 33 percent of mercury used in products sold in the United States, switches and relays also represent the largest category of mercury-added products. In fact, in joining the Minamata Convention, the United States demonstrated that mercury used in eight of nine subject categories was reduced to *de minimis* levels. The lone category for which such a demonstration was not made was switches and relays. As a result, the Agency identified switches and relays as a priority category of mercury use in the EPA Strategy.

The Agency has sufficient information on the use of mercury in certain categories of other mercury-added products (e.g., batteries, lamps, measuring devices). Yet, despite the aforementioned downward trend of use of mercury in products and manufacturing processes in general, EPA is interested in learning more about mercury-added products

that continue to enter the market (i.e., new products) and the prevalence of the use of mercury and mercury compounds in catalysts.

The Agency is currently in the first phase of implementing its Strategy, which lists priority mercury-added product and process categories (switches, relays, new products, and catalysts), describes the progression of stakeholders from whom information is to be collected (mercury manufacturers and importers, mercury processors, and other stakeholders), and commits to conducting outreach throughout the implementation of the Strategy (Ref. 2). Following this phase, EPA will assess information gathered and compare data to existing Agency baselines derived from IMERC, the TRI program, the CDR Rule, and other research (Phase 2). Results of the second phase will be used to define or modify product categories and identify remaining data gaps or other limitations that could affect the planning and prioritization of reduction activities (Phase 3). At this juncture, the Agency could consider the use of voluntary efforts to reduce the use of mercury (Phase 4), as well as a Section 8(a) rule or other appropriate regulatory measure (Phase 5). At this point in time, however, EPA believes the implementation of the EPA Strategy, which uses a variety of both voluntary and regulatory measures as needed, is sufficient to carry out TSCA.

4. The EPA Strategy is working and will continue to work. The petitioners accurately identify the Agency's goals to continue to collect and analyze information to better understand the current and future use of mercury. However, the petitioners focus exclusively on the voluntary information-collection component within the first of five phases to conclude that "the voluntary approach has not worked thus far, and there is no reasonable basis to believe it ever will" and "the need for and the utility of a rulemaking

that would require mandatory reporting from all mercury, mercury-compound, and mercury-mixture manufacturers has been demonstrated” (Ref. 1). By focusing on the Agency’s preference to initially proceed on a voluntary basis, the petitioners overlook that the Strategy contemplates “additional available regulatory steps being necessary” (Ref. 2). In fact, the Agency finds that the best approach is to employ voluntary or regulatory mechanisms to collect information based on particular circumstances. For example, after publishing the EPA Strategy in September 2014, the Agency conducted a series of letter requests and teleconferences with companies identified as nine key players in the mercury marketplace in October and November 2014.

While the petitioners express skepticism with this approach due to its initiation with only nine companies, this was a strategic approach that the Agency expected to yield relevant information. The initial list of nine was derived from more than one hundred potential companies based on thorough research and professional judgment to identify companies likely to provide a reasonably complete picture of the domestic market for recycling and selling mercury. This approach allowed for the systematic elimination of companies less likely to have significant information from consideration and minimized the potential burden to both stakeholders and the Agency. In fact, the information received led EPA to further narrow its investigation to five companies it believes to be the primary recyclers and distributors of mercury in the United States. Based on those efforts – and the failure of certain companies from the narrowed list of five to voluntarily provide agreed to information – EPA issued subpoenas in March 2015 to those five companies (Ref. 5).

5. Effective use of regulatory tools via the EPA Strategy. The subpoenas consisted

of twelve information requests designed to ascertain specific information on quantities of mercury manufactured (including imported), processed, stored on-site, or distributed in commerce (including transferred off-site, sold and exported), as well as lists of customers to whom mercury was sold (Ref. 5). The activities related to mercury were selected to cross-reference with similar reporting requirements for the TRI program and CDR Rule. Of particular interest to the Agency were quantities reported for mercury manufactured and processed (e.g., recycled from various waste streams), sold, imported, and exported, which represents key aspects of the domestic mercury marketplace. EPA requested this information to better understand how mercury flows through the five primary facilities that recycle and sell mercury with the goal of identifying the amount of mercury likely being used to produce mercury-added products or in manufacturing processes in the United States. The subpoenas requested that annual totals of mercury in pounds for such activities be reported for 2010 and 2013. These years were selected to not only coincide with IMERC reporting years, but also because they could provide a before-and-after illustration of how two mercury-related measures affected the domestic mercury market place: MEBA and the conclusion of the negotiation of the Minamata Convention. The reporting years also were selected to allow a trend comparison for reported quantities without creating undue burden on the companies subject to the subpoenas. The subpoenas also requested customer lists for each company as of January 1, 2015. This date was selected as a fixed and recent date relative to the issuance of the subpoenas in March 2015. Each of the five companies subject to the subpoenas supplied the information requested in full.

Due to extensions granted to certain companies, some responses were submitted

after the initial 30-day deadline. This resulted in the initial completion of the full data set at the end of June 2015, only days after the petitioners submitted their petition that concluded that certain approaches outlined in the EPA Strategy were inadequate. The Agency is currently evaluating the information submitted in response to the five March 2015 subpoenas. As necessary, EPA has followed up with companies and clarified responses submitted. Based on its initial review of submitted information, the Agency now has a better understanding of the flow of mercury in the U.S. marketplace and has an inventory of recent lists of companies that purchase elemental mercury from the five companies, including volumes and trends of mercury in key channels of commerce (e.g., manufactured, stored, sold, imported, and exported). The Agency understands that this information collection approach cannot account for imports of mercury-added products or mercury compounds that are not processed by the five companies subject to the March 2015 subpoenas. However, EPA intends to collect such data either through voluntary compliance with letters or through subpoenas, as it determines to be necessary for an adequate understanding of mercury use in the United States through further implementation of EPA Strategy and use of existing Agency resources.

The petitioners express disappointment with the “months” that elapsed since the initiation of the voluntary inquiries to companies in October 2014 and the submission of their petition in June 2015 (Ref. 1). In fact, the Agency conducted the voluntary portion of data collection between October 2014 and December 2014. When that process was not fruitful, the subpoenas were sent in March 2015. Responses to the March 2015 subpoenas were received by the end of June 2015. For comparison, new federal rulemakings often take several years to complete from development through the proposal, public comment,

and finalization phases. A final information collection rule would then need to provide for some period of time following promulgation for the submission of the required information. EPA notes that it already collected data on mercury voluntarily and via subpoena and, based on that experience, could expeditiously issue any further needed subpoenas, whereas the timing of a rulemaking process is less predictable. The Agency gathered information via its Strategy in several months, new data to be collected by the petitioners' requested rule – or another Section 8(a) rule – may not be obtained for several years. For those reasons, EPA believes that the current approach used to collect information from companies that manufacture, recycle, and distribute in commerce elemental mercury has been successful, is more efficient than the development of a new rule, and is sufficient – with some adaptation of the substance of information requests for companies that use mercury in products and processes – to carry out TSCA.

6. The EPA Strategy avoids unnecessary or duplicative reporting. Based on the above discussion, EPA disagrees that there is “no other federal or state mechanism in place that collects the data on mercury production and use in the United States necessary to inform risk-reduction activities” (Ref. 1). As articulated by the petitioners, IMERC, the TRI program, and the CDR Rule each collect data in whole or in part related to mercury and mercury compounds. All of these reporting mechanisms are accessible online. While a single information collection and reporting apparatus identical to the petitioners' requested rule does not currently exist, existing tools, as implemented through the EPA Strategy, are sufficient to gather such data as necessary for the effective implementation of TSCA. EPA is committed to gathering such data, including – as appropriate – through the future use of TSCA section 8. For the same reasons, EPA also disagrees that the EPA

Strategy “implicitly acknowledges that the CDR Rule and its other existing reporting mechanisms are not sufficient to gather the data necessary to make sound decisions about mercury risk-reduction activities” (Ref. 1).

The petitioners also describe various ways in which the TRI program and CDR Rule collect data on mercury and mercury compounds yet how idiosyncrasies within each program prevent the reporting of the specific information they request to be collected. Where the petitioners see insufficiency, the Agency sees opportunity to use existing tools and resources to pinpoint specific data gaps, which may or may not require new regulatory or voluntary actions to gather information. EPA is using quantitative and qualitative information, particularly activity and use information reported to the TRI program, to help narrow the scope of potential stakeholders to be contacted as needed to collect information that EPA determines to be necessary. For example, EPA is reviewing information reported to the TRI program to identify and prioritize how to gather such information.

The TRI program requires facilities that manufacture, process, or otherwise use more than 10 pounds of mercury or mercury compounds during the calendar year to report amounts released to the environment or managed through recycling, energy recovery and treatment (Ref. 6). While the TRI program does not require quantitative reporting for all manufacturing, processing, or use categories, a facility is required to report activities and uses of the toxic chemical including, but not limited to “import,” “for sale/distribution,” “as a reactant,” “as an article component,” and “as a chemical processing aid” (Ref. 7). In this instance, EPA does not see the lack of quantitative reporting as a dead end, but rather as a tool to narrow the number of companies to ask for

more specific information related to the use of mercury in their products and processes. For example, a review of data submitted to the TRI program for “mercury” in 2013 yields 447 facilities that manufactured, processed, or otherwise used mercury. That number can be narrowed to 60 facilities that processed mercury “as an article component” (e.g., used in a product). When the same search is conducted for “mercury compounds,” more than 1,100 facilities can be narrowed to 48 facilities reporting processing into articles. The use of such data allows EPA to reduce the scope of potential manufacturers of mercury-added products by more than 90 percent that under the petitioners’ proposed rule would be required to supply detailed, quantitative data. EPA will perform similar data sorting among facilities that report “import” and “for sale/distribution” of mercury or mercury compounds, which will help further describe how such materials flow through the domestic marketplace. The Agency also plans to examine uses “as a reactant” and “as a chemical processing aid” to help identify the use of mercury or mercury compounds in manufacturing processes. As these examples demonstrate, the Agency believes that it can use existing data to better identify individual facilities for more targeted efforts to collect information.

It is important to note that the 2016 reporting cycle for the CDR Rule (applicable to production volume information for calendar years 2012, 2013, 2014, and 2015; submission period from June 1, 2016, to September 30, 2016) will collect information from persons who manufacture mercury in quantities greater than or equal to 2,500 pounds (Ref. 4); the reporting threshold for mercury in the previous cycle was 25,000 pounds and 100,000 pounds for process and use information. As such, the Agency anticipates receiving quantitative data on mercury in the domestic marketplace from a

larger pool of companies that manufacture (including import) and process mercury. In conjunction with the analysis of TRI program data, EPA plans to use the identities of companies reporting per the lowered threshold to further clarify the pool of potential entities from whom to collect more detailed information. Thus, EPA finds its existing resources, such as the TRI program and CDR Rule, can be instrumental not only in carrying out TSCA, but also to tailor future efforts to collect information on discrete categories of mercury products and processes.

7. EPA intends to target specific information requests to specific entities. EPA anticipates that subsequent efforts to gather information from companies that produce or import mercury-added products and use mercury or mercury compounds in manufacturing processes may require contacting more entities than the nine EPA contacted in late 2014. EPA anticipates using a similar process of research and professional judgment to identify and prioritize companies to contact and will follow appropriate procedures to reach as many companies as needed to obtain relevant information, as necessary. For example, EPA is considering using TSCA section 11 to ask other companies the same kinds of questions posed in the March 2015 subpoenas, but with an emphasis on quantities of mercury and mercury compounds used in the production of products or in manufacturing processes.

Looking at the specific information requested in the petition, the petitioners request two sets of notification requirements between two categories: (1) mercury, mercury compounds, and mixtures containing mercury; and (2) mercury-added products. The petitioners' request of eight notification requirements for information to be reported for mercury, mercury compounds, and mixtures containing mercury can be broken down

into three general categories. The first category consists of location and contact information for company headquarters, facilities that manufacture or process such substances, and technical staff. For mercury and mercury compounds, information comparable to the requests in the first category of notification requirements is reported to the TRI program and the CDR Rule. The second category includes quantitative data on such substances manufactured and processed for distribution in commerce, sold or transferred off-site, and stored on-site. Due to the similarity with questions posed in the March 2015 subpoenas, EPA is satisfied that it ascertained sufficient quantitative information for how mercury is used in such activities. For mercury compounds, EPA believes that information reported to the TRI program for activities and uses can be used to identify and prioritize companies and facilities that could be contacted using the same approach that the Agency used when reaching out to and ultimately issuing subpoenas to individual recyclers and distributors of mercury. The third category requests narrative descriptions of manufacturing and processing processes and end uses of such materials. EPA is not persuaded that such information for mercury or mercury compounds is necessary to carry out TSCA. In particular, it is more appropriate to pose questions regarding end uses to companies or facilities that use mercury or mercury compounds in products or manufacturing processes and not companies that recover mercury from various waste streams. Finally, the Agency is not persuaded that information on mixtures containing mercury is necessary to carry out TSCA. To the best of the Agency's knowledge, the only point in the cycle of mercury manufacture, use, recovery, and reuse when mixtures play a significant role is when mercury is recovered from mercury waste such as contaminated soil or impure laboratory mercury. The resulting elemental mercury

is used, but EPA is not aware of any significant manufacture, processing, or use of mercury mixtures. As EPA reviews the information it has and will collect on mercury and mercury compounds, it will assess the need for information on mixtures and pursue such data as needed.

For mercury-added products, the petitioners also request eight notification requirements. As discussed in regard to mercury, mercury compounds, and mixtures containing mercury, the notification requirements for location and contact information for company headquarters and technical staff pertain to comparable information reported to the TRI program or the CDR Rule. The Agency agrees that collection of the kinds of information listed in three of the eight notification requests suggested by the petitioners can be valuable: quantities of mercury used in products (per unit and total for all units produced in a calendar year), descriptions of product categories produced, and a breakdown of products manufactured (including imported), sold domestically, and exported. Such requirements would provide quantitative information that would benefit the implementation of TSCA by helping to define the overall volume of mercury used, particularly in the priority category of switches and relays. EPA also agrees that it is helpful to ascertain information related to whether switches or relays are “manufactured or processed solely for the purpose of replacement where no feasible mercury-free alternative for replacement is available” (Ref. 1). This information would help the Agency better estimate costs and benefits associated with not only ongoing uses of the switches and relays themselves, but also the larger equipment and systems that use them as components. However, the Agency is not persuaded that notification requirements for descriptions of mercury-added components, including the number of and location in

larger products, is necessary. At this time, EPA anticipates that quantitative data on amounts of mercury contained in or added to such products and processes is likely to be sufficient to make regulatory determinations.

As previously discussed, switches and relays are the largest remaining domestic use of mercury in products by volume in the United States. Better defining the total quantity of mercury in that category, especially given the cessation of reporting of such information via IMERC, is a priority data point within a priority product category. Regardless, even in instances where EPA agrees with the notification requirements proposed by the petitioners, the Agency is not persuaded that the overarching proposed Section 8(a) rule is the appropriate means to collect such information. At this time, the Agency continues to implement its Strategy to determine its next steps, including, but not limited to using TSCA section 11, to collect information from additional companies on mercury used in products and processes. The assessment of information collected to date under the EPA Strategy will inform next steps in the current and future phases of the implementation. In so doing, the Agency is employing the variety of existing tools, including IMERC, the TRI program, and the CDR Rule, as well as the aforementioned voluntary outreach and targeted subpoenas, as necessary. This process is expedient, efficient, and does not duplicate the reporting requirements of IMERC, the TRI program, and the CDR Rule. As the assessment of collected information dictates, the Agency continues to use the tools currently available, while not eliminating the possibility of implementing other voluntary and regulatory options if deemed necessary. Thus, EPA disagrees with the petitioners' conclusions as to the ultimate efficacy of the EPA Strategy, its sufficiency to carry out TSCA, and the need for EPA to immediately pursue

a TSCA section 8(a) rulemaking.

8. *The EPA Strategy minimizes undue burdens.* The Agency also disagrees with the petitioners' claim that their requested TSCA section 8(a) rule "would result in substantial benefits" (Ref. 1). As previously stated, the Agency agrees that there is value in gathering more information for certain, individual categories of mercury-added products and processes identified by the petitioners. However, EPA is not persuaded that a TSCA section 8(a) rule at this time – as opposed to continued implementation of the EPA Strategy – would produce substantial or different benefits associated with collecting and reporting information on the use of mercury in products and processes. The EPA Strategy intends to provide for flexibility in the approach to "better understand continuing uses of mercury in . . . products and processes" and "further reduce mercury use in products and certain processes in order to prevent future releases to the environment" (Ref. 2). The Strategy allows for a dynamic and iterative process that can be adapted to specific categories of concern and makes clear that "initiation of future phases may not necessarily be dependent on preceding phases" (Ref. 2). Where the petitioners see a TSCA section 8(a) rule as the remedy to existing EPA resources that do not deliver the data they seek in the format they prefer, the Agency is wary of the potential for duplication of reporting requirements. The rule outlined by the petitioners not only creates potential overlap in the kind of data being submitted under the TRI program and CDR Rule, but also adds another mercury-based reporting requirement, with an incongruous reporting timeline, on top of these two established information-gathering programs. This scenario would require reporting under TSCA section 8(a)(1) that is unnecessary and, in some instances, duplicative. Thus, where the petitioners may

interpret the measure of benefit for the rule they request to derive from the breadth and depth of information collected, the Agency is focusing on more discrete areas of need (i.e., individual product and process categories) that can provide for less burdensome requirements for potential stakeholders and a more efficient approach for the Agency to carry out TSCA in regard to mercury and mercury compounds. As a result, the petitioners' requested TSCA section 8(a) rule would be unduly burdensome both to the Agency and regulated entities.

9. Petitioners failed to demonstrate the requested rule is necessary to protect against unreasonable risk. EPA disagrees that “there is a reasonable . . . basis to conclude that a section 8(a) reporting rule for mercury is necessary to protect health and the environment against an unreasonable risk of injury to health and the environment from ongoing domestic uses of mercury in products and processes” (Ref. 1). Central to the petitioners' claim is that:

The lack of adequate data on mercury use in products and processes prevents a complete accounting of the full extent of the human health risks from exposure to mercury . . . [and] EPA cannot fully address the health and environmental risks from mercury exposure without adequate data about ongoing mercury uses . . . In addition, such data collection is necessary to allow EPA to monitor any development of new mercury uses, so that the agency can assess the risks to human health that may be presented by such new uses.
(Ref. 1).

The petitioners go on to state “incomplete and non-comprehensive data hampers EPA's ability to effectively assess risks from exposure to mercury” (Ref. 1). The petitioners then cite various EPA statements regarding risk management decision-making that speak to the availability and adequacy of information, as well as the EPA Strategy and its intent to gather more and updated information related to mercury used in products and processes

(Ref. 1). The petitioners then conclude that without “comprehensive national data about ongoing mercury uses in products and processes . . . EPA *cannot* make informed, sound decisions about how to further reduce risks from mercury exposure” (emphasis added) (Ref. 1). The Agency disagrees with this conclusion. EPA is unaware of statutory authority, applicable case law, or Agency policy that would preclude risk assessment or actions to reduce risk based on the fact that available information is limited. While EPA risk assessment guidance lists the quality and comprehensiveness of data as factors that can diminish uncertainty, an “acceptable data set is one that is consistent with the scope, depth, and purpose of the assessment, and is both relevant and adequate” (Ref. 8). In this context, adequacy can be determined “by evaluating the amount of data available and the accuracy of the data” (Ref. 8). The same guidance also states that “[d]ata of insufficient quality will have little value for problem solving, while data of quality vastly in excess of what is needed to answer the questions asked provide few, if any, additional advantages” (Ref. 8). To achieve its stated goals to “acquire a more robust baseline of mercury quantities used in products and processes . . . [and] enhance data on manufacture, export, and import for certain categories of mercury use” (Ref. 2), the Agency’s current approach will provide data on mercury that are not only adequate and relevant, but also more narrowly tailored to products and processes of greatest concern (e.g., switches, relays, new products, and catalysts). While EPA recognizes that these products and processes are not exhaustive, these are the categories that EPA has rationally chosen to focus on first. EPA is aware that mercury may be added to other products listed by the petitioners (e.g., rotational balancers, wheel weights, and additives in a variety of children’s products). If EPA determines that additional information targeted to these products is necessary, EPA

will take steps necessary to collect it.

At this stage of implementing the strategy, the Agency also is uncertain what, if any, information is needed on mercury compounds beyond use as catalysts in manufacturing processes. Where products are concerned, for example, the product category of greatest concern (switches and relays) contains elemental mercury, not mercury compounds. Although certain batteries contain mercury oxide, that product group is of lesser concern than switches and relays. EPA will collect information on use of mercury compounds in products if, in the course of carrying out its Strategy, the Agency determines such information to be necessary. At this stage, requiring reporting for mercury compounds in all products while an Agency assessment of needs for such information is pending would require unnecessary reporting under TSCA section 8(a)(1).

Thus, while the Agency is mindful of the petitioners' analysis of mercury-related concerns (e.g., toxicity, exposure, risks presented by releases into the environment, and risk reduction), EPA cannot reach the petitioners' conclusion that "a section 8(a) reporting rule for mercury is necessary to protect health and the environment against an unreasonable risk of injury to health and the environment from ongoing domestic uses of mercury in products and processes" (Ref. 1). While the petitioners articulate how the collection of comprehensive and national data could provide the Agency with more information to weigh in determining unreasonable risk, EPA finds that its current approach could be equally successful while imposing considerably less burden on both EPA and the regulated community in its implementation of TSCA, as well as allowing the Agency to move more quickly on the highest priority product categories. To date, this approach has yielded satisfactory information and the Agency expects that continued

implementation of the EPA Strategy will be an appropriate and effective means to acquire the information needed to allow EPA to better understand continuing uses of mercury, to further reduce such uses, and to prevent potential exposure and risk for human health and the environment linked to releases of mercury into the environment.

Furthermore, while the petition discusses the toxicity and potential risk associated with exposure to mercury and methylmercury, it does not provide a basis for finding that there is a reasonable basis to conclude that the requested rule is necessary to protect against an unreasonable risk. The finding of unreasonable risk under TSCA encompasses consideration of both the anticipated benefits of action under consideration as well as the anticipated costs. In this instance, the petition would need to provide a basis for EPA to conclude that any additional risk reduction that would be achieved by the requested rule, beyond that which will be achieved by EPA's current efforts, would justify the additional costs to EPA and the regulated community.

In discussing risks associated with releases of mercury, the petitioners describe how mercury releases during the product lifecycle "significantly" contribute to the total reservoir of "mercury pollution" (Ref. 1). After release, the petitioners describe how mercury cycles through environmental media, can be converted to methylmercury, and can potentially contaminate fish and humans (Ref. 1). The petitioners provide an estimate of the number of newborns exposed to methylmercury (376 to 14,293 cases annually) from all sources and the costs to care for children exposed to levels of methylmercury associated with cognitive impairment considered mental retardation (\$500 million to \$17.9 billion annually) (Ref. 1). The petitioners then cite several EPA significant new use rules (SNURs) applicable to mercury used in various motor vehicle switches (Ref. 9);

flow meters, natural gas manometers, and pyrometers (Ref. 10); and barometers, manometers, hygrometers, and psychrometers (Ref. 11), to demonstrate previous Agency efforts to reduce risks from mercury based on potential releases of mercury during the product lifecycle (Ref. 1). The petitioners also cite estimated reporting costs for a TSCA section 8(a) rule of “approximately \$8,000 to \$9,000 per report for the initial cycle . . . and between \$5,000 and \$6,000 for each reporting cycle” (Ref. 1). However, the information provided in the petition on the impacts of mercury exposure, including the monetized risk estimate, relates to all sources of mercury pollution; it provides limited information to support the need for the requested rule to collect information as to ongoing uses. In addition, the petition does not provide a basis to conclude that the requested rule would provide for any additional risk reduction beyond that which will be achieved by EPA’s current efforts, or that any such reduction would justify the additional cost to EPA and the regulated community. EPA notes in this regard that the petition misstates the baseline for judging the benefits of the requested rule by not accounting for the significant reduction in the CDR reporting threshold for mercury, as discussed above.

10. EPA will continue its successful voluntary and regulatory efforts.

Furthermore, the Agency is already taking voluntary and regulatory measures related to mercury, some of which are listed in the petition (e.g., SNURs for various mercury-added products, proposed rule for dental effluent guidelines, emission standards for hazardous air pollutants from coal- and oil-fired electric utility steam-generating units, and the March 2015 subpoenas) (Ref. 1). EPA leads a voluntary initiative to phase out use of mercury in industrial and laboratory thermometers, which led to the development of the document “A Guide for Federal Agencies on Replacing Mercury-Containing Non-Fever

Thermometers” (Ref. 12). The Agency also collaborates in voluntary programs such as the Energy Star Program co-sponsored by EPA and the Department of Energy, under which participating manufacturers agree to limit the mercury content of lamps, and the National Vehicle Mercury Switch Recovery Program and follow-on initiatives, which manages, on a nationwide basis, programs to collect, transport, retort, recycle, or dispose of elemental mercury from automotive switches. Finally, EPA leads the mercury in products partnership within the United Nations Environment Program’s Global Mercury Partnership, an international, voluntary effort that strives to phase out and eventually eliminate mercury in products and to eliminate releases during manufacturing and other industrial processes via environmentally sound production, transportation, storage, and disposal procedures (Ref. 13).

In sum, the Agency finds that the requested promulgation of a TSCA section 8(a) is neither timely nor warranted to carry out TSCA pending the continued implementation of the approaches set forth in the EPA Strategy.

VI. References

The following is a listing of the documents that are specifically referenced in this document. The docket includes these documents and other information considered by EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

1. NRDC/NEWMOA. Petition to Promulgate Reporting Rules for Mercury Manufacturing, Processing, and Importation Under Section 8(a) of the Toxic Substances

Control Act. June 24, 2015.

2. EPA. EPA Strategy to Address Mercury-Containing Products. September 2014. Available at <http://www.epa.gov/mercury/pdfs/productsstrategy.pdf>.

3. EPA. Toxic Chemical Release Reporting; Community Right-to-Know. **Federal Register**. 53 FR 4500, February 16, 1988 (FRL-3298-2).

4. EPA. TSCA Inventory Update Reporting Modifications: Chemical Data Reporting. **Federal Register**. 76 FR 50816, August 16, 2011 (FRL-8872-9).

5. EPA. Subpoena and Information Request. March 20, 2015. Available at http://www.epa.gov/mercury/pdfs/Hg_FormalRequest_SIGNED_03-20-2015.pdf.

6. EPA. Emergency Planning and Community Right-to-Know Act – Section 313: Guidance for Reporting Toxic Chemicals: Mercury and Mercury Compounds Category. August 2001. Available at http://www.epa.gov/tri/reporting_materials/guidance_docs/pdf/2001/2001hg.pdf.

7. EPA. Form R. Available at http://www2.epa.gov/sites/production/files/2015-01/documents/2014_form_r.pdf.

8. EPA. Guidelines for Exposure Assessment. May 29, 1992. Available at http://www.epa.gov/raf/publications/pdfs/GUIDELINES_EXPOSURE_ASSESSMENT.PDF.

9. EPA. Mercury Switches in Motor Vehicles; Significant New Use Rule. **Federal Register**. 72 FR 56903, October 5, 2007 (FRL-8110-5).

10. EPA. Elemental Mercury Used in Flow Meters, Natural Gas Manometers, and Pyrometers; Significant New Use Rule. **Federal Register**. 75 FR 42330, July 21, 2010 (FRL-8832-2).

11. EPA. Elemental Mercury Used in Barometers, Manometers, Hygrometers, and Psychrometers; Significant New Use Rule. **Federal Register**. 77 FR 31728, May 30, 2012 (FRL-9345-9).

12. EPA. A Guide for Federal Agencies on Replacing Mercury-Containing Non-Fever Thermometers. June 2013. Available at <http://epa.gov/mercury/pdfs/Non-Fever-Mercury-Thermometers-Guide-for-Federal-Agencies-FINAL.pdf>.

13. UNEP. Mercury-Containing Products Partnership Area Business Plan. June 28, 2013. Available at <http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership/Products/tabid/3565/language/en-US/Default.aspx>.

List of Subjects in 40 CFR Chapter I

Environmental protection, mercury, compounds, mixtures, products, processes.

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