- N.J.A.C. 7:27B–3.10. Procedures for the determination of volatile organic compounds in surface coating formulations
- N.J.A.C. 7:27B–3.11. Procedures for the determination of volatile organic compounds emitted from transfer operations using a flame ionization detector (FID) or non-dispersive infrared analyzer (NDIR)
- N.J.A.C. 7:27B–3.12. Procedures for the determination of volatile organic compounds in cutback and emulsified asphalts
- N.J.A.C. 7:27B–3.13. Procedures for the determination of leak tightness of gasoline delivery vessels
- N.J.A.C. 7:27B–3.14. Procedures for the direct detection of fugitive volatile organic compound leaks
- N.J.A.C. 7:27B–3.15. Procedures for the direct detection of fugitive volatile organic compound leaks from gasoline tank trucks and vapor collection systems using a combustible gas detector
- N.J.A.C. 7:27B–3.18. Test methods and sources incorporated by reference

\* \* \* \* \* \* [FR Doc. 2018–13577 Filed 6–26–18; 8:45 am]

BILLING CODE 6560-50-P

# ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 713

[EPA-HQ-OPPT-2017-0421; FRL-9979-74]

#### RIN 2070-AK22

#### Mercury; Reporting Requirements for the TSCA Mercury Inventory

**AGENCY:** Environmental Protection Agency (EPA). **ACTION:** Final rule.

SUMMARY: As required under section 8(b)(10)(D) of the Toxic Substances Control Act (TSCA), EPA is finalizing reporting requirements for applicable persons to provide information to assist in the preparation of an "inventory of mercury supply, use, and trade in the United States," where "mercury" is defined as "elemental mercury" and "a mercury compound." The requirements apply to any person who manufactures (including imports) mercury or mercury-added products, or otherwise intentionally uses mercury in a manufacturing process. Based on the inventory of information collected, the Agency is directed to "identify any manufacturing processes or products that intentionally add mercury; and . . recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use." At this time, EPA is not making such identifications or recommendations.

**DATES:** This final rule is effective August 27, 2018.

**ADDRESSES:** The docket for this action. identified by docket identification (ID) number EPA-HQ-OPPT-2017-0421, 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. NӁ, 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.

# FOR FURTHER INFORMATION CONTACT:

For technical information contact: Thomas Groeneveld, National Program Chemicals Division, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001; telephone number: (202) 566–1188; email address: groeneveld.thomas@ epa.gov.

For general information contact: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554– 1404; email address: *TSCA-Hotline*@ *epa.gov.* 

#### SUPPLEMENTARY INFORMATION:

#### I. Executive Summary

A. Does this action apply to me?

You may be potentially affected by this action if you manufacture (including import) mercury or mercuryadded products, or if you otherwise intentionally use mercury in a manufacturing process. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include the following:

• Gold ore mining (NAICS code 212221).

• Lead ore and zinc ore mining (NAICS code 212231).

• All other metal ore mining (NAICS code 212299).

• Asphalt shingle and coating materials manufacturing (NAICS code 324122).

• Synthetic dye and pigment manufacturing (NAICS code 325130).

• Other basic inorganic chemical manufacturing (NAICS code 325180).

• All other basic organic chemical manufacturing (NAICS code 325199).

• Plastics material and resin manufacturing (NAICS code 325211).

• Pesticide and other agricultural chemical manufacturing (NAICS code 325320).

• Medicinal and botanical manufacturing (NAICS code 325411).

- Pharmaceutical preparation manufacturing (NAICS code 325412).
- Biological product (except
- diagnostic) manufacturing (NAICS code 325414).
- Paint and coating manufacturing (NAICS code 325510).

• Adhesive manufacturing (NAICS code 325520).

• Custom compounding of purchased resins (NAICS code 325991).

• Photographic film, paper, plate, and chemical manufacturing (NAICS code 325992).

• All other miscellaneous chemical product and preparation manufacturing (NAICS code 325998).

• Unlaminated plastics film and sheet (except packaging) manufacturing (NAICS code 326113).

• Unlaminated plastics profile shape manufacturing (NAICS code 326121).

• Urethane and other foam product (except polystyrene) manufacturing (NAICS code 326150).

• All other plastics product

- manufacturing (NAICS code 326199).
  Tire manufacturing (NAICS code
- 326211).

• All other rubber product manufacturing (NAICS code 326299).

• Iron and steel mills and ferroalloy manufacturing (NAICS code 331110).

• Rolled steel shape manufacturing (NAICS code 331221).

• Alumina refining and primary aluminum production (NAICS code 331313).

• Secondary smelting and alloying of aluminum (NAICS code 331314).

Nonferrous metal (except

aluminum) smelting and refining (NAICS code 331410).

• Secondary smelting, refining, and alloying of nonferrous metal (except copper and aluminum) (NAICS code 331492).

• Iron foundries (NAICS code 331511).

• Steel foundries (except investment) (NAICS code 331513).

• Fabricated structural metal

manufacturing (NAICS code 332312).Industrial valve manufacturing

(NAICS code 332911).

• Ammunition except small arms manufacturing (NAICS code 332993).

• Small arms, ordnance, and ordnance accessories manufacturing (NAICS code 332994).

• All other miscellaneous fabricated metal product manufacturing (NAICS code 332999)

• Food product machinery

manufacturing (NAICS code 333294). Office machinery manufacturing (NAICS code 333313).

 Other commercial and service industry machinery manufacturing (NAICS code 333319).

• Heating equipment (except warm air furnaces) manufacturing (NAICS code 333414).

• Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing (NAICS code 333415).

 Pump and pumping equipment manufacturing (NAICS code 333911).

• Bare printed circuit board

manufacturing (NAICS code 334412).Semiconductor and related device

manufacturing (NAICS code 334413). Other electronic component

manufacturing (NAICS code 334419). • Electromedical and

electrotherapeutic apparatus

manufacturing (NAICS code 334510). • Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing (NAICS code 334511).

 Automatic environmental control manufacturing for residential, commercial, and appliance use (NAICS code 334512).

 Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables (NAICS code 334513).

 Totalizing fluid meter and counting device manufacturing (NAICS code 334514).

• Instrument manufacturing for measuring and testing electricity and electrical signals (NAICS code 334515).

• Analytical laboratory instrument manufacturing (NAICS code 334516).

• Watch, clock, and part manufacturing (NAICS code 334518).

• Other measuring and controlling device manufacturing (NAICS code 334519).

• Electric lamp bulb and part

manufacturing (NAICS code 335110). • Commercial, industrial, and

institutional electric lighting fixture manufacturing (NAICS code 335122). Other lighting equipment

manufacturing (NAICS code 335129). • Electric house wares and household

fan manufacturing (NAICS code 335211).

Household vacuum cleaner

manufacturing (NAICS code 335212). • Household cooking appliance

manufacturing (NAICS code 335221).

 Household refrigerator and home freezer manufacturing (NAICS code 335222).

 Household laundry equipment manufacturing (NAICS code 335224).

 Other major household appliance manufacturing (NAICS code 335228).

• Switchgear and switchboard apparatus manufacturing (NAICS code 335313).

Relay and industrial control

manufacturing (NAICS code 335314). Primary battery manufacturing

(NAICS code 335912).

• Current-carrying wiring device manufacturing (NAICS code 335931).

 All other miscellaneous electrical equipment and component

manufacturing (NAICS code 335999). Automobile manufacturing (NAICS) code 336111).

• Light truck and utility vehicle manufacturing (NAICS code 336112).

• Heavy duty truck manufacturing (NAICS code 336120).

• Motor home manufacturing (NAICS code 336213).

 Travel trailer and camper manufacturing (NAICS code 336214).

 Other aircraft parts and auxiliary equipment manufacturing (NAICS code 336413).

• Boat building (NAICS code 336612). Motorcycles and parts

manufacturing (NAICS code 336991). Surgical and medical instrument

manufacturing (NAICS code 339112). Costume jewelry and novelty

manufacturing (NAICS code 339914).

 Game, toy, and children's vehicle manufacturing (NAICS code 339932).

• Sign manufacturing (NAICS code 339950).

• Other chemical and allied products merchant wholesalers (NAICS code 424690).

• Research and development in the physical, engineering, and life sciences (except biotechnology) (NAICS code 541712).

 Hazardous waste treatment and disposal (NAICS code 562211).

Other nonhazardous waste

treatment and disposal (NAICS code 562219).

 Materials recovery facilities (NAICS) code 562920).

 National security (NAICS code 928110).

#### B. What action is the Agency taking?

EPA is issuing a final rule under TSCA section 8(b)(10) to require reporting to assist in the preparation of "an inventory of mercury supply, use, and trade in the United States," where "mercury" is defined as "elemental mercury" and "a mercury compound." Hereinafter "mercury" will refer to both elemental mercury and mercury compounds collectively, except where separately identified. This final rule

requires reporting from any person who manufactures (including imports) mercury or mercury-added products, or otherwise intentionally uses mercury in a manufacturing process. EPA published its initial inventory report in the Federal Register on March 29, 2017 (Ref. 1), which noted data gaps and limitations encountered by the Agency in its historic reliance on publicly available data on the mercury market in the United States. As stated in the initial inventory report, "[f]uture triennial inventories of mercury supply, use, and trade are expected to include data collected directly from persons who manufacture or import mercury or mercury-added products, or otherwise intentionally use mercury in a manufacturing process" (Ref. 1). These reporting requirements will help the Agency narrow such data gaps, prepare subsequent, triennial publications of the inventory, and execute the mandate to "identify any manufacturing processes or products that intentionally add mercury; and . . . recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use" (15 U.S.C. 2607(b)(10)(C)).

In addition, this information could be used by the U.S. Government to assist in its national reporting regarding its implementation of the Minamata Convention on Mercury (Minamata Convention), to which the United States is a Party (Ref. 2). The Minamata Convention is an international environmental agreement that has as its objective the protection of human health and the environment from anthropogenic emissions and releases of elemental mercury and mercury compounds. Article 21 of the Convention requires Parties to include in their national reports, among other information, information demonstrating that the Party has met the requirements of Article 3 on Mercury Supply Sources and Trade and of Article 5 on Manufacturing Processes in Which Mercury or Mercury Compounds Are Used. EPA intends to use the collected information from the mercury inventory to implement TSCA and assist in its national reporting for the Minamata Convention as well as to shape the Agency's efforts to reduce the use of mercury in commerce. In so doing, the Agency will conduct a timely evaluation and refinement of these reporting requirements so that they are efficient and non-duplicative for reporters.

EPA issued the proposed rule for this action in the Federal Register on October 26, 2017 with a December 26, 2017 deadline for comments (Ref. 3); in response to two requests, the deadline

was extended to January 11, 2018 (Ref. 4). Based on comments received, the Agency modified the regulatory text to improve the logic and flow of sections, to clarify various terms and reporting requirements, and to eliminate several quantitative reporting requirements. Such issues are discussed in greater detail in Unit III. and the *Response to Comments* document for this rule (Ref. 5).

The reporting requirements for supply, use, and trade of mercury include activities that are established TSCA terms: Manufacture, import, distribution in commerce, storage, and export. The reporting requirements also apply to otherwise intentional use of mercury in a manufacturing process. Persons who manufacture (including import) mercury or mercury-added products, or otherwise intentionally use mercury in a manufacturing process, are required to report amounts of mercury in pounds (lbs.) used in such activities during a designated reporting year. Reporters also are required to identify specific mercury compounds, mercuryadded products, manufacturing processes, and how mercury is used in manufacturing processes, as applicable, from preselected lists. For certain activities, reporters are required to provide additional, contextual data (e.g., NAICS codes for mercury or mercuryadded products distributed in commerce).

The finalized reporting requirements do not apply to: (1) Persons who do not first manufacture, import, or otherwise intentionally use mercury; (2) persons who only generate, handle, or manage mercury-containing waste; (3) persons who only manufacture mercury as an impurity; and (4) persons engaged in activities involving mercury not with the purpose of obtaining an immediate or eventual commercial advantage (see Unit III.D.2.). Within the category of persons who must report, there are certain persons who are not required to provide specific data elements. To avoid reporting that is unnecessary or duplicative, the Agency is finalizing certain exemptions for persons who already report for mercury and mercuryadded products to the TSCA section 8(a) Chemical Data Reporting (CDR) rule and the Interstate Mercury Education and Reduction Clearinghouse (IMERC) Mercury-added Products Database, respectively. Such reporters are not required to respond to certain data elements of the mercury reporting application that are comparable to data they also report in response to CDR and IMERC reporting requirements.

### C. Why is the Agency taking this action?

EPA is issuing this final rule under TSCA section 8(b)(10) to require reporting to assist in the preparation of the statutorily-required inventory of mercury supply, use, and trade in the United States. As indicated in the initial inventory report (Ref. 1), this final rule will support future triennial publications of the mercury inventory by establishing reporting requirements and an electronic application and database to collect, store, and analyze information provided by applicable respondents. In administering this mercury inventory, the Agency will "identify any manufacturing processes or products that intentionally add mercury; and . . . recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use" (15 U.S.C. 2607(b)(10)(C)).

# D. What is the Agency's authority for taking this action?

EPA is issuing this rule pursuant to TSCA section 8(b)(10)(D) to implement the direction at TSCA section 8(b)(10)(B) that "[n]ot later than April 1, 2017, and every 3 years thereafter, the Administrator shall carry out and publish in the Federal Register an inventory of mercury supply, use, and trade in the United States." TSCA section 8(b)(10)(D) requires EPA to promulgate a final rule by June 22, 2018 that establishes reporting requirements applicable to any person who manufactures mercury or mercuryadded products or otherwise intentionally uses mercury in a manufacturing process to assist in the preparation of the inventory.

In addition, the Paperwork Reduction Act (PRA) requires Federal agencies to manage information resources to reduce information collection burdens on the public; increase program efficiency and effectiveness; and improve the integrity, quality, and utility of information to all users within and outside an agency, including capabilities for ensuring dissemination of public information, public access to Federal Government information, and protections for privacy and security (44 U.S.C. 3506).

TSCA section 2 expresses the intent of Congress that EPA carry out TSCA in a reasonable and prudent manner and in consideration of the impacts that any action taken under TSCA may have on the environment, the economy, and society. EPA will manage and leverage its information resources, including information technology, and the Agency is requiring the use of electronic reporting to implement the mercury inventory reporting requirements of TSCA section 8(b)(10)(D) in a reasonable and prudent manner.

# *E.* What are the estimated incremental impacts of the final rule?

EPA prepared an economic analysis of the potential impacts associated with this rulemaking (Ref. 6). The chief benefit of the final rule is the collection of detailed data on mercury, which will serve as a basis to recommend actions to further reduce mercury use in the United States, as required at TSCA section 8(b)(10)(C). Another benefit is the use of information collected under the final rule to help the United States implement its obligations under the Minamata Convention. While there are no quantified benefits for the final rule, the statutory mandate specifically calls for and authorizes a rule to support an inventory of mercury supply, use, and trade in the United States, to identify any manufacturing processes or products that intentionally add mercury, and to recommend actions to achieve further reductions in mercury use. As described in the Agency's economic analysis, unquantified benefits include providing increased information on mercury and assisting in the reduction of mercury use (Ref. 6). To the extent that the information gathered through this rule is used to reduce mercury use, benefits to society may result from a reduction in exposure.

## TABLE 1—SUMMARY OF COSTS AND BENEFITS

Category	Description
Benefits	The final rule will provide information on mercury and mercury-added products to which the Agency (and the pub- lic) does not currently have access. To the extent that the information gathered through this final rule is used to reduce mercury use, benefits to society may result from a reduction in risk.

# TABLE 1—SUMMARY OF COSTS AND BENEFITS—Continued

Category	Description
Costs	Estimated industry costs and burden total \$5.83 million and 72,600 hours (for 750 respondents) for the first year of reporting, with an individual estimate of \$7,800 and 97 hours. For future triennial reporting cycles, industry costs and burden will be \$4.04 million and 50,200 hours, with an individual estimate of \$5,400 and 67 hours. These estimates include compliance determination, rule familiarization, CBI substantiation, electronic reporting, and recordkeeping, in addition to completing reporting requirements.
Effects on State, Local, and Tribal Governments.	Government entities are not expected to be subject to the rule's requirements, which apply to entities that manu- facture (including import) mercury or mercury-added products, or otherwise intentionally use mercury in a man- ufacturing process. The final rule does not have a significant intergovernmental mandate, significant or unique effect on small governments, or have Federalism implications.
Small Entity Impacts	The final rule will impact 211 companies that meet the U.S. Small Business Administration (SBA) definitions for their respective NAICS classifications: Four small entities (1.85%) are expected to incur impacts of 1% percent or greater. No small entity assessed is expected to incur an impact of greater than 3%. Five companies could not be verified as small entities. Even if the entities whose status is "undetermined" were assumed to be impacted small entities, this would result in only nine entities (4.17%). Therefore, EPA certifies that this action will not have a significant economic impact on a substantial number of small entities.
Environmental Justice and Protection of Children.	The information obtained from the reporting required by this final rule will be used to inform the Agency's deci- sion-making process regarding chemicals to which minority or low-income populations or children may be dis- proportionately exposed. This information will also assist the Agency and others in determining whether ele- mental mercury and mercury compounds addressed in this final rule present potential risks, allowing the Agen- cy and others to take appropriate action to investigate and mitigate those risks.

#### II. Background

# A. Recent Amendments to TSCA and the Initial Inventory

The Frank R. Lautenberg Chemical Safety for the 21st Century Act (Lautenberg Act) (Pub. L. 114-182, 130 Stat. 448), enacted on June 22, 2016, implemented reforms to TSCA (15 U.S.C. 2601 et seq.). Among other changes to TSCA, the Lautenberg Act amended TSCA section 8(b) to require EPA to establish: (1) An inventory of mercury supply, use, and trade in the United States; and (2) reporting requirements by rule applicable to any person who manufactures mercury or mercury-added products or otherwise intentionally uses mercury in a manufacturing process not later than June 22, 2018 (15 U.S.C. 2607(b)(10)). Information collected per the reporting requirements will be used to periodically update the mercury inventory; identify any manufacturing processes or products that intentionally add mercury; and recommend actions, including proposed revisions of federal law or regulations, to achieve further reductions in mercury use (15 U.S.C. 2607(b)(10)(B) and (C)). The Lautenberg Act also added certain mercury compounds to the TSCA section 12(c) ban on export of elemental mercury and authorized EPA to ban the export of additional mercury compounds by rule. Additional information on the Lautenberg Act is available on EPA's website at *https://www.epa.gov/* assessing-and-managingchemicalsunder-tsca/frank-r-lautenbergchemical-safety-21st-century-act.

Prior to developing its initial inventory, EPA reviewed federal and

state reports and databases, among other sources, to assemble a collection of available information on mercury, mercury-added products, and manufacturing processes involving mercury (Ref. 1). In reviewing data obtained, the Agency found that its baseline of data lacked the specificity and level of detail required to develop a mercury inventory responsive to TSCA section 8(b)(10)(D) or to be useful to inform mercury use reduction efforts for both the public and private sectors (Ref. 1). In 2015, to develop its understanding of domestic mercury supply and trade, the Agency collected information on the quantity of mercury sold in the United States for the years 2010 and 2013 from five companies identified as the primary recyclers and distributors of mercury in the United States (Ref. 7), which revealed a gap between available data on the amount of mercury within sold mercury-added products and the amount of bulk elemental mercury sold in the United States. Additional Agency research identified a data gap for the amount of mercury in exported mercury-added products. The Agency also is seeking to identify and differentiate between the amount of mercury in imported versus domestically manufactured mercuryadded products. EPA is committed to further addressing such data gaps and considers the national mercury inventory mandated by Congress to be an instrumental means to establish the requisite body of information to support achievement of that goal.

#### B. Stakeholder Involvement

In developing the proposed rule, the Agency coordinated with the Northeast

Waste Management Officials' Association, which administers the IMERC database, as directed by TSCA section 8(b)(10)(D)(ii).

#### C. Public Comments

During the public comment period (October 26, 2017 to January 11, 2018) for the proposed rule, EPA received 89 comments. After careful review, the Agency determined that 27 of those comments were substantively or procedurally relevant to the proposed rule, while 55 comments were not applicable, germane, or responsive. EPA received six comments generally supportive of the proposed rule and one comment related to mercury use, but exceeded the Agency's understanding of the statutory scope of "mercury supply, use, and trade in the United States." All comments received are identified by docket identification (ID) number EPA-HQ-OPPT-2017-0421 and available at *https://www.regulations.gov.* Included in this docket is the *Response to Comments* document for this rule (Ref. 5).

#### **III. Provisions of This Final Rule**

This final rule provides for the collection of information that allows EPA to implement statutory requirements at TSCA section 8(b)(10)(B), which directs that "[n]ot later than April 1, 2017, and every 3 years thereafter, the Administrator shall carry out and publish in the **Federal Register** an inventory of mercury supply, use, and trade in the United States". Based on the inventory, the Agency is directed to "identify any manufacturing processes or products that intentionally add mercury; and . . . recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use." EPA's rationale for fulfilling specific statutory provisions and terms, including summaries of public comments received and Agency responses and determinations for the final rule, are set forth by topic as follows. Some of these issues are discussed in greater detail in the *Response to Comments* document for this rule (Ref. 5), which is available at docket ID number EPA-HQ-OPPT-2017–0421 at https:// www.regulations.gov.

## A. Definition of Mercury

TSCA section 8(b)(10)(A) states "notwithstanding [TSCA] section 3(2)(B), the term 'mercury' means . . . elemental mercury; and . . . a mercury compound." As such, the definition for mercury at TSCA section 8(b)(10)(A) supersedes the exclusions for "chemical substances" described in TSCA section 3(2)(B) that would otherwise apply to mercury, mercury-added products, or otherwise intentional uses of mercury in manufacturing processes. For example, any "drug, cosmetic, or device" as described in TSCA section 3(2)(B)(vi), should such items contain mercury, are not excluded from reporting under this final rule.

The Agency proposed that where EPA distinguishes between elemental mercury and mercury compounds, elemental mercury be limited to elemental mercury as described by its Chemical Abstracts Service Registry Number (CASRN 7439–97–6) and mercury compounds be inclusive of all instances where elemental mercury or a mercury compound is reacted with another chemical substance. Examples of mercury compounds in the TSCA Chemical Substance Inventory are listed in Table 2.

#### TABLE 2—LIST OF MERCURY COMPOUNDS

1004-57-2         Mircin add, mercury(2+) salt (2:1).           10112-4-31-4         Mercury, hidroxyphenyl.           10112-4-31-4         Mercury, hidroxyphenyl.           1012-4-31-5         Mircury, hidroxyphenyl.           10112-4-31-6         Mercury, andle choride (HgR/D2)D.           10145-75-5         Mircury, 19-ottadecenota chorado. kappa.Ophenyl.           10146-60-6         -Octadecenota cid (92)-, mercury(2+) salt (2:1).           12068-90-6         Hexanolic add, Zeithyl., mercury(2+) salt (2:1).           13102-76-8         Hexanolic add, Zeithyl., mercury(2+) salt (2:1).           1335-31-5         Mercury valide cid (Hg2(C)/2).           1344-69-1         Cadimium mercury sulide.           1335-68-2         Mercury, tbl(2+deraboxylatophenyl.           1336-78-5         Mercury, tbl(2+deraboxylatophenyl.           13370-76-8         Mercury, tbl(2+deraboxylatophenyl.           1344-69-1         Cadimium mercury sulide.           1338-63-2         Mercury, tbl(2+deraboxylatophenyl.           1345-69-1         Cadimium mercury sulide.           13870-76         Mercury, tbl(2+deraboxylatophenyl.           13870-76         Mercury, tbl(2+derabox)taophenyl.           13870-76-6         Mercury, tbl(2+derabox)taophenyl.           13870-760-1         Mercury, tbl(2+derabox)taophenyl	Chemical Abstracts Service Registry No.	Mercury compound
100-57-2         Mercury, hydroxyphenyl-           10112-01-1         Mercury anide (Hq2C12),           10124-48-8         Mercury amide (Hq2C12),           1012-27-5         Mercury, panyl(propanota-kappa,O),           10415-75-5         Nitric acid, mercury(1+) sall (1:1),           10416-09         Mercury samide (Hq2C12), mercury(2+) sall (2:1),           103120-76-8         9-Octadecenoto: acid (92,7), mercury(2+) sall (2:1),           13020-00-6         Mercury (subpervance) (Hq2C(N)2O),           13170-776-8         Hexanoic acid (92,7), mercury(2+) sall (2:1),           13320-200-6         Mercury (subpervance) (Hq2C(N)2O),           13320-200-6         Mercury (subpervance) (Hq2C(N)2O),           13320-200-6         Mercury (subpervance) (Hq2C(N)2O),           1334-68-5         Cadmium mercury suble, copper(1+) (12), (T-4)-,           1338-65-2         Mercury, iodo(iodomethy),           14783-59-6         Mercury, iodo(iodomethy),           14783-59-6         Mercury, chicro(12, 4-dinitrophenyl)amino]phenyl]           15825-63-7         Mercury, chicro(12, 4-dinitrophenyl)amino]phenyl]           15825-71-2         Mercury, chicro(12, 4-dinitrophenyl)amino]phenyl]           15825-71-2         Mercury, chicro(2+dinitrophenyl)amino]phenyl]           15825-71-2         Mercury, chicro(2+dinitrophenyl)     <	10045-94-0	Nitric acid mercury(2+) salt (2:1)
10112-4-81         Mercury chioride (Hq2C2),           10124-48-         Mercury amide Chioride (Hq(HPC)C),           103-27-5         Mitric acid, mercury (1+) sait (1:1),           10415-75-5         Mitric acid, mercury(1+) sait (2:1),           10415-75-6         Mitric acid, mercury(2+) sait (2:1),           12086-90-5         Mercury, (9-octadecenosic-kappa,Ophenyl-,           13170-76-8         Hexanoic acid, 2-ethyl-, mercury(2+) sait (2:1),           13352-31-5         Mercury suifide (Hq5),           1335-31-5         Mercury suifide (Hq5),           1344-08-1         Cadmium mercury suifide (Hq5),           1345-09-1         Cadmium mercury suifide (Hq5),           1345-09-1         Cadmium mercury suifide (Hq5),           138-85-2         Mercury suifide (Hq5),           138-85-3         Mercury, bio(2-phenyldiszenecabothioic acid-kappa,S) 2-phenylhydrazidato-kappa,N2}-, (T-4)           138-85-4         Mercury, bio(2-phenyldiszenecabothioic acid-kappa,S) 2-phenylhydrazidato-kappa,N2}-, (T-4)           138-85-5         Mercury, bio(2-phenyldiszenecabothioic acid-kappa,S) 2-phenylhydrazidato-kappa,N2}-, (T-4)           138-85-8         Mercury, bio(2-phenyldiszenecabothioic acid-kappa,P1)-           138-85-2         Mercury, bio(2-phenyldiszenecabothioic acid-kappa,P1)-           138-85-3         Mercury, bio(2-phenyldiszenecabothioic acid-kappa		
10124-48-8         Mercury amide chioriae (hq(NH2)C).           103-27-5         Mercury, pheny(typopanota-kappa.O)p.           10415-75-5         Nitric acid, mercury(1+) sall (1:1).           104-60-9         Mercury and coleconota caid (22), mercury(2+) salt (2:1).           12068-90-5         Mercury seluride (HqTe).           13170-76-8         Hexanoic acid, 2-ethyl-, mercury(2+) salt (2:1).           13302-00-6         Mercury seluride (HqS).           1334-48-5         Mercury sequride (HqS).           1344-48-6         Mercury sequride (HqS).           133676-85-2         Mercury seluride (HqS).           1344-48-5         Mercury seluride (HqS).           1344-48-6         Mercury, Cethylhexanota k-kappa.O)phenyl-, Marcury seluride (HqS).           1344-85-2         Mercury seluride (HqS).           134576-85-5         Mercury, big(2-phenyldiazenecarbothioic acid-kappa.S) 2-phenylhydrazidato-kappa.N2}, (T-4)           135876-85-7         Mercury, choro(4-[(2,-4-dinitrophenyl)amino]phenyl].           15385-83-0         Mercury, selury oxide (HqSO).           1600-27-7         Acetic adid, mercury(x) aminophenyl, asation)phenyl.           15385-83-0         Mercury selenide (HqSO).           1944-62-2         Mercury, selenide (HqSO).           1944-62-2         Mercury, selenide (HqSO).		
103-27-5         Mercury, phenyl(propanoto-kappa.O)           10415-75-5         Mitri add, mercury(1+) sail (11).           104-60-9         Mercury, (9-octadecenoato-kappa.O)phenyl           12068-90-5         Mercury (1-) sail (2-1).           13170-76-8         Hexanoic acid, 22-, mercury(2+) sail (2-1).           13302-31-5         Mercury (2-ethylhexanota-kappa.O)phenyl           1335-31-5         Mercury (2-ethylhexanota-kappa.O)phenyl           1345-09-1         Cadmium mercury sulfide           1347-75-5         Mercury sulfide (HgS).           1345-09-1         Cadmium mercury sulfide           138-85-2         Mercury sulfide (-, copper(1+) (1:2), (T-4)           138-85-4         Mercury, idol(cdomethyl)           14733-59-6         Mercury, idol(cdomethyl)           17783-83-0         Mercury, idoromod (Hg-Hg).           15783-83-0         Mercury, chior(ethanethiolato).           15783-83-0         Mercury, chior(ethanethiolato).           15783-83-0         Mercury, chior(ethanethiolato).           15783-83-0         Mercury, chior(ethanethiolato).           15783-83-1         Mercury, chior(ethanethiolato).           15783-83-1         Mercury (1+) atmicohenyl ophasil (2+).           15783-84-3         Mercury (1+) atmicoheny ophasil (2+).		Mercury amide chloride (Ha(NH2)Cl).
10415-75-5       Nitric acid, mercury(4) salt (1:1).         1191-80-6       9-Octadecenoto: kappa.O)phenyl.         1191-80-6       9-Octadecenoto: kappa.O)phenyl.         13026-90-6       Mercury (Bordacenoto: kappa.O)phenyl.         13027-76-8       Hexanoic acid, 2-ethyl., mercury(2+) salt (2:1).         13020-00-6       Mercury cyanide oxide (Hg2(CN)2O).         1344-48-5       Mercury cyanide oxide (Hg2(CN)2O).         1344-48-5       Mercury sulfide.         13876-85-2       Mercury sulfide.         13876-85-2       Mercury sulfide.         13876-85-3       Mercury, Istavioto, copper(1+) (1:2), (T-4)         147851-5       Mercury, big(2-phenyldiazenecarbothioic acid-kappa.S) 2-phenylhydrazidatokappa.N2]-, (T-4)         15885-83-0       Mercury, chlorod (Hg2).         15785-93-0       Mercury, (actato-kappa.O)[4-[2-4/dinitrophenyl]mino]phenyl]         15829-53-5       Mercury, (actato-kappa.O)[4-[2-4/dinitrophenyl]mino]phenyl[diazenyl]phenyl].         1944-762-2       Mercury, (actato-kappa.O)[4-[2-4/dinitrophenyl].         1960-27-7       Acetia acid, mercury(2+) salt (2:1).         1944-762-2       Mercury, (actato-kappa.O)[4-[2-4/dinitrophenyl].         20582-71-2       Mercury, salenide (HgS).         21908-53-2       Mercury, (actato-kappa.O)[4-[2-[4/dinitrophenyl].		
104-60-9         Mercury, (9-octadecenoiato-kappa, D)phenyl           12069-90-5         Mercury telluride (HqTe).           1300-76-8         Hexanoic acid, 22-rhymercury(2+) salt (2:1).           1302-00-6         Mercury, (2-ethylhexanoto-kappa, O)phenyl           1335-31-5         Mercury, (2-ethylhexanoto-kappa, O)phenyl           1344-08-5         Mercury sulfide (HqS).           1345-09-1         Cadmium mercury sulfide.           1387-85-2         Mercury sulfide.           1387-85-5         Mercury, (d-chadword, copper(1+) (1:2), (T-4)           138-85-2         Mercury, idol(iodomethyl)h, Mercury, sodium (1:1).           141-51-5         Mercury, idol(iodomethyl)h, Mercury, idol(icodomethyl)h, Mercury, idol(icodomet		
1191-80-6       9-Octadecenoic acid (92), mercury(2+) salt (2:1).         13170-76-8       Hexanoic acid, 2-ethyl-, mercury(2+) salt (2:1).         13302-00-6       Mercury cyanide oxide (Hg2(CN)2O).         1334-48-5       Mercury cyanide oxide (Hg2(CN)2O).         1344-48-5       Mercury cyanide oxide (Hg2(CN)2O).         1344-59-7       Cadmium mercury sulide.         13876-85-2       Mercury, tota/decomposition         14733-59-6       Mercury, tota/decomposition         14733-59-6       Mercury, tota/decomposition         15735-83-7       Mercury, tota/decomposition         15735-83-7       Mercury, tota/decomposition         15735-83-7       Mercury, choronodi-, (Hg-Hg).         15735-83-7       Mercury, choro(ethanetholato).         19447-82-2       Mercury, choro(ethanetholato).         19447-82-2       Mercury, choro(ethanetholato).         19447-82-2       Mercury, choro(ethanetholato).         19447-82-3       Mercury, choro(ethanetholato).         19447-84-4       Mercury, choro(ethanetholato).         19447-82-4       Mercury, choro(ethanetholato).         19447-82-3       Mercury, choro(ethanetholato).         19447-82-4       Mercury, choro(ethanetholato).         19447-82-4       Mercury, choro(ethanetholato).	104–60–9	
13170-76-8       Hexanoic acid, 2-ethyl-, mercury(2+) salt (2:1).         13302-00-6       Mercury, cy-nide oxide (Hg2(CN)2O).         1344-48-5       Mercury cy-nide oxide (Hg2(CN)2O).         1344-65       Cadmium mercury sulfide.         13370-87-2       Mercury (1), ethylaxonato-kappa, Ophenyl-, sodium (1:1).         1345-50-1       Cadmium mercury sulfide.         13370-85-2       Mercurate(1-), (4-catbox)(atophenyl)hydroxy-, sodium (1:1).         141-51-5       Mercury, dio(codomethyl)-, 14733-58-7         Mercury, dio(codomethyl)-, 15783-58-7       Mercury, choro(4-(12.4-dimtrophenyl)amino]phenyl]         15783-58-7       Mercury, choro(4-(12.4-dimtrophenyl)         15783-58-7       Mercury, choro(14.2-(2.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         17847-58-5       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         17847-58-5		
13170-76-8       Hexanoic acid, 2-ethyl-, mercury(2+) salt (2:1).         13302-00-6       Mercury, cy-nide oxide (Hg2(CN)2O).         1344-48-5       Mercury cy-nide oxide (Hg2(CN)2O).         1344-65       Cadmium mercury sulfide.         13370-87-2       Mercury (1), ethylaxonato-kappa, Ophenyl-, sodium (1:1).         1345-50-1       Cadmium mercury sulfide.         13370-85-2       Mercurate(1-), (4-catbox)(atophenyl)hydroxy-, sodium (1:1).         141-51-5       Mercury, dio(codomethyl)-, 14733-58-7         Mercury, dio(codomethyl)-, 15783-58-7       Mercury, choro(4-(12.4-dimtrophenyl)amino]phenyl]         15783-58-7       Mercury, choro(4-(12.4-dimtrophenyl)         15783-58-7       Mercury, choro(14.2-(2.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         15783-58-7       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         17847-58-5       Mercury, choro(4-fig.4-(14.4-dimtrophenyl)         17847-58-5	12068–90–5	Mercury telluride (HgTe).
13302-00-6       Mercury, (2-ethylhexanoato-kappa.O)phenyl         1344-48-5       Mercury sulfide (HgS).         1344-48-5       Mercury sulfide.         1345-09-1       Cadmium mercury sulfide.         138-68-2       Mercury, (2-ethylhexanoato-copper(1+) (1:2), (T-4)         138-68-2       Mercury, todo(idoomethyl).         14785-15       Mercury, biol(2,4-carboxylatophenyl)hydroxy-, sodium (1:1).         14785-45-2       Mercury, todo(idoomethyl).         14785-45-3       Mercury, todo(idoomethyl).         15885-86-7       Mercury, chorol-4. (2,4-dinitrophenyl)amio]phenyl].         15828-83-0       Mercury, chorol-4. (2,4-dinitrophenyl)amio]phenyl].         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, chorol (4+1g2(4-(dimethylamino)phenyl]diazenyl]phenyl].         20582-71-2       Mercury, chorol (4+1g2(4)-(dimethylamino)phenyl]diazenyl]phenyl].         20681-83-6       Mercury, (molecanoato + kappa.0)[4-[2+4/(dimethylamino)phenyl]diazenyl]phenyl].         21008-63-2       Mercury, (molecanoato + kappa.0)[4-[2+4/(dimethylamino)phenyl]diazenyl]phenyl].         24569-90-4       Mercury, (molecanoato + kappa.0)[4-[2+4/(dimethylamino)phenyl]diazenyl]phenyl].         24569-90-6       Mercury, (molecanoato + kappa.0)[4-[2+4/(dimethylamino)phenyl]diazenyl]phenyl].         24569-90-6       Mercury, (molecanoato + k	13170–76–8	
1344-48-5       Mercury sulfide (hgs).         1345-09-1       Cadmium mercury sulfide.         1387-68-52       Mercurate(2-), tetraiodo-, copper(1+) (1:2), (T-4)         138-85-2       Mercurate(1-), devafoxytappheryl)hydroxy-, sodium (1:1).         141-51-5       Mercury, iolo(idomethyl)         14783-59-6       Mercury, bis((2-phenyldiazenecarbothicic acid- kappa.S) 2-phenylhydrazidatokappa.N2]-, (T-4)         15385-68-7       Mercury, chorod-i, (Hg-Hg).         15785-83-0       Mercury, chorol-4, (Hg-Hg).         15829-53-5       Mercury, chorol-4, (Hg-Hg).         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, (chorol (ethanethiolato)         19447-62-2       Mercury, chorol (ethageliolato)         19447-62-2       Mercury, chorol (ethageliolato)         20582-71-2       Mercury, chorol (ethageliolato)         19447-62-2       Mercury, chorol (ethageliolato).         21908-53-2       Mercury, chorol (ethageliolato).         24569-90-4       Mercury, chorol (ethageliolato).         24569-90-6       Mercury, Chorol (2-hydroxy-S-shrophenyl)         24569-44-3       Mercury, Imoreleaconator. Kappa.Ol-1. kappa.O1. kappa.O4]Jiphenyldi.         24569-51-4       Cobaltate(2-), tetrakis(thicoxanato: kappa.O)-, mercury(2+) (1:1), (T-4)		
1344-48-5       Mercury sulfide (hgs).         1345-09-1       Cadmium mercury sulfide.         1387-68-52       Mercurate(2-), tetraiodo-, copper(1+) (1:2), (T-4)         138-85-2       Mercurate(1-), devafoxytappheryl)hydroxy-, sodium (1:1).         141-51-5       Mercury, iolo(idomethyl)         14783-59-6       Mercury, bis((2-phenyldiazenecarbothicic acid- kappa.S) 2-phenylhydrazidatokappa.N2]-, (T-4)         15385-68-7       Mercury, chorod-i, (Hg-Hg).         15785-83-0       Mercury, chorol-4, (Hg-Hg).         15829-53-5       Mercury, chorol-4, (Hg-Hg).         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, (chorol (ethanethiolato)         19447-62-2       Mercury, chorol (ethageliolato)         19447-62-2       Mercury, chorol (ethageliolato)         20582-71-2       Mercury, chorol (ethageliolato)         19447-62-2       Mercury, chorol (ethageliolato).         21908-53-2       Mercury, chorol (ethageliolato).         24569-90-4       Mercury, chorol (ethageliolato).         24569-90-6       Mercury, Chorol (2-hydroxy-S-shrophenyl)         24569-44-3       Mercury, Imoreleaconator. Kappa.Ol-1. kappa.O1. kappa.O4]Jiphenyldi.         24569-51-4       Cobaltate(2-), tetrakis(thicoxanato: kappa.O)-, mercury(2+) (1:1), (T-4)	1335–31–5	Mercury cyanide oxide (Hg2(CN)2O).
13876-85-2         Mercurate(2-), teriaiodo-, copper(1+) (1:2), (T-4)           138-85-2         Mercurate(1-), (4-catoxylatophenyl)hydroxy-, sodium (1:1).           141-51-5         Mercurate(1-), (4-catoxylatophenyl)hydroxy-, sodium (1:1).           14783-59-6         Mercury, bis[(2-phenyldiazenecarbothioic acid-kappa.S) 2-phenylhydrazidato-kappa.N2]-, (T-4)           15785-83-0         Mercury, chioro[4-1](2,4-dinitrophenyl]amino]phenyl]           15829-35-5         Mercury, chioro[4+1](2,4-dinitrophenyl]amino]phenyl]           1600-27-7         Acetic acid, mercury(2+) salt (2:1).           1785-43-9         Mercury, chioro[4+1](2,4-dinitrophenyl]amino]phenyl]diazenyl]phenyl]           20582-71-2         Mercury, chioro[4+1](2,4-dimethylamino]phenyl]diazenyl]phenyl]           2061-83-6         Mercury (chioro[4hanethiolato)           19447-82-2         Mercury (chioro[4hanethiolato]           21008-53-2         Mercury (chioro[4hanethiolato]           2450-90-4         Mercury (nu-l_2-dodecyl-lydocyl-shirophenyl)           2450-90-4         Mercury, un-l_2-dodecyl-lydocyl-shirophenyl           2450-90-4         Mercury, nu-l_2-dodecyl-cyl-baradioato(2-).kappa.O1; kappa.O4]]diphenyldi           2645-49-3         Mercury, nu-l_2-dodecyl-cyl-baradioato(2-).kappa.O1; (1:1), (T-4)           28700-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           29870-72-2	1344–48–5	
138-85-2         Mercurate(1-), (4-carboxylatophenyl)hydroxy-, sodium (1:1).           141-51-5         Mercury, biol(idomethyl)           14783-59-6         Mercury, biol(idomethyl)           15785-93-0         Mercury, dibromodi-, (Hg-Hg).           15785-93-0         Mercury, chlorol-4, (24-dinitrophenyl)amino]phenyl]           15829-53-5         Mercury, chlorol-4, (24-dinitrophenyl)amino]phenyl]           1600-27-7         Acetic acid, mercury(2+) salt (2:1).           1785-43-9         Mercury, chlorol-(Hg2C).           02682-71-2         Mercury, chlorol-4, (24-dimitophenyl)           20582-71-2         Mercury, solde (Hg2O).           21908-53-2         Mercury oxide (Hg2O).           22450-90-4         Mercury oxide (Hg2O).           24579-90-6         Mercury, chlorol(2-hydroxy-5-nitrophenyl)           24569-91-4         Mercury, (notorol-2-hydroxy-5-nitrophenyl)           24569-92-4         Mercury, (holro(2-hydroxy-5-nitrophenyl)           24579-90-6         Mercury, (holrov(2-hydroxy-5-nitrophenyl)           24569-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           29457-73         Mercury, holrov(2-hydroxy-5-nitrophenyl)           29457-73         Mercury, holrov(2-hydroxy-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-60-4         Mercury, holenyl(-hydroxy-happa.O)-3,5c	1345–09–1	Cadmium mercury sulfide.
141–51–5         Mercury, iddo(idomethyl)           14783–58–6         Mercury, bis(2-pohenyldiazenecarbothioic acid-kappa.S) 2-phenylhydrazidato-kappa.N2]-, (T-4)           15385–58–7         Mercury, chiorodiazenecarbothioic acid-kappa.S) 2-phenylhydrazidato-kappa.N2]-, (T-4)           15385–58–7         Mercury, chiorodenta-file           15785–93–0         Mercury, chiorodenta-file           1600–27–7         Acetic acid, mercury(2+) salt (2:1).           1785–43–9         Mercury, chioro(ethanethiolato)           19447–62–2         Mercury, chioro(ethanethiolato)           19447–62–2         Mercury, selenide (HgSe).           20582–71–2         Mercury selenide (HgSe).           21908–53-2         Mercury, chioro(2-hydroxy-5-nitrophenyl)           24450–90–4         Mercury, (Imu-12-dodecylbutanedioato(2). kappa.O1: kappa.O4][diphenyldi           2455–49–3         Mercury, (modecanoato-kappa.O)phenyl           27685–51-4         Cobaltate[2-). tetrakithicoxyanato kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)].           294–57–3         Mercury, I3.6-dichioro-4,5-di(hydroxy-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)].           3770–60–4         Mercury, I3.6-dichioro-4,5-di(hydroxy-kappa.S)benzoato(2-).kappa.O], sodium (1:1).           37–64–4         Mercury, chioro(4-methylphenyl)           37–64–4         Mercury, chioro(4-methylphenyl)	13876–85–2	Mercurate(2-), tetraiodo-, copper(1+) (1:2), (T-4)
14783-59-6       Mercury, bisl(2-phenyldiazenecarbothioic acid-kappa.S) 2-phenylhydrazidato-kappa.N2]-, (T-4)         15385-58-7       Mercury, chiorol4-1(2,4-dinitrophenyl)amino]phenyl]         15785-93-0       Mercury, chiorol4-1(2,4-dinitrophenyl)amino]phenyl]         15829-63-5       Mercury, chiorol4-1(2,4-dinitrophenyl)amino]phenyl]         15829-63-5       Mercury, chiorol4-1(2,4-dinitrophenyl)amino]phenyl]diazenyl]phenyl]         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, chiorol(thmaethiolato)         19447-62-2       Mercury, clacetalo- kappa.Ol[4-[2/4-(dimethylamino)phenyl]diazenyl]phenyl]         20682-71-2       Mercury solide (HgO).         21008-53-2       Mercury, chioro(2-hydroxy-5-nitrophenyl)         24579-90-4       Mercury, chioro(2-hydroxy-5-nitrophenyl)         24569-90-4       Mercury, (nodecanoato-kappa.O)+.kappa.O1:kappa.O4]]diphenyldi         26545-49-3       Mercury, henyl(trichioromethyl)         24569-51-4       Cobalitate(2-), letrakis(thiocyanato-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]         2570-80-7       Mercury, bis(acetato-kappa.O)[mu-ci,3,6-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl]di         3570-60-4       Mercury, henyl(1(chioros-4,5-di(hydroxy-kappa.O)]-, sodium (1:1).         537-64-4       Mercury, henyl(1(chioros-4,5-di(hydroxy-soaxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-2',7'd	138–85–2	Mercurate(1-), (4-carboxylatophenyl)hydroxy-, sodium (1:1).
15385-58-7       Mercury, dibornodi., (Hg-Hg),         15785-93-0       Mercury, chloro[4-[(2,4-dinitrophenyl]amino]phenyl]         15829-53-5       Mercury, chloro[4-[(2,4-dinitrophenyl]amino]phenyl]         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, chloro(ftanethiolato)         19447-62-2       Mercury, cloro(tanethiolato)         19447-62-2       Mercury, cloro(tanethiolato)         20582-71-2       Mercury, cloro(tanethiolato)         20601-83-6       Mercury, selenide (HgSe).         21908-53-2       Mercury, chloro(2-hydroxy-5-nitrophenyl)         22450-90-4       Mercury, chloro(2-hydroxy-5-nitrophenyl)         2450-90-6       Mercury, (neodecanoatokappa.O)1.kappa.O1.kappa.O4]]diphenyldi         26545-43-3       Mercury, (neodecanoatokappa.O)phenyl         27685-51-4       Cobaltate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)         29870-72-2       Cadmium mercury telluide ((Cd,Hg)Te).         33770-60-4       Mercury, bis(actatokappa.O)-3.5cyclohexadiene-1,2-dionato(2-)]         3570-80-7       Mercury, bis(actatokappa.O)[hmu-(3',6'-dihydroxy-3oxospic](sobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di         539-43-5       Mercury, thirdic/ (Cd,Hy)Te).         5464-8       Mercury, thipor(-kappa.O)[hmu/-(3',6'-dihydroxy-3oxospic](sobenzofuran-1(3H)	141–51–5	Mercury, iodo(iodomethyl)
15785-93-0       Mercury, chloro[4-](2,4-dinitrophenyl]amino]phenyl]         15829-53-5       Mercury oxide (Hg2O).         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, chloro(ethanethiolato).         19447-62-2       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl]diazenyl]phenyl].         20582-71-2       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl]diazenyl]phenyl].         20582-71-2       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl]diazenyl]phenyl].         20582-71-2       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl]diazenyl]phenyl].         20582-71-2       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl]diazenyl]phenyl].         24579-90-4       Mercury, (acetato-kappa.O)[4-]2-[4-(dimethylamino)phenyl].         24579-90-6       Mercury, (nuc-[2-dodecylbutanedioato[2-]).kappa.O1:kappa.O4]]diphenyldi         2645-49-3       Mercury, (nuc-[2-dodecylbutanedioato[2-]).kappa.O4]]diphenyldi         2645-49-3       Mercury, (neodecanato-kappa.O)phenyl         27685-51-4       Cobaltale(2-). tetrakis(thiocyanato-kappa.D)-, mercury(2+) (1:1), (T-4)         26370-72-2       Cadmium mercury telluride ((Cd, Hg)Te).         3770-60-4       Mercury, bis(acetato-kappa.O)[.mu-(3',6'-dihydroxy-soxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl]di         377-64-7       Mercury, notro(4-mappa.O)[phenyl	14783–59–6	
15829-53-5       Mercury oxide (Hg2O).         1600-27-7       Acetic acid, mercury(2+) salt (2:1).         1785-43-9       Mercury, (acetato-kappa.O)[4+]2-[4-(dimethylamino)phenyl]diazenyl]phenyl]         19447-62-2       Mercury, (acetato-kappa.O)[4+]2-[4-(dimethylamino)phenyl]diazenyl]phenyl]         20582-71-2       Mercury chloro(ethanethiolato)         Mercury selenide (HgSe).       Mercury selenide (HgSe).         21908-53-2       Mercury selenide (HgSe).         24450-90-4       Mercury, (mu-[2-dodecylbutanedicato[2-),kappa.O1:.kappa.O4]]diphenyldi         2645-49-3       Mercury, (mu-[2-dodecylbutanedicato[2-),kappa.O1:.kappa.O4]]diphenyldi         2645-51-4       Cobaltate(2-), tetrakis(thiocyanato-kappa.O)-stoppa.O4]         29870-72-2       Cadmium mercury telluride ((Cd,Hg)Te).         33770-60-4       Mercury, bis(acetato-kappa.O)[.mu(3',6'-dihydroxy-soxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl]di         3570-80-7       Mercury, chloro(4-methylphenyl)         3570-64-4       Mercury, chloro(4-methylphenyl)         356-68+5       Mercury, chloro(2-hydroxy-kappa.S)benzoato(2-),kappa.O]-, sodium (1:1).         55-68+5       Mercury, chloro(4-methylphenyl)         56724-482-4       Mercury, diphenyl         587-68-8       Mercury, dimethyl         598-85-8       Mercury, diphenyl	15385–58–7	Mercury, dibromodi-, (Hg-Hg).
1600-27-7         Acetic ácid, mercűry(2+) salt (2:1).           1785-43-9         Mercury, chloro(ethanethiolato)           19447-62-2         Mercury, (acetato-kappa.O][4-[2-[4-(dimethylamino)phenyl]diazenyl]phenyl]           20582-71-2         Mercury, (acetato-kappa.O][4-[2-[4-(dimethylamino)phenyl]diazenyl]phenyl]           20501-83-6         Mercury selenide (HgSe).           21908-53-2         Mercury oxide (HgQ).           24579-90-6         Mercury, chloro(2-hydroxy-5-nitrophenyl)           24509-90-4         Mercury, (nedecanoto-kappa.O)phenyl           24569-90-6         Mercury, (nedecanoto-kappa.O)phenyl           24565-49-3         Mercury, (needecanoto-kappa.O)phenyl           27685-51-4         Cobaltate(2-), tetrakis(thiocyanato-kappa.N)-, mercury(2+) (1:1), (T-4)           2094-57-3         Mercury, ja6-dichloro-4,5-di(hydroxy-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3770-60-4         Mercury, bis(4-methylphenyl)           3770-60-4         Mercury, bis(4-methylphenyl)           3770-40-7         Mercury, bis(4-methylphenyl)           3770-40-4         Mercury, thior(4-methylphenyl)           3770-40-4         Mercury, tolor(4-methylphenyl)           537-64-4         Mercury, chloro(4-methylphenyl)           54-64-8         Mercury, chloro(4-methylphenyl)           55-68-5 </td <td>15785–93–0</td> <td>Mercury, chloro[4-[(2,4-dinitrophenyl)amino]phenyl]</td>	15785–93–0	Mercury, chloro[4-[(2,4-dinitrophenyl)amino]phenyl]
1785-43-9       Mercury, chloro(ethanethiolato)-         19447-62-2       Mercury, (acetato-kappa.O)[4-[2-[4-(dimethylamino)phenyl]diazenyl]phenyl]         20582-71-2       Mercury selenide (HgSe).         20582-71-2       Mercury selenide (HgSe).         21908-53-2       Mercury selenide (HgSe).         24450-90-4       Mercury oxide (HgO).         24450-90-4       Mercury, chloro(2-hydroxy-5-nitrophenyl)         24450-32-4       Mercury, (neodecanoato-kappa.O)phenyl         24806-32-4       Mercury, (neodecanoato-kappa.O)phenyl         27685-51-4       Cobaltate(2-), tetrakis(thiocyanato-kappa.O)-3,5cyclohexadiene-1,2-dionato[2-])         29870-72-2       Cadmium mercury telluride (ICd.Hg)Te).         3294-57-3       Mercury, bis(ac-tackpap.O)-3,5cyclohexadiene-1,2-dionato[2-])         3570-60-7       Mercury, bis(ac-tackpap.O)-3,5cyclohexadiene-1,2-dionato[2-])         3570-60-7       Mercury, bis(a-methylphenyl)         537-64-4       Mercury, chloro(4-methylphenyl)         537-64-4       Mercury, chloro(4-methylphenyl)         547-64-8       Mercury, diphenyl         567-85       Mercury, diphenyl         567-85-5       Mercury, diphenyl         567-85-9       Mercury, diphenyl         592-64-1       Mercury, diphenyl <td< td=""><td>15829–53–5</td><td>Mercury oxide (Hg2O).</td></td<>	15829–53–5	Mercury oxide (Hg2O).
19447-62-2         Mercury, (acetatokappa.O)[4-[2-[4-(dimethylamino)phenyl]diazenyl]phenyl]           20582-71-2         Mercury selenide (HgSe).           20601-83-6         Mercury selenide (HgSe).           21908-53-2         Mercury selenide (HgSe).           24509-90-4         Mercury selenide (HgSe).           24579-90-6         Mercury, chloro(2-hydroxy-5-nitrophenyl)           24509-30-4         Mercury, chloro(2-hydroxy-5-nitrophenyl)           246545-49-3         Mercury, (mu-[2-dodecylbutanedioato(2-).kappa.O1:.kappa.O4]]diphenyldi           26545-49-3         Mercury, (nodecanoatokappa.O)phenyl           27685-51-4         Cobaltate(2-), tetrakis(thiocyanatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3970-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           3970-60-4         Mercury, bis(4-methylphenyl)           3770-60-4         Mercury, bis(4-methylphenyl)           3770-60-7         Mercury, bis(4-methylphenyl)           3743-5         Mercury, bis(4-methylphenyl)           374-64-8         Mercury, (nitratokappa.O)phenyl           56-68-5         Mercury, ontratokappa.O)phenyl           57-64-4         Mercury, ontratokappa.O)phenyl           57-24-82-4         Mercury, chenyl(12-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]           57-	1600–27–7	Acetic acid, mercury(2+) salt (2:1).
20582-71-2         Mercurate(2-), tetrachloro-, potassium (1:2), (T-4)           20601-83-6         Mercury oxide (HgQ).           21908-53-2         Mercury oxide (HgQ).           24579-90-6         Mercury, interphenyl-, acetate (1:1).           24579-90-6         Mercury, [mu[2-dodecylbutanedioato(2-).kappa.01:.kappa.04]]diphenyldi           2685-51-4         Cobaltate(2-), tetrakis(thiocyanato-kappa.0)phenyl           27685-51-4         Cobaltate(2-), tetrakis(thiocyanato-kappa.0)-, mercury(2+) (1:1), (T-4)           29870-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           33770-60-4         Mercury, [sig.4-cetato-kappa.0].mercury(2+) (1:1), (T-4)           29870-77-3         Mercury, tetrakis(thiocyanato-kappa.0)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-80-7         Mercury, bis(acetato-kappa.0].mu(3',6'-dihydroxy-30xospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           537-84-4         Mercury, bis(4-methylphenyl)           539-43-5         Mercury, chloro(4-methylphenyl)           54-64-8         Mercury, nitrato-kappa.0]phenyl           54-64-8         Mercury, ophenyl(iczenecarbothioic acid.kappa.S)benzoato(2-).kappa.0]-, sodium (1:1).           55-88-5         Mercury, nehnyl(E)-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]           587-85-9         Mercury, diphenyl           592-845-8         Mercur		
20601-83-6         Mercury selenide (HgSe).           21908-53-2         Mercury oxide (HgO).           22450-90-4         Mercury (1+), amminephenyl-, acetate (1:1).           24579-90-6         Mercury, chloro(2-hydroxy-5-nitrophenyl)           24606-32-4         Mercury, (neodecanoatokappa.O)phenyl           26545-49-3         Mercury, (neodecanoatokappa.O)phenyl           26545-49-3         Mercury, tetrakis(thiocyanatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3294-57-3         Mercury, j8(a-cetatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           33770-60-4         Mercury, bis(acetatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-80-7         Mercury, bis(acetatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-84-4         Mercury, bis(4-methylphenyl)           3943-5         Mercury, bis(4-methylphenyl)           394-35         Mercury, chloro(4-methylphenyl)           539-43-5         Mercury, neuplenyl(2-mercaptokappa.S)benzoato(2-).kappa.O]-, sodium (1:1).           55-68-5         Mercury, phenyl(12-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]           587-85-9         Mercury, chloro(4-methylphenyl)           592-85-8         Mercury, chloro(4-hydroxylatophenyl)           592-85-8         Mercury, note (Hg(CN)2).           592-85-9         Mercury,		
21908-53-2         Mercury oxide (HgO).           22450-90-4         Mercury, chiroto(2-hydroxy-5-nitrophenyl)           24579-90-6         Mercury, chiroto(2-hydroxy-5-nitrophenyl)           24806-32-4         Mercury, [mu[2-dodecylbutanedioato(2-).kappa.O1:.kappa.O4]]diphenyldi           26545-49-3         Mercury, (neodecanoatokappa.Ophenyl           27685-51-4         Cobaltate(2-). tertakis(thiocyanatokappa.O)-, mercury(2+) (1:1), (T-4)           29870-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           32770-60-4         Mercury, bis(acetatokappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-80-7         Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           537-64-4         Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           537-64-4         Mercury, chiroto-4-methylphenyl)           54-64-8         Mercury, chiroto-4-methylphenyl)           54-64-8         Mercury, diphenyl           572-88-5         Mercury, diphenyl           587-85-9         Mercury, diphenyl           592-85-8         Mercury, diphenyl           592-85-8         Mercury, diphenyl           593-74-8         Mercury, diord(4-hydroxyhpenyl).           593-74-8         Mercury, diord(4-hydroxyhp	20582–71–2	
22450-90-4         Mercury(1+), amininephenyl-, acetate (1:1).           24579-90-6         Mercury, chloro(2-hydroxy-5-nitrophenyl)           24806-32-4         Mercury, [mu-[2-dodecylbutanedioato(2-).kappa.01:.kappa.04]]diphenyldi           26545-49-3         Mercury, (meodecanoatokappa.0)phenyl           27685-51-4         Cobaltate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)           29870-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           3294-57-3         Mercury, bis(acetatokappa.0)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-60-4         Mercury, bis(acetatokappa.0)[.mu-(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           3770-60-4         Mercury, bis(acetatokappa.0)[.mu-(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           37870-80-7         Mercury, bis(acetatokappa.0)[.mu-(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           379-43-5         Mercury, chloro(4-methylphenyl)           539-43-5         Mercury, chloro(4-methylphenyl)           54-64-8         Mercury, chloro(4-methylphenyl)           55-68-5         Mercury, chloro(4-methylphenyl)           572-442-4         Mercury, chloro(4-methylphenyl           592-85-8         Thiocyanic acid, mercury(2+) salt (2:1).           593-74-8         Mercury, dimethyl	20601–83–6	Mercury selenide (HgSe).
24579-90-6         Mercury, chloro(2-hydroxy-5-nitrophenyl)           24806-32-4         Mercury, [.mu[2-dodecylbutanedicato(2).kappa.0].kappa.0]diphenyldi           26545-49-3         Mercury, (neodecanoatokappa.0)phenyl           27685-51-4         Cobalitate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)           28970-72-2         Cadmium mercury telluride ((Cd,Hg)Te).           3270-60-4         Mercury, j.b., dichloro-4, 5-di(hydroxy-kappa.0)-3,5cyclohexadiene-1,2-dionato(2-)]           3570-80-7         Mercury, bis(acetatokappa.0)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di           537-64-4         Mercury, bis(4-methylphenyl)           539-43-5         Mercury, chloro(4-methylphenyl)           54-64-8         Mercury, phenyl(irtracto-kappa.0)phenyl           557-68-5         Mercury, phenyl(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]           56724-82-4         Mercury, copanic acid, mercury(2+) salt (2:1).           592-04-1         Mercury, copanic (Hg(CN)2).           592-85-8         Thiocyanic acid, mercury(2+) salt (2:1).           593-74-8         Mercury, dimethyl           59-85-8         Mercury, cacetatokappa.0)phenyl           623-07-4         Mercury, (acetatokappa.0)phenyl           623-07-4         Mercury, dimethyl <t< td=""><td>21908–53–2</td><td></td></t<>	21908–53–2	
24806-32-4       Mercury, [.mu[2-dodecy/butanedioato(2).kappa.O1:.kappa.O4]]diphenyldi         26545-49-3       Mercury, (neodecanoatokappa.O)phenyl         27685-51-4       Cobaltate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)         29870-72-2       Cadmium mercury telluride ((Cd,Hg)Te).         3294-57-3       Mercury, [3,6-dichoro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]         3570-80-4       Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-30xospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di         537-64-4       Mercury, bis(4-methylphenyl)         539-43-5       Mercury, chloro(4-methylphenyl)         54-64-8       Mercury, nitratokappa.O)phenyl         55-68-5       Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]         56724-82-4       Mercury, diphenyl         592-04-1       Mercury, diphenyl         592-85-8       Thiocyanic acid, mercury(2+) salt (2:1).         593-74-8       Mercury, dimethyl         593-74-8       Mercury, (acetatokappa.O)phenyl)         623-07-4       Mercury, (acetatokappa.O)phenyl)         623-07-4       Mercury, (acetatokappa.O)phenyl)         623-84-1       Mercury, (acetatokappa.O)phenyl)         623-82-4       Mercury, (acetatokappa.O)phenyl)         <		
26545-49-3       Mercury, (neodecanoatokappa.O)phenyl         27685-51-4       Cobaltate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)         29870-72-2       Cadmium mercury telluride ((Cd,Hg)Te).         3294-57-3       Mercury, phenyl(trichloromethyl)         33770-60-4       Mercury, [3,6-dichloro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]         3570-80-7       Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di         537-64-4       Mercury, chloro(4-methylphenyl)         539-43-5       Mercury, chloro(4-methylphenyl)         54-64-8       Mercury, (nitratokappa.O)phenyl         54-64-8       Mercury, (nitratokappa.O)phenyl         56724-82-4       Mercury, (nitratokappa.O)phenyl         56724-82-4       Mercury, diphenyl.         592-04-1       Mercury, diphenyl.         592-04-1       Mercury, diphenyl         592-85-8       Thiocyanic acid, mercury(2+) salt (2:1).         593-74-8       Mercury, (hloro(4-hydroxyphenyl)         623-07-4       Mercury, (caetatokappa.O)phenyl         623-07-4       Mercury, (acetatokappa.O)phenyl         623-07-4       Mercury, (acetatokappa.O)phenyl         623-07-4       Mercury, (acetatokappa.O)phenyl <t< td=""><td></td><td></td></t<>		
27685-51-4Cobaltate(2-), tetrakis(thiocyanato-kappa.N)-, mercury(2+) (1:1), (T-4)29870-72-2Cadmium mercury telluride ((Cd,Hg)Te).3294-57-3Mercury, phenyl(trichloromethyl)33770-60-4Mercury, [3.6-dichloro-4,5-di(hydroxy-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]3570-80-7Mercury, bis(acetato-kappa.O)[.mu(3',6'-dihydroxy-30xospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di537-64-4Mercury, bis(4-methylphenyl)539-43-5Mercury, chloro(4-methylphenyl)54-64-8Mercury, chloro(4-methylphenyl)54-64-8Mercury, nitrato-kappa.O)phenyl55-68-5Mercury, nitrato-kappa.O)phenyl56724-82-4Mercury, phenyl([2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]587-85-9Mercury, diphenyl592-04-1Mercury cyanide (Hg(CN)2).593-74-8Mercury, dimethyl593-74-8Mercury, chloro(4-methylphenyl)623-07-4Mercury, chloro(4-hydroxyhaphenyl)chloro-, hydrogen.623-07-4Mercury, chloro(4-hydroxyhaphenyl)62-38-4Mercury, chloro(4-hydroxyhaphenyl)62-38-4Mercury, chloro(4-hydroxyhphenyl)62-38-4Mercury, (acetato-kappa.O)phenyl623-02-2Cyclohexanebutanoic acid, mercury(2+) salt (2:1).623-24-5Mercury, (acetato-kappa.O)phenyl623-24-5Mercury, (acetato-kappa.O)(4-aminophenyl)		
29870-72-2Cadmium mercury telluride ((Cd,Hg)Te).3294-57-3Mercury, phenyl(trichloromethyl)33770-60-4Mercury, [3,6-dichloro-4,5-di(hydroxy-kappa.O)-3,5cyclohexadiene-1,2-dionato(2-)] $570-80-7$ Mercury, bis(acetato-kappa.O)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di $537-64-4$ Mercury, bis(4-methylphenyl) $539-43-5$ Mercury, chloro(4-methylphenyl) $54-64-8$ Mercury, chloro(4-methylphenyl) $56724-82-4$ Mercury, phenyl[[2-mercapto-kappa.S]benzoato(2-).kappa.O]-, sodium (1:1). $56724-82-4$ Mercury, phenyl[[2-phenyldiazenecarbothioic acid.kappa.S] 2-phenylhydrazidatokappa.N2] $587-85-9$ Mercury, diphenyl $592-04-1$ Mercury, cyanide (Hg(CN)2). $592-85-8$ Thiocyanic acid, mercury(2+) salt (2:1). $59-85-8$ Mercury, chloro(4-hydroxyphenyl)chloro-, hydrogen. $623-07-4$ Mercury, chloro(4-hydroxyphenyl) $62-38-4$ Mercury, dicetatokappa.O)phenyl $62638-02-2$ Cyclohexanebutanoic acid, mercury(2+) salt (2:1). $627-44-1$ Mercury, dicetatokappa.O)(4-aminophenyl) $627-44-5$ Mercury, dicethyl		
3294–57–3       Mercury, phenyl(trichloromethyl).         33770–60–4       Mercury, [3,6-dichloro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]         3570–80–7       Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-30xospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di         537–64–4       Mercury, bis(4-methylphenyl)         539–43–5       Mercury, chloro(4-methylphenyl)         54–64–8       Mercury, (nitratokappa.O)phenyl         55–68–5       Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]         56724–82–4       Mercury, diphenyl         592–04–1       Mercury, chloro(4-methylphenyl)         592–04–1       Mercury, chloro(2+) salt (2:1).         593–74–8       Mercury, diphenyl         593–74–8       Mercury, diphenyl         592–85–8       Thiocyanic acid, mercury(2+) salt (2:1).         593–74–8       Mercury, dimethyl         59–85–8       Mercury, chloro(4-hydroxylatophenyl)chloro-, hydrogen.         623–07–4       Mercury, dicetatokappa.O)phenyl         623–07–4       Mercury, dimethyl         59–85–8       Mercury, diatetapelee         623–07–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1		
33770-60-4       Mercury, [3,6-dichloro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]         3570-80-7       Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-30xospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di         537-64-4       Mercury, bis(4-methylphenyl)         539-43-5       Mercury, chloro(4-methylphenyl)         54-64-8       Mercury, (nitratokappa.O)phenyl         55-68-5       Mercury, (nitratokappa.O)phenyl         56724-82-4       Mercury, ophenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]         587-85-9       Mercury, diphenyl         592-04-1       Mercury, dimethyl         592-04-1       Mercury, dimethyl         592-85-8       Thiocyanic acid, mercury(2+) salt (2:1).         592-85-8       Mercury, chloro(4-hydroxyphenyl)         623-07-4       Mercury, chloro(4-hydroxyphenyl)         623-24-5       Mercury, (acetatokappa.O)phenyl		
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537-64-4Mercury, bis(4-methylphenyl) $539-43-5$ Mercury, chloro(4-methylphenyl) $54-64-8$ Mercury, chloro(4-methylphenyl) $55-68-5$ Mercury, (nitrato-kappa.O)phenyl $56724-82-4$ Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidato-kappa.N2] $587-85-9$ Mercury cyanide (Hg(CN)2). $592-04-1$ Mercury, diphenyl $592-85-8$ Mercury, dimethyl $593-74-8$ Mercury, dimethyl $59-85-8$ Mercury, dimethyl $623-07-4$ Mercury, (acetato-kappa.O)phenyl) $62638-02-2$ Cyclohexanebutanoic acid, mercury(2+) salt (2:1). $627-44-1$ Mercury, (acetato-kappa.O)phenyl $6283-24-5$ Mercury, dicethyl $628-24-5$ Mercury, dicethyl		Mercury, [3,6-dichloro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]
539-43-5Mercury, chloro(4-methylphenyl)54-64-8Mercury, chloro(4-methylphenyl)55-68-5Mercury, chloro(4-methylphenyl)56724-82-4Mercury, (nitratokappa.O)phenyl56724-82-4Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]587-85-9Mercury, diphenyl592-04-1Mercury cyanide (Hg(CN)2).592-85-8Thiocyanic acid, mercury(2+) salt (2:1).593-74-8Mercury, dimethyl59-85-8Mercury, dimethyl62-38-4Mercury, chloro(4-hydroxyphenyl)62-38-4Mercury, (acetatokappa.O)phenyl62638-02-2Cyclohexanebutanoic acid, mercury(2+) salt (2:1).627-44-1Mercury, (acetatokappa.O)(4-aminophenyl)6283-24-5Mercury, (acetatokappa.O)(4-aminophenyl)		
54-64-8       Mercurate(1-), ethyl[2-(mercaptokappa.S)benzoato(2-).kappa.O]-, sodium (1:1).         55-68-5       Mercury, (nitratokappa.O)phenyl         56724-82-4       Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]         587-85-9       Mercury, diphenyl         592-04-1       Mercury cyanide (Hg(CN)2).         592-85-8       Thiocyanic acid, mercury(2+) salt (2:1).         593-74-8       Mercury, dimethyl         59-85-8       Mercury, chloro(4-hydroxyphenyl)chloro-, hydrogen.         623-07-4       Mercury, (acetatokappa.O)phenyl         62638-02-2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627-44-1       Mercury, diethyl         6283-24-5       Mercury, (acetatokappa.O)(4-aminophenyl)		
55-68-5Mercury, (nitratokappa.O)phenyl56724-82-4Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]587-85-9Mercury, diphenyl592-04-1Mercury cyanide (Hg(CN)2).592-85-8Thiocyanic acid, mercury(2+) salt (2:1).59-74-8Mercury, dimethyl59-85-8Mercury, choro(4-hydroxyphenyl).62-38-4Mercury, (acetatokappa.O)phenyl62638-02-2Cyclohexanebutanoic acid, mercury(2+) salt (2:1).627-44-1Mercury, (acetatokappa.O)(4-aminophenyl)		
56724-82-4Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]587-85-9Mercury, diphenyl592-04-1Mercury cyanide (Hg(CN)2).592-85-8Thiocyanic acid, mercury(2+) salt (2:1).59-74-8Mercury, dimethyl59-85-8Mercury, choro(4-hydroxyphenyl)chloro-, hydrogen.623-07-4Mercury, (acetatokappa.O)phenyl62638-02-2Cyclohexanebutanoic acid, mercury(2+) salt (2:1).627-44-1Mercury, diethyl6283-24-5Mercury, (acetatokappa.O)(4-aminophenyl)		
587–85–9       Mercury, diphenyl         592–04–1       Mercury cyanide (Hg(CN)2).         592–85–8       Thiocyanic acid, mercury(2+) salt (2:1).         593–74–8       Mercury, dimethyl         593–74–8       Mercury, dimethyl         593–74–8       Mercury, dimethyl         623–07–4       Mercury, choro(4-hydroxyphenyl)chloro-, hydrogen.         62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
592–04–1       Mercury cyanide (Hg(CN)2).         592–85–8       Thiocyanic acid, mercury(2+) salt (2:1).         593–74–8       Mercury, dimethyl         59–85–8       Mercury, chloro(4-hydroxyphenyl)chloro-, hydrogen.         623–07–4       Mercury, chloro(4-hydroxyphenyl)         62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
592–85–8       Thiocyanic acid, mercury(2+) salt (2:1).         593–74–8       Mercury, dimethyl         59–85–8       Mercury, choro(4-hydroxyphenyl)chloro-, hydrogen.         623–07–4       Mercury, choro(4-hydroxyphenyl)         62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
593–74–8       Mercury, dimethyl         59–85–8       Mercury, dimethyl         623–07–4       Mercury, chloro(4-hydroxyphenyl)         62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
59-85-8       Mercurate(1-), (4-carboxylatophenyl)chloro-, hydrogen.         623-07-4       Mercury, chloro(4-hydroxyphenyl)         62-38-4       Mercury, (acetatokappa.O)phenyl         62638-02-2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627-44-1       Mercury, diethyl         6283-24-5       Mercury, (acetatokappa.O)(4-aminophenyl)		
623–07–4       Mercury, chloro(4-hydroxyphenyl)         62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
62–38–4       Mercury, (acetatokappa.O)phenyl         62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
62638–02–2       Cyclohexanebutanoic acid, mercury(2+) salt (2:1).         627–44–1       Mercury, diethyl         6283–24–5       Mercury, (acetatokappa.O)(4-aminophenyl)		
627–44–1 Mercury, diethyl 6283–24–5 Mercury, (acetatokappa.O)(4-aminophenyl)		
6283–24–5 Mercury, (acetatokappa.O)(4-aminophenyl)		
628_86_4 Mercury bis(fulminato- kanna C)-		
020 00 + History, bis(turninato-kappa.0/	628–86–4	Mercury, bis(fulminatokappa.C)

TABLE 2—LIST OF	MERCURY COMPOUNDS—	-Continued
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Chemical Abstracts Service Registry No.	Mercury compound
63325-16-6       M         63468-53-1       M         63549-47-3       M         68201-97-8       M         72379-35-2       M         7439-97-6       M         7447-94-7       M         7546-30-7       M         7774-29-0       M         7778-33-7       M         7783-35-9       Si         7783-39-3       M         7789-47-1       M         90-03-9       M	

The Agency received a comment requesting an explanation for the Agency decision to not adopt the definition for "mercury compound" used by the Minamata Convention ("any substance consisting of atoms of mercury and one or more atoms of other chemical elements that can be separated into different components only by chemical reactions'') (Ref. 8). Another commenter requested that the Agency clarify whether there is a concentration limit for classifying a material as elemental mercury and if EPA intends to require parties to report the manufacture or use of all mercury compounds, or only those that are listed on the TSCA Inventory (Ref. 9).

Consistent with the discussion in the proposed rule, the Agency did not define specific terms for purposes of the mercury inventory in the regulatory text. Instead, the Agency considered and synthesized descriptions of applicable definitions found in TSCA and implementing regulations, as well as the Minamata Convention. To that end, EPA proposed that "elemental mercury be limited to elemental mercury (CASRN 7439-97-6) and mercury compounds be inclusive of all instances where elemental mercury or a mercury compound is reacted with another chemical substance" (Ref. 3). In regard to the definition of "mercury compound" set forth in the Minamata Convention, EPA finds the language in the proposed rule to be clear and comparable to the definition under the Minamata Convention. EPA is therefore retaining its proposed characterization. EPA also provides an extensive, though not comprehensive, list of compounds for which reporting is required based on CASRN. EPA's statutory obligations are to prepare the mercury inventory (15

U.S.C. 2607(b)(10)(B)) and to develop identifications and recommendations to reduce the use of mercury (15 U.S.C. 2607(b)(10)(C)); nonetheless, EPA believes the resulting reporting will assist the United States in implementing the Minamata Convention.

In regard to establishing a concentration limit for elemental mercury, the statutory text at TSCA section 8(b)(10)(A)(i) uses the term "elemental mercury" without qualification. Therefore, the Agency believes that it is appropriate to identify elemental mercury by use of its CASRN and without a concentration limit.

# *B.* Explanation of Supply, Use, and Trade

1. Overview of the Proposed Scope. Pursuant to TSCA section 8(b)(10)(B), EPA interprets the scope of the mercury inventory to include activities within the domestic and global commodity mercury market that fall under "supply, use, and trade of mercury in the United States." An inventory that adequately accounts for mercury in supply, use, and trade includes activities of persons who must report as described in TSCA section 8(b)(10)(D)(i): Manufacture, import, and otherwise intentionally use mercury in a manufacturing process. As such, the Agency proposed that persons required to report to the mercury inventory also include information on distribution in commerce, storage, and export to provide for the requisite inventory of mercury supply, use, and trade in the United States (Ref. 3).

2. Comments Related to Terminology. The Agency received comments requesting clarification of the descriptions of various terms, including: Mercury handled as waste, including elemental mercury destined for longterm storage; otherwise intentionally use mercury in a manufacturing process; impurities present in a final product; commercial purposes; mercury-added products and components; and "persons." As described in Unit III.A., the Agency did not define specific terms for purposes of the mercury inventory in the regulatory text. Instead, the Agency considered and synthesized descriptions of applicable definitions found in TSCA and implementing regulations, as well as the Minamata Convention.

• Mercury Handled as Waste, Including Elemental Mercury Destined for Long-Term Storage. EPA received comments on reporting of mercury by facilities that certify that their stored elemental mercury will not be sold,<sup>1</sup> including instances where mercury is produced as a mining byproduct and is managed as a hazardous waste (Ref. 10; Ref. 11; Ref. 12). Other comments addressed imported mercury-containing materials or wastes from which mercury can be recovered. Commenters emphasized that any exemption should

<sup>&</sup>lt;sup>1</sup>Under section 6939f(g)(2) of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6939f(g)(2)), U.S. Department of Energy is required to establish a facility by 2019 "for the purpose of long-term management and storage of elemental mercury generated within the United States." Until that facility is operational, the elemental mercury can be stored at facilities with RCRA permits, or onsite at some mining operations that generate elemental mercury. In both cases, the facility is allowed to store elemental mercury waste (without regard to the RCRA prohibition on hazardous waste storage in lieu of treatment and disposal) until the planned DOE facility is operational and accepts elemental mercury for long-term management and storage. All facilities or companies storing waste in this manner, whether in the mining sector or not, are required to certify in writing to the DOE that they will store the mercury under certain conditions set forth in RCRA, including not selling the mercury.

only apply to mercury that is clearly not intended to be used for commercial purposes (Ref. 10; Ref. 11).

EPA agrees with the commenters that elemental mercury waste, whether generated from mining or another process, that is being stored (or accumulated on-site and destined for storage) for eventual transfer to the DOE long-term mercury storage facility, should not be subject to the reporting requirements because it is waste, which is exempt from this rule in accordance with TSCA section 8(10)(D)(iii). If any person manufactures elemental mercury, including recovery from waste or as a byproduct from mining or any other activity, and has not made the decision to store it for transfer to the DOE storage facility or to otherwise handle it as waste, then that person must report that mercury. The Agency considers such mercury to be a commodity, not waste, and, therefore, part of the U.S. mercury supply.

EPA partially agrees with the comment that any mercury available for sale or otherwise available for commercial use including incidentally produced mercury should be captured in the inventory. Mercury produced as a byproduct and sold or otherwise made available for commercial use, for example by mines, must be reported (unless managed as waste), even if it may be considered incidentally produced. However, mercury that is present after the production of a commodity (e.g., coal ash or cement), but serves no function in the final product, is not subject to reporting requirements set forth by this rule.

ÉPA agrees with the same commenter that if mercury-containing materials or waste are imported into the United States and the mercury is then recovered from such materials/waste, then this mercury must be reported upon recovery unless the mercury is immediately managed as waste under RCRA. An importer of such material or waste would only report the mercury if it is the same entity that recovers the mercury.

• Otherwise Intentionally Use Mercury in a Manufacturing Process. Commenters suggested that defining "otherwise intentionally use mercury in a manufacturing process" in the regulatory text would clarify reporting requirements (Ref. 13) and requested that EPA limit "manufacturing process" to the actual chemistry performed during such a process (Ref. 14).

In general, the Agency agrees with these comments. Notwithstanding differences in the statutory text (*i.e.*, "add" and "uses" in the context of how the mercury is used in a manufacturing process (see 15 U.S.C. 2607(b)(10)(C)(i) and (D)(i)), EPA believes that Congress meant to emphasize instances where persons intentionally introduce mercury into U.S. supply, use, and trade. As such, EPA agrees with commenters that, in the context of intentional use of mercury in a manufacturing process, it is the intentional use of elemental mercury or a mercury compound for a specific purpose (e.g., a catalyst, cathode, reactant, reagent, etc.) that triggers reporting requirements. The Agency also appreciates the suggestion of how it might qualify persons and activities subject to reporting requirements by adding "intentional" in applicable regulatory text. However, to the extent that terms in the regulatory text are drawn from 15 U.S.C. 2602 and 2607(b)(10), the Agency prefers to align with the statutory terms as much as possible. EPA further clarified interpretations of these terms in this rule. Forthcoming support and outreach materials, which will be available on the EPA website six months prior to the reporting deadline, also will attempt to illustrate such terms and issues.

 Impurities Present in a Final Product. The Agency received comments regarding inconsistencies related to if and how impurities would be reported by persons who intentionally use mercury in a manufacturing process. The commenters argue that EPA's proposal to not require reporting of impurities for manufactured mercury and mercury-added products is inconsistent with the requirement to report impurities in end products that result from the intentional use of mercury in a manufacturing process (Ref. 8; Ref. 15). The commenters opined that reporting mercury present as an impurity (*i.e.*, reporting unintentional presence) would be overly burdensome, unreasonable, and would not add any real value to the mercury inventory (Ref. 8; Ref. 15).

In the proposed rule, the Agency described impurities in regard to whether "such chemical substances are intentionally generated and whether such substances are used for commercial purposes." In order to clarify, EPA finds the definition of "impurity" at 40 CFR 704.3 to be instructive: "chemical substance which is unintentionally present with another chemical substance." Thus, after reconsideration, the Agency determined that to require reporting of amounts of mercury unintentionally present in a final product would contradict the logic set forth by the Agency regarding the intentional addition of mercury where mercury remains present in the final product for a particular purpose (Ref. 3). EPA believes the quantity of mercury used in the manufacturing process, how the mercury is used and for what purpose, to which NAICS code a final product is distributed, and to which country(ies) the final product is exported provide adequate information about manufacturing processes that involve the intentional use of mercury to support the supply, use, and trade national inventory. Thus, the unintentional quantity of mercury in final products that result from such processes is not required. Should the Agency need additional information regarding any mercury present as an impurity, it may seek such information from the reporter, as necessary. Therefore, the Agency is not requiring the reporting of impurities for the mercury inventory and revised the regulatory text accordingly.

• Commercial Purposes. The Agency received a comment that requested clarity on the use of "commercial purpose," particularly within the context of the proposed rule preamble, which discussed certain byproducts and impurities the Agency proposed excluding from reporting (Ref. 11). Another commenter suggested that EPA's intentions would be clearer if it specified that to be reportable, the activities (*e.g.*, manufacture, import, otherwise intentionally use mercury in a manufacturing process) must be for commercial purposes (Ref. 10).

In the proposed rule, the Agency discussed its attempt to build on existing regulatory text applicable to TSCA section 8 reporting (Ref. 3). TSCA section 8(f) states "[f]or purposes of [TSCA section 8], the terms 'manufacture' and 'process' mean manufacture or process for commercial purposes." Thus, EPA reads "for commercial purposes" to apply to the TSCA section 8(b)(10)(D)(i) terms "manufactures" (including imports) and "otherwise intentionally uses mercury in a manufacturing process" (i.e., comparable to "process" as defined at TSCA section 3(13)).

As used in 40 CFR 704.3, the terms defined with "for commercial purposes" incorporate ". . . with the purpose of obtaining an immediate or eventual commercial advantage . . ." for certain persons (*e.g.*, manufacturers, importers, and processors). In the proposed rule, the Agency described its rationale for instances where mercury would not be reported by focusing on "whether such chemical substances are intentionally generated and whether [byproducts and impurities] are used for commercial purposes" (Ref. 3). In the proposed regulatory text, however, EPA used a structure that used both sets of terms in the same sentence (*e.g.*, "purpose of obtaining . . . commercial advantage" (must be reported) and "not used for commercial purposes" (not to be reported)). Based on comments received, the Agency amended the regulatory text to clarify this concept.

The Agency determined that the terms "with the purpose of obtaining an immediate or eventual commercial advantage" are more consistent with the statutory mandate at 15 U.S.C. 2607(b)(10)(C)(i) to "identify any manufacturing processes or products that intentionally add mercury" (emphasis added). EPA believes such terms (e.g., "with the purpose of obtaining") more accurately align with the Agency's emphasis on the intent of persons required to report as opposed to "for commercial purposes." In addition, the Agency interprets "commercial advantage" to extend to benefits beyond profits, such as not incurring additional operational costs by continuing to use mercury rather than use non-mercury substances or technologies. Thus, to be required to report to the mercury inventory, persons must intentionally engage in activities that introduce mercury into supply, use, and trade in the United States with the purpose of obtaining an immediate or eventual commercial advantage. This interpretation and revised descriptions of supply, use and trade activities are discussed further in Unit III.B.5.

In the regulatory text of the final rule, therefore, the Agency omitted the use of "commercial purposes" and clarified how "with the purpose of obtaining an immediate or eventual commercial advantage" applies to activities for which reporting is required, as well as persons who must report.

• Mercury-added Products and Components. A commenter recommended that the Agency adopt the definition of the term "mercury-added product" as set forth in the Minamata Convention (Ref. 16), while another commenter requested that EPA clarify the distinction related to a "product that contains a component that is a mercuryadded product" (Ref. 17). Other commenters requested clarifications, such as: Whether certain uses of mercury qualified as a component that is a mercury-added product (Ref. 9; Ref. 13; Ref. 17); how reporting requirements would apply to manufacturers who first incorporate mercury into a product versus subsequent manufacturers of products that contain the original mercury-added product (e.g., the manufacture or import of Thimerosal (a mercury-containing preservative) and the manufacture or import of a vaccine containing Thimerosal) (Ref. 13);

distinguishing between mercurycontaining products involving chemical synthesis, alloy generating, blending and mixing operations versus articles with mercury-containing components (Ref. 9); and whether the proposed exemption for imported products that contain a component that is a mercuryadded product would apply to exported products (Ref. 18).

In the proposed rule, EPA did not define "mercury-added product," but provided examples of intentional addition of mercury to a product by persons who manufacture a mercuryadded product: "inserting mercury into a switch or battery, or mixing a mercury compound with other substances to formulate a topical antiseptic" (Ref. 3). In addition to the definition of "mercury-added product" in Article 2 of the Minamata Convention (*i.e.*, "a product or product component that contains mercury or a mercury compound that was intentionally added"), EPA also considered IMERC's definition, which is "any formulated or fabricated product that contains mercury, a mercury compound, or a component containing mercury, when the mercury is intentionally added to the product (or component) for any reason." The Agency sees merit in both definitions, but believes the definition in the Minamata Convention is more consistent with EPA's interpretation of the instruction at 15 U.S.C. 2607(b)(10)(C)(i) to "identify any manufacturing processes or products that intentionally add mercury." The Agency is of the view that the manufacture (other than import) of a mercury-added product is the "intentional addition of mercury where mercury remains present in the final product for a particular purpose'' (Ref. 3). In other words, the intentional addition of mercury is the essential act by a manufacturer (other than importer) who makes a mercury-added product and, thus, triggers applicable reporting requirements.

In regard to a ''component,'' EPA views this term as being similar to the definition of "article" in 40 CFR 704.3. The Agency views the inclusion of a mercury-added product that is a component within an assembled product differently from the act of intentionally inserting mercury (*i.e.*, chemical substance) into the component itself. As a result, the Agency is not requiring information to be reported on the manufacture (including import) of assembled products that include a component that is a mercury-added product. The Agency's rationale for reporting requirements applicable to products that contain a component that

is a mercury-added product is provided in Unit III.D.1.b.

The example of the manufacture and use of Thimerosal illustrates when something is or is not a component. EPA agrees that only the domestic manufacturer who intentionally adds mercury to a product, or an importer who imports a product where mercury (e.g., chemical substance) was inserted into the product, would report under this rule; subsequent manufacturers (including importers) of products that contain the original mercury-added product as a component would not report under this rule. Thimerosal is a mercury compound (e.g., listed under CASRN 54-64-8 on EPA's TSCA Chemical Substance Inventory list), and is subject to reporting as a mercury compound or, if intentionally combined with other substances, is subject to reporting as a mercury-added product because the mercury compound is being intentionally added to the product. Therefore, Thimerosal is not a component.

• *Persons*. One commenter requested that the Agency specify the basis for defining what "person" means in the context of who may be subject to reporting (Ref. 19). EPA finds the definition at 40 CFR 704.3 to be instructive, in which a "person" includes "any individual, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof; any municipality; any interstate body; and any department, agency, or instrumentality of the Federal Government."

3. Requests for Exemptions or *Exclusions from Reporting.* The Agency also received specific requests for exemptions from reporting to the mercury inventory, including: Specific industry sectors (Ref. 16; Ref. 20; Ref. 21); specific activities (Ref. 22); use of tools and equipment (Ref. 14); distribution of products originating from others (Ref. 9); replacement parts (Ref. 16; Ref. 17); recycled waste (Ref. 17); and products excluded from the Minamata Convention on Mercury (Ref. 9). Given the level of specificity of such requests and explanation of Agency determinations, these discussions are set forth in the *Response to Comments* document for this rule (Ref. 5).

4. Exports of Certain Mercury Compounds. In regard to certain exports of mercury, the Agency notes that the export of elemental mercury has been prohibited since January 1, 2013 (15 U.S.C. 2611(c)(1)) and therefore the Agency is not requiring reporting on the export of elemental mercury from the United States. TSCA, as of January 1, 2020, will also prohibit the export of certain mercury compounds: Mercury (I) chloride or calomel; mercury (II) oxide; mercury (II) sulfate; mercury (II) nitrate; and cinnabar or mercury sulphide (the statute uses the term "mercury sulphide" which is an alternative spelling of "mercury sulfide" as found in Table 2) (15 U.S.C. 2611(c)(7)).

In the proposed rule, the Agency noted that the inventory would benefit from the recent totals of at least one cycle of reporting prior to the effective date of the prohibition for exporting mercury compounds subject to TSCA section 12(c)(7) to measure trends in supply, use, and trade and provide a baseline for comparison of the changes in the amounts of other mercury compounds exported after the 2020 effective date (Ref. 3). The Agency received comments supporting the collection of such data: (1) To fulfill the express Congressional mandate to provide data on trade; (2) to determine the precise impact of the mercury compound export ban and associated trends, which would allow EPA to recommend whether the export ban should be further expanded to other compounds; and (3) to uphold obligations of the United States under the Minamata Convention (Ref. 11; Ref. 12). Thus, the Agency requires one-time reporting for those five compounds. Conversely, reporting for exports of mercury compounds that are not prohibited from export by TSCA section 12(c)(7) is required for every collection period. EPA previously determined that mercury-added products (including those containing elemental mercury or mercury compounds prohibited from export) generally are not prohibited from export and, therefore, are subject to the reporting requirements set forth in this rule.

5. Revised Descriptions of Supply, Use and Trade Activities. Based on comments received and the discussion presented elsewhere in Unit III.D., EPA modified the specific descriptions of supply, use, and trade activities to more accurately reflect the language of TSCA section 8(f) and the Agency's interpretation of the statutory mandate at TSCA section 8(b)(10)(C)(i). Thus, the Agency is requiring reporting of the following activities when intentionally undertaken to introduce mercury into supply, use, and trade in the United States with the purpose of obtaining an immediate or eventual commercial advantage:

• Import of mercury;

• Manufacture (other than import) of mercury;

• Import of a mercury-added product;

• Manufacture (other than import) of a mercury-added product; or

• Intentional use of mercury in a manufacturing process.

In addition, the following activities are part of supply, use, and trade of mercury:

• Distribution in commerce, including domestic sale or transfer, of mercury;

• Distribution in commerce, including domestic sale or transfer, of mercury-added products or products that result from the intentional use of mercury in a manufacturing process;

• Storage of mercury;

• Export of a mercury compound (unless specifically prohibited); or

• Export of mercury-added products or products that result from the intentional use of mercury in a manufacturing process.

As described in greater detail in Unit III.D., persons must first engage in the manufacture (including import) of mercury or mercury-added products or otherwise intentionally use mercury in a manufacturing process to be required to report to the mercury inventory.

C. Coordination With Existing Reporting Programs

TSCA section 8(b)(10)(D)(ii) directs the Agency to "coordinate the reporting" . . . with the Interstate Mercury **Education and Reduction** Clearinghouse" to avoid duplication. Furthermore, TSCA section 8(a)(5)(a) states "[i]n carrying out [TSCA section 8], the Administrator shall, to the extent feasible . . . not require reporting which is unnecessary or duplicative." The Agency seeks to avoid collecting data on mercury that would duplicate information already reported to existing state and federal programs, and to coordinate with and complement those reporting programs as much as possible. While developing this rule (Ref. 3), EPA reviewed four data collection systems applicable to supply, use, and trade of mercury (including mercury-added products and mercury used in manufacturing processes):

• The IMERC Mercury-added Products Database, an online reporting database managed by the Northeast Waste Management Officials' Association (NEWMOA), which provides publicly available, national data on mercury used in products;

• The TSCA section 8(a) Chemical Data Reporting rule, which collects manufacturing, processing, and use information on certain chemical substances manufactured (including imported) in the United States;

• The Toxics Release Inventory (TRI) program, which collects data on toxic

chemical releases to air, water and land from industrial facilities and pollution prevention activities in the United States; and

• The U.S. International Trade Commission Interactive Trade DataWeb (USITC DataWeb), which provides U.S. international trade statistics and U.S. tariff data to the public.

After reviewing these reporting programs, EPA designed the reporting requirements in this rule to be least burdensome for reporters already familiar with IMERC, CDR, TRI, and USITC DataWeb protocols (Ref. 3). Therefore, the Agency is incorporating comparable reporting concepts and tools from each program, as well as not requiring reporting in certain instances to increase the efficacy while decreasing the burden to the greatest extent practicable for reporting to a national mercury inventory.

1. Reporting Requirements for Existing CDR and IMERC Reporters. The Agency received several comments related to persons who submit mercuryrelated information to the Chemical Data Reporting database or the IMERC Mercury-added Products Database. In regard to reporting requirements applicable to both CDR and IMERC reporters, two commenters identified discrepancies (e.g., non-alignment of reporting year/frequency and efforts to prohibit duplicative reporting) in the Agency's bifurcated reporting requirements for persons currently required to report to the IMERC Mercury-Added Products Database and under the CDR rule, and those who are not (Ref. 11; Ref. 12). Another commenter expressed concerns regarding the non-alignment of EPA and IMERC reporting years (Ref. 23). Some commenters argued that reporting such information to multiple systems would not be economically burdensome because the costs are relatively small and would not be duplicative because the reporting to different systems would occur in different years (Ref. 11; Ref. 12). Of particular concern to one commenter was a possible negative impact on the accuracy of the mercury inventory and the EPA's ability to make recommendations to reduce the use of mercury (Ref. 11). Conversely, two commenters supported the proposed approach to not require reporting from persons reporting comparable information to IMERC, although one commenter also supported alignment of the reporting years and requested that EPA codify a full exemption for manufacturers, including importers, that already report to IMERC (Ref. 17; Ref. 24). Finally, the Agency received comments recommending that EPA

adopt IMERC's submission deadline for reporting (April 1, 2020 and every three years thereafter) (Ref. 9; Ref. 18; Ref. 23; Ref. 24). Such issues are discussed in greater detail in the *Response to Comments* document for this rule (Ref. 5).

As discussed in the proposed rule, EPA cited TSCA section 8(a)(5)(A) as a basis for avoiding the collection of data that duplicated information already reported to the four data collection systems applicable to the supply, use, and trade of mercury: IMERC, CDR, TRI, and USITC DataWeb (Ref. 3). The Agency considered multiple, existing reporting systems that gather comparable data related to mercury pursuant to statutory text (15 U.S.C. 2607(a)(5)(A)). EPA also considered provisions of TSCA section 8(a)(5) that direct the Agency to "minimize the cost of compliance with this section and the rules issued thereunder on small manufacturers and processors; and . . . apply any reporting obligations to those persons likely to have information relevant to the effective implementation of this subchapter" (15 U.S.C. 2607(a)(5)(B) and (C)). In regard to comments arguing that requiring reporting for comparable data in two different systems is not duplicative if the reporting occurs in different years, the Agency maintains that this is a duplication of effort and EPA does not agree with the commenters' argument that the addition or avoidance of burden is not significant if it is relatively small. The language at TSCA section 8(a)(5) directs the Agency avoid duplicative reporting and reduce burden "to the extent feasible." Because EPA is able to obtain comparable data via EPA's CDR program or in coordination with IMERC, the Agency finds not requiring the reporting of overlapping reporting to the mercury inventory to be a feasible approach. To the extent that data elements may not align per differences in reporting years and frequency, the Agency does not view such discrepancies to be prohibitive of its ability to carry out statutory obligations at TSCA sections 8(b)(10)(B) and (C).

Based on comments received, the Agency is clarifying that a person who currently reports to CDR or IMERC is not categorically exempt from the mercury inventory reporting requirements set forth in this rule. Instead, the bifurcated reporting structure is designed to omit only those quantitative data elements already collected by CDR and IMERC to avoid duplication in the collection, calculation, verification, review, certification, reporting, and maintenance of records pursuant to

TSCA section 8(a)(5). The Agency's goal is to create a "comprehensive inventory such that existing data gaps would be eliminated, where feasible [and] . . complement amounts of quantitative mercury data already collected by, but without overlapping with, reporting requirements," as well as "decrease the burden of reporting to the greatest extent practicable" (Ref. 3). These goals are guided by statutory mandates not only in TSCA section 8(b)(10), but also in TSCA section 8(a)(5). Thus, while recognizing that there is a nonalignment of CDR and IMERC reporting years, the Agency believes supplementing data reported through this rule with data from CDR and IMERC creates a totality of available data that will provide an adequate basis to observe long-term trends in mercury supply, use, and trade. As such, the Agency determined that requiring reporting for comparable data to two systems would be duplicative even if the CDR and IMERC data represent information from different years. Therefore, requiring duplicative data to be reported from reporters who also report to CDR and IMERC would result in additional burden and is unnecessary.

Finally, EPA understands the interest in aligning with IMERC's submission deadline. However, the statutorily mandated publication date for the mercury inventory was April 1, 2017 and every three years thereafter, which falls on IMERC's data submission date. EPA has a legal responsibility to publish on or before the date set forth in TSCA section 8(b)(10)(B), which means that EPA must publish the inventory on or before the day IMERC reporters must submit data to IMERC. While mindful of incongruities in reporting frequency and years, EPA believes that the reporting schedule and achieve this goal to the greatest extent practicable. As a result, the reporting requirements, including efforts to incorporate data collected by CDR and IMERC while avoiding overlap among CDR and IMERC data elements, will enhance its ability to collect and publish robust data on mercury supply, use, and trade in the United States (15 U.S.C. 2607(b)(10)(B)) and to "identify any manufacturing processes or products that intentionally add mercury; and . . . recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use" (15 U.S.C. 2607(b)(10)(C)).

2. Reporting Requirements for Products Regulated by Other Federal Agencies. One commenter requested that EPA not require reporting for uses of mercury regulated by other federal agencies (*e.g.*, pharmaceuticals) (Ref. 13). The commenter cited drugs, as regulated by FDA, and animal vaccines, as regulated by the U.S. Department of Agriculture (USDA), and noted that FDA and USDA regulations already require reporting information regarding the use of mercury in these products and, therefore, should not be collected by EPA.

The Agency disagrees. While these agencies may regulate mercury, they do not collect the data necessary to support the national inventory required by TSCA section 8(b)(10). As such, EPA does not view the reporting requirements to be duplicative of the requirements highlighted by the commenter and, therefore, is not exempting reporting of such uses of mercury.

#### D. Persons and Information Subject to This Rulemaking

TSCA section 8(b)(10)(D)(i) states "any person who manufactures mercury or mercury-added products or otherwise intentionally uses mercury in a manufacturing process shall make periodic reports to the Administrator." As explained in Unit III.B., EPA interprets the statutory text at TSCA sections 8(b)(10)(B), 8(b)(10)(D)(i), and 8(b)(10)(D)(iii) as applying to intentional acts that introduce mercury into supply, use, and trade in the United States. EPA reads TSCA section 8(b)(10)(D)(i) to narrow potential reporters to persons who first manufacture mercury or mercury-added products or otherwise intentionally use mercury in a manufacturing process prior to other activities such as storage, distribution, and export. Descriptions of persons who must report under this rule and tables illustrating applicable reporting requirements are detailed in Unit III.D.1.

1. Persons Who Must Report. In addition to persons described in the following subsections and tables, EPA will provide examples of persons who will and will not be required to report under this regulation in reporting instructions and other support materials.

a. Persons Who Manufacture (Including Import) Mercury. As described in Unit III.C., the Agency sought to decrease the burden of reporting to the greatest extent practicable by, among other things, complementing without overlapping existing reporting requirements related to mercury and mercury-added products. As such, persons who manufacture (including import) in excess of 2,500 lbs. for elemental mercury or in excess of 25,000 lbs. for mercury compounds for a specific reporting year are not required to report amounts manufactured (including imported) or exported that are already reported per the CDR rule. Such persons, however, are required to provide quantitative data on storage and distribution in commerce, as well as qualitative and contextual information related to all applicable data elements under the proposed rule (see Table 3. Information to Report—Mercury). In further efforts to decrease reporting burdens, the Agency will provide preselected lists of mercury compounds to streamline reporting requirements as much as possible.

#### TABLE 3—INFORMATION TO REPORT—MERCURY

Persons who must report	Applicable reporting requirements
<ul> <li>Persons who manufacture (including import) mercury in amounts greater than or equal to 2,500 lbs. for elemental mercury or greater than or equal to 25,000 lbs. for mercury compounds for a specific reporting year (<i>i.e.</i>, current CDR reporters).</li> <li>All other persons who manufacture (including import) mercury</li> </ul>	-Country(ies) of destination for exported mercury.

b. Persons Who Manufacture or Import Mercury-added Products. EPA proposed to require reporting for the manufacture (including import) of mercury-added products, except for: (1) Import of an assembled product that contains mercury solely within a component that is a mercury-added product; and (2) domestic manufacture of an assembled product unless the person first manufactures or imports the mercury-added product that can be used as a component. The Agency determined that this distinction was appropriate after reviewing the data reported to the IMERC Mercury-Added Products Database and comparing the companies that reported national sales data for individual mercury-added products (including components), as well as items that contain a component that is a mercury-added product (Ref. 25). For example, the IMERC database lists a product name (*e.g.,* flat panel display, projection TV, make and model of vehicle) and component (e.g., lamp, bulb). In the proposed rule, the Agency cited concerns that requiring reporting for assembled products where mercury is present solely within a previously manufactured component would result in double counting and thereby could negatively affect the reliability of future mercury inventory updates, as well as the potential to create undue burden for certain importers (Ref. 3). The Agency based this determination on its emphasis on the intentional insertion of mercury into a product as the introduction of mercury via a mercuryadded product into supply, use, and trade in the United States. For imported

assembled products that contain a component that is a mercury-added product, the Agency also considered the degree to which certain importers would know the mercury content, if any, of the assembled products they import, as well as the additional breadth, and therefore burden, that including such imports at this time would entail. The Agency notes that its specific reporting requirements (see Unit III.D.4.b.) include mercury-added products that are likely to be used as components in assembled products. As discussed in this section, EPA's combined general, specific, and contextual reporting requirements are designed not only to provide information that are expected to identify mercury-added products that are components within assembled products, but also to avoid unnecessary, duplicative, and burdensome reporting as much as feasible (15 U.S.C. 2607(a)(5)).

The Agency received comments related to instances where mercury is present in a product as a component that is a mercury-added product. Some commenters requested that the Agency require reporting for the manufacture (including import) of such products (Ref. 11; Ref. 12; Ref. 20; Ref. 23), while other commenters supported the proposed approach to not require such reporting (e.g., advanced manufacturing equipment that contains components that are mercury-added products and supply chains where the mercury-added product may be incorporated into several iterations of other components before being used in a final assembled

product) (Ref. 9; Ref. 13; Ref. 17; Ref. 18; Ref. 26). Commenters requesting that the Agency require reporting for products that contain a component that is a mercury-added product believe that the proposed approach would underestimate mercury use in products and hamper EPA's ability to fill data gaps and make further recommendations for mercury reductions. The commenters also argued that not requiring reporting for products that contain mercury-added components is neither authorized by nor consistent with the purpose of the statute and is inconsistent with IMERC and Minamata Convention definitions of "mercuryadded product." Such issues are discussed in greater detail in the Response to Comments document for this rule (Ref. 5).

The statutory text describes who must report to the mercury inventory: "any person who manufactures mercury or mercury-added products or otherwise intentionally uses mercury in a manufacturing process . . . at such time and including such information as the Administrator shall determine by rule" (15 U.S.C. 2607(b)(10)(D)(i)). In addition to the development of the inventory itself (15 U.S.C. 2607(b)(10)(B)), the Agency interprets the ultimate purpose of the inventory as identifying manufacturing processes or products that intentionally add mercury and recommending actions to achieve further reductions in mercury use (15 U.S.C. 2607(b)(10)(C)). When developing this rule, the Agency considered statutory requirements applicable to all of TSCA section 8:

Prohibition of "unnecessary or duplicative" reporting (15 U.S.C. 2607(a)(5)(A)) and minimization of the cost of compliance for small manufacturers and processors (15 U.S.C. 2607(a)(5)(B)). Thus, EPA will carry out an inventory and require reporting consistent with the statute that avoids duplication of information already reported to existing state and federal programs and avoids unnecessary reporting burdens.

TSCA section 8(b)(10)(C)(i) mandates that in carrying out the inventory, EPA must "identify any manufacturing processes or products that intentionally add mercury." Some commenters suggested that the statute requires EPA to collect information on all products that contain mercury, including those that contain mercury only because they include a mercury-added product as a component. EPA interprets the statutory text to only require the identification of the *types* of products where mercury is intentionally added such that EPA would be able to make recommendations for reducing such use. Based on its review of the information available in the IMERC database (Ref. 25), EPA believes that it will be able to identify the various types of mercuryadded products where mercury is intentionally added (e.g., mercuryadded lamps) without requiring the reporting on the manufacture of more complex products where mercury is contained within a component (e.g., vehicle containing mercury-added lamp in headlight).

In identifying products where mercury is intentionally added, the Agency interprets the statute as giving it discretion over what information it may require to be reported, including from certain manufacturers and types of products. TSCA section 8(b)(10)(D)(i) requires periodic reports to assist in the preparation of the inventory "at such time and including such information as the Administrator shall determine by rule." EPA has determined that fulfilling the mandate to identify products that intentionally add mercury and make recommendations to achieve reduction in mercury use does not require reporting for assembled products, as EPA is not convinced that all products that contain a component that is a mercury-added product should be viewed as "products that intentionally add mercury." For example, a domestic automobile manufacturer may not know that a component of the car contains mercury and arguably, therefore, has not intentionally added mercury to the car for the purposes of TSCA section 8(b)(10)(C)(i). Similarly, an automobile

importer may not know that a component of the car contains mercury. Since the import is the manufacture for purposes of TSCA, the product arguably is not a product to which mercury has intentionally been added per TSCA section 8(b)(1)(C)(i) for this reason as well.

The addition of a mercury-added product as a component to a more complex, assembled product does not change the nature or the quantity of mercury within the component, and, for a product assembled domestically, would result in the double counting of that specific quantity of mercury since EPA would receive reports both on the manufacture of the component and the manufacture of the assembled product. Even without receiving reports from manufacturers of assembled products, EPA can glean information about types of mercury-added products from the reports by manufacturers/importers of mercury-added products, which can be used as components. The information reported on NAICS codes by a person who manufactures (or imports) mercuryadded products that can be used as components (e.g., mercury-added lamp), can be used to help the Agency identify the types of domestically manufactured assembled products (e.g., light truck and utility vehicle manufacturing (NAICS code 336112)) likely to contain components that are mercury-added products. Thus, the full set of reporting requirements work together to account for and describe mercury supply, use, and trade in the United States, while avoiding unnecessary or duplicative reporting.

With respect to imports, based on the Agency's review of the information available in the IMERC database (Ref. 25) and its rationale set forth in the preceding paragraph, EPA believes that the reporting requirements similarly will enable it to identify the types of mercury-added products imported into the United States (i.e., both mercuryadded products that can be used as components and those assembled products that contain a mercury-added component). Reporting is required for the import of mercury-added products that can be used as components in assembled products. This will give EPA a clearer understanding of the types of components that exist along with information on the quantity of mercury in those components. While reporting is not required on the import of assembled products that contain mercury-added components, the reporting requirements and data collected from manufacturers/ importers of mercury products that can be used as components are expected to help alleviate the uncertainties

associated with the types of imported assembled products that may contain such components. For example, the Agency can use NAICS codes reported for domestically-manufactured assembled products to better understand the specific types of imported assembled products that may contain mercury within a component part. In this context, the reporting requirements can enhance the understanding of mercury supply, use, and trade in the United States while helping to minimize the cost of compliance for importers of assembled products.

The baseline direction from Congress was to identify products that intentionally add mercury. EPA concludes this is best done, at this stage, by requiring reporting only from the manufacturers who initially insert mercury into products and importers of mercury-added products that may be used as components in assembled products, but not assembled products themselves. EPA is not requiring a reporter who manufactures (including imports) mercury components to identify whether or how the mercuryadded product is used as a component; instead, EPA intends to use NAICS codes to identify such uses. By design, the general reporting requirements first identify the total quantity of mercury in products manufactured (other than imported), distributed in commerce, or exported for a reporting year (*i.e.*, prioritize reporting on the amounts of mercury in supply, use, and trade activities (see Unit III.B.5.)). Thereafter, specific and contextual reporting requirements (e.g., the category/subcategory of mercury-added products and NAICS code(s) for manufacturing categories, and countries of origin and destination for imports and exports) further illustrate how reported quantities of mercury move through supply, use, and trade. EPA believes this is appropriate because it can collect quantitative data from persons who report for domestic manufacture and import of mercury-added products that can be used as components, and use contextual (i.e., qualitative) reporting to better understand how those components are incorporated into assembled products. The Agency could, as appropriate, use such domestic quantitative data in concert with other available data on imported assembled products in a specific product category to draw comparisons and, should they be relevant, focus recommendations for reducing mercury for both domestic and foreign assembled products. Even if this approach is not able to directly account for amounts of mercury within the

mercury-added products that are components of assembled products, the Agency determined that its ability to identify categories—and potentially more specific types—of assembled products will allow it to satisfy mandates at TSCA sections 8(b)(10)(B) and (C). While a reporter would not be required to identify whether or how the mercury-added product is used as a component, the reporting requirements should provide ample information to shed light on the use of the mercury, to satisfy the mandate to identify products that intentionally add mercury, including components being manufactured domestically and imported, and allow EPA to "recommend actions [. . .] to achieve further reductions in mercury use" including recommendations related to products containing mercury components (15 U.S.C. 2607(b)(10)(C)(ii)).

EPA is mindful that the global implementation of the Minamata Convention should result in a decrease

in the manufacture, import, and export of many mercury-added products that are commonly used as components in products, discourage the use of such products as components, and generally increase the knowledge of manufacturers, importers, exporters, and consumers regarding the types of assembled products that contain components that are mercury-added products. EPA will evaluate whether this expected downward trend comes to fruition by monitoring trends in the importation of mercury components and its described approach to better understand the types of domesticallymanufactured and imported assembled products that may contain mercury in a component part. As necessary, the Agency will use such data to consider modifying reporting requirements or to recommend appropriate actions to reduce the use of mercury.

As described in Unit III.C., persons who report to IMERC identify the amount of mercury sold in mercuryadded products that may be

manufactured, distributed, or imported. The Agency considers the amount of mercury reported to IMERC as sold to be comparable to the amount of mercury to be reported under the rule as distributed in commerce. As such, EPA is not requiring persons who report to IMERC to report amounts of mercury distributed in commerce in mercuryadded products. However, those persons must report quantitative and qualitative information for other applicable data elements (e.g., manufacture, import, and export of mercury-added products). Such persons are also required to report contextual information applicable to amounts, if any, of mercury in mercuryadded products manufactured, imported, distributed in commerce, or exported (see Table 4. Information to Report-Mercury-Added Products). In further efforts to decrease reporting burdens, the Agency will provide preselected lists of mercury-added product categories to streamline reporting requirements as much as possible.

#### TABLE 4—INFORMATION TO REPORT—MERCURY-ADDED PRODUCTS

Persons who must report	Applicable reporting requirements
Persons who manufacture (including import) mercury-added products, except a product that contains a component that is a mercury-added product, who currently report to IMERC.	<ul> <li>—Amount of mercury in manufactured products (lbs.).</li> <li>—Amount of mercury in imported products (lbs.).</li> <li>—Country(ies) of origin for imported products.</li> <li>—Amount of mercury in exported products (lbs.).</li> <li>—Country(ies) of destination for exported products.</li> <li>—NAICS code(s) for products distributed in commerce.</li> <li>—As applicable, specific product category(ies) and subcategory(ies) from pre-selected list.</li> </ul>
All other persons who manufacture (including import) mercury-added products, except a product that contains a component that is a mercury-added product.	<ul> <li>Amount of mercury in manufactured products (lbs.).</li> <li>Amount of mercury in imported products (lbs.).</li> <li>Country(ies) of origin for imported products.</li> <li>Amount of mercury in exported products (lbs.).</li> <li>Country(ies) of destination for exported products.</li> <li>Amount of mercury in products distributed in commerce (lbs.).</li> <li>NAICS code(s) for products distributed in commerce.</li> <li>As applicable, specific product category(ies) and subcategory(ies) from pre-selected list.</li> </ul>

c. Persons Who Otherwise Intentionally Use Mercury in a Manufacturing Process. As described in Unit III.B., TSCA section 8(b)(10)(D)(i) includes persons who intentionally use mercury in a manufacturing process amongst those who must report. The Agency believes that persons who otherwise intentionally use mercury in a manufacturing process may currently report to existing data collection programs in the United States, but because the reporting requirements for the mercury inventory differ from those programs, EPA does not view the reporting requirements to be duplicative or unnecessary. As such, the general, specific, and contextual reporting requirements are intended to provide a complete picture of uses for which little information is currently available (see Table 5. Information to Report— Otherwise Intentional Use of Mercury in a Manufacturing Process). As discussed in Unit III.D.1.b., the combination of general, specific, and contextual reporting requirements will assist the Agency to adequately "identify any processes . . . that intentionally add mercury" 15 U.S.C. 2607 8(b)(10)(C)(i). In further efforts to decrease reporting burdens, the Agency will provide preselected lists of manufacturing processes and attendant uses of mercury to streamline reporting requirements as much as possible.

Persons who must report	Applicable reporting requirements
Persons who otherwise intentionally use mercury in a manufacturing process, other than the manufacture of a mercury compound or a mercury-added product.	

# TABLE 5—INFORMATION TO REPORT—OTHERWISE INTENTIONAL USE OF MERCURY IN A MANUFACTURING PROCESS

2. Persons Not Required to Report. The Agency received various comments requesting clarification of persons who would not be required to report to the mercury inventory.

i. Persons Who Do Not First Manufacture, Import, or Otherwise Intentionally Use Mercury. EPA determined that persons who only trade (e.g., brokering, selling wholesale, shipping, warehousing, repackaging, or retail sale), but do not manufacture or import mercury or mercury-added products, should not be subject to the proposed reporting requirements (Ref. 3). Aside from its reading of TSCA section 8(b)(10)(D)(i), the Agency is concerned that requiring reporting from such entities risks: (1) Double counting of mercury as it moves through supply chains; and (2) undue burden or liability on entities that are not likely to be aware if or how mercury is present in products that they trade. Several commenters requested clarifications regarding this determination, including modifications to ensure that the exclusion will not result in transactions involving mercury that go unreported within the context of supply, use, and trade and to prevent duplicative reporting by focusing on products traded instead of the persons engaged in trade (Ref. 11; Ref. 12). Another commenter suggested that such an exemption should not apply to any persons that would be defined as a manufacturer, importer, or exporter (Ref. 12).

EPA interprets the statutory text on who should report at 15 U.S.C. 2607(b)(10)(D)(i) as applicable to "intentional acts that introduce mercury into supply, use, and trade in the United States." EPA specified in the proposed rule that this applies to "persons who *first* manufacture mercury or mercuryadded products or otherwise intentionally use mercury in a manufacturing process" (emphasis added) (Ref. 3). EPA recognizes that certain transactions (*e.g.*, resale, incorporation of a purchased component that is a mercury-added product into equipment) may not be captured with this structure. However, the Agency believes that focusing on the initial introduction of mercury to the market prevents the possibility of double counting or undue burden (see 15 U.S.C. 2607(a)(5)(A and B)) which could occur if entities that do not first introduce mercury to supply, use, and trade were required to report to the inventory. EPA revised the regulatory text in the final rule to improve clarity.

ii. Persons Who Generate, Handle, or Manage Mercury-containing Waste. Persons "engaged in the generation, handling, or management of mercurycontaining waste, unless that person manufactures or recovers mercury in the management of that waste" are not required to report to the mercury inventory (15 U.S.C. 2607(b)(10)(D)(iii)). EPA interprets the statute here to mean for immediate or eventual commercial purposes (see also "Mercury Handled as Waste, Including Elemental Mercury Destined for Long-Term Storage" in Unit III.B.2). EPA will provide examples of such persons in reporting instructions and other support materials.

iii. Persons Who Manufacture Mercury as an Impurity. Persons who manufacture (including import) mercury as an impurity are not required to report to the mercury inventory (see also "Impurities Present in a Final Product" in Unit III.B.2.). EPA will provide examples of such persons in reporting instructions and other support materials.

iv. Persons Engaged in Activities Involving Mercury Not with the Purpose of Obtaining an Immediate or Eventual Commercial Advantage. Persons who do not manufacture (including import) mercury or mercury-added products or otherwise intentionally use mercury in a manufacturing process with the purpose of obtaining an immediate or eventual commercial advantage are not required to report to the mercury inventory (see also "Commercial Purposes" in Unit III.B.2.). In addition, EPA will provide examples of such persons in reporting instructions and other support materials.

v. Manufacture or Import of a Product that Contains a Component that is a Mercury-added Product. EPA maintains that requiring reporting on the use of a mercury-added product as a component in the manufacture (other than import) of another product for a person who did not first manufacture (other than import) the mercury-added product would constitute double counting. The Agency's rationale is explained in detail in Unit III.D.1.b. To the extent that the Agency is not requiring persons who import products that contain a component that is a mercury-added product to report, the reporting requirements do not prevent the identification of such products. The decision to not require reporting on such products also will not prevent the Agency from making recommendations "to achieve further reductions in mercury use" (15 U.S.C. 2607(b)(10)(C)(ii)). In order to clarify and streamline reporting requirements related to products that contain a component that is a mercury-added product, the Agency modified the structure of the regulatory text in this final rule. In addition, EPA will provide examples of such persons in reporting instructions and other support materials. Those materials will be available on the EPA website six months prior to the reporting deadline.

3. Reporting Units and Threshold. As discussed in Unit III.C., the Agency compared existing state and federal reporting databases applicable to the supply, use, and trade of mercury. EPA conducted this review in an attempt not only to eliminate duplicative reporting requirements, but also to incorporate applicable features of such programs, including the consideration of respective reporting thresholds.

The statutory text at TSCA section 8(b)(10) is silent on a reporting threshold; however, TSCA section 8(b)(10)(C) directs the Agency to "identify any manufacturing processes or products that intentionally add mercury." Based on: (1) The interpretation that the direction to "identify any" applies to any amount of mercury in a manufacturing process or product; and (2) concerns related to the potential adverse effects on human health and the environment resulting from releases of mercury, EPA proposed to apply the reporting requirements to any person who manufactures (including imports) mercury or mercury-added products or otherwise intentionally uses mercury in a manufacturing process regardless of the amount of mercury at issue (Ref. 3).

The Agency received comments in support of the proposal to not establish a *de minimis* threshold for reporting (Ref. 11; Ref. 12; Ref. 23), as well as comments suggesting EPA establish minimum units for which persons should report and a threshold under which persons should not report to the mercury inventory (Ref. 15; Ref. 21; Ref. 24; Ref. 26; Ref. 27). Specific recommendations from commenters included: a minimum reportable value of 1 pound (Ref. 27), parts per million amounts for impurities (Ref. 15), and less than 1 kilogram for an annual total for certain activities (Ref. 28). Commenters also expressed concerns with the reasonableness and burden associated with being able to detect, as well as calculate annual totals, for trace amounts of mercury in certain products and processes (Ref. 15; Ref. 24). Finally, commenters recommended that reporting thresholds be established in SI/metric units due to prevalent market practices for identifying mercury content in products and for greater consistency with IMERC reporting requirements (Ref. 18; Ref. 23).

ÈPA appreciates the suggestion to offer multiple/alternative units of measurement for reporting amounts of mercury. However, EPA believes that the pound (lb.) as a unit of measurement is the best choice based on it being a unit familiar to most potential reporters and consistent with the reporting provided by IMERC, CDR, and TRI. The reporting application is designed such that persons seeking to report amounts equal to or less than one pound during a reporting year would be directed to round amounts of mercury to "1 lb."

In regard to a reporting threshold, EPA understands that certain persons may use small amounts of mercury over the course of a reporting year, but believes that it is not appropriate to establish a *de minimis* threshold. As explained in the proposed rule (Ref. 3), this decision is based on a review of statutory text at 15 U.S.C. 2607(b)(10)(C), which EPA interprets to require reporting for any amount of

mercury. However, to address the concerns expressed, and as an alternative to a reporting threshold, EPA accepts the suggestions of commenters to offer a minimum unit. Any person that manufactures (including imports) mercury or mercury-added products or any person that otherwise intentionally uses mercury in a manufacturing process in an amount equal to or less than one pound during a reporting year would be directed to round amounts of mercury to "1 lb." Because the Agency is not requiring reporting for impurities (see also "Impurities Present in a Final Product" in Unit III.B.2.), EPA believes the suggested parts per million unit of measurement associated with impurities is no longer applicable. In instances where persons subject to the reporting requirements may be using mercury in small amounts on a per unit basis, the Agency will provide additional examples in reporting instructions and support materials designed to assist reporters. Those materials will be available on the EPA website six months prior to the reporting deadline.

4. Reporting Requirements. TSCA section 8(b)(10)(B) sets the general scope of the inventory as the "mercury supply, use, and trade in the United States. EPA interprets the core elements to be covered in the mercury inventory to be the amount of mercury used in the activities within the mercury market described in Unit III.B. (i.e., manufacture, import, export, storage, distribution in commerce, and otherwise intentional use of mercury in a manufacturing process). EPA also determined that, for certain data elements, requiring reporting of more specific information would help to better contextualize reported quantities of mercury used in domestic and global supply, use, and trade. The general, specific, and contextual reporting requirements are described in this section.

a. General Reporting Requirements. EPA considers "supply" to include manufacture and storage, "use" to include otherwise intentional use of mercury in a manufacturing process, and "trade" to include import, export, and distribution in commerce. The Agency determined that accounting for such activities is necessary to fulfill statutory mandates at TSCA sections 8(b)(10)(B) and (C). Therefore, for persons required to report (as described in Unit III.D.), EPA is requiring reporting quantitative data for mercury, mercury-added products, and otherwise intentional use of mercury in a manufacturing process (as qualified from existing terms as discussed in Unit III.B.) as follows:

i. *Importers of mercury:* Amount of mercury imported per year (lbs.); Amount of mercury stored per year (lbs.); Amount of mercury distributed in commerce per year (lbs.); Amount of mercury exported per year (lbs.).

ii. *Manufacturers* (other than importers) of mercury: Amount of mercury manufactured (other than imported) per year (lbs.); Amount of mercury stored per year (lbs.); Amount of mercury distributed in commerce per year (lbs.). Amount of mercury exported per year (lbs.).

iii. Importers of a mercury-added product: Amount of mercury in imported products per year (lbs.); Amount of mercury in products distributed in domestic commerce per year (lbs.); Amount of mercury in exported products per year (lbs.).

iv. Manufacturers (other than importers) of a mercury-added product: Amount of mercury in manufactured (other than imported) products per year (lbs.); Amount of mercury in products distributed in commerce per year (lbs.); Amount of mercury in exported products per year (lbs.).

v. Persons who intentionally use mercury in manufacturing processes: Amount of mercury used in a manufacturing process per year (lbs.); Amount of mercury stored per year (lbs.).

EPA understands that certain persons may report for multiple activities associated with supply, use, and trade of mercury. For example, a person may import mercury and manufacture mercury-added products. As such, the Agency is designing the quantitative data elements for reporting requirements such that a person could report both as an "importer of mercury' and "manufacturer of mercury-added" products," but only report for the specific activity in which they engage. The Agency expects there may be certain persons engaged in the supply, use, and trade of mercury who might not be accounted for in the inventory, but EPA views this omission of prospective reporters as an opportunity to limit undue burden and avoid double counting. Thus, the Agency is limiting the persons who must report at TSCA section 8(b)(10)(D)(i) to only those persons described in Unit III.D.

b. Specific Reporting Requirements. To better understand the categories of mercury-added products and otherwise intentional use of mercury in a manufacturing process, the Agency is requiring reporters to identify the specific categories and subcategories of products and functional uses for which quantitative data is reported. The Agency believes this is an appropriate interpretation of the direction to "identify any manufacturing processes or products that intentionally add mercury," which, in turn, could inform how to "recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use" (15 U.S.C. 2607(b)(10)(C)). Persons required to report must provide the total amount of mercury used during the reporting year in pounds for general reporting activities associated with supply, use, and trade, rather than per category and subcategory. EPA based this decision on issues concerning burden and confidential business information that could be created by reporting quantitative information for increasingly specific categories and subcategories.

*i. Mercury-added products.* Based on the current knowledge of mercuryadded products available in the marketplace, including skin products manufactured abroad and sold illegally in the United States (Ref. 29), EPA is finalizing the following list of categories and subcategories of mercury-added products:

• *Batteries:* Button cell, silver; Button cell, zinc-air; Button cell, alkaline; Stacked button cell batteries; Manganese oxide; Silver oxide; Mercuric oxide, non-button cell; Button cell, mercuric oxide; Button cell, zinc carbon; Other (specify).

• Dental amalgam.

 Formulated products (includes uses in cosmetics, pesticides, and laboratory chemicals): Skin-lightening creams; Lotions; Soaps and sanitizers; Topical antiseptics; Bath oils and salts; Preservatives (*e.g.*, for use in vaccines and eye-area cosmetics when no preservative alternatives are available); Pharmaceuticals (including prescription and over-the-counter drug products); Cleaning products (not registered as pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act); Pesticides; Paints; Dyes; Reagents (e.g., catalysts, buffers, fixatives); Other (specify).

• Lighting, lamps, bulbs: Linear fluorescent; Compact fluorescent; Utube and circular fluorescent; Cold cathode fluorescent; External electrode fluorescent; Mercury vapor; Metal halide; High pressure sodium; Mercury short arc; Neon; Other (specify).

• *Measuring instruments:* Barometer; Fever thermometer; Flow meter; Hydrometer; Hygrometer/psychrometer; Manometer; Non-fever thermometer; Pyrometer; Sphygmomanometer; Other (specify).

• Pump seals.

• *Switches, relays, sensors, valves:* Tilt switch; Vibration switch; Float switch; Pressure switch; Temperature switch; Displacement relay; Wetted reed relay; Contact relay; Flame sensor; Thermostat; Other (specify).

• *Miscellaneous mercury-added products:* Wheel weights; Wheel rotation balancers/stabilizers; Firearm recoil suppressors; Carburetor synchronizers; Joint support/shock absorption bands; Other (specify).

ii. Intentional mercury use in manufacturing processes. EPA received comment on the proposed rule and has refined the following manufacturing processes for which mercury may be intentionally used: Chlorine production (e.g., mercury-cell chlor-alkali process); Acetaldehyde production; Sodium/ potassium methylate/ethylate production; Polyurethane/plastic production; Other (specify). Based on public comment, EPA has also refined the following list of uses of mercury in the manufacturing processes: Catalyst; Cathode; Reactant; Reagent; Other (specify).

Two commenters proposed revisions to specific information to be collected applicable to the intentional use of mercury in a manufacturing process (Ref. 15; Ref. 28). One commenter noted that in a mercury cell electrolyzer, the mercury serves solely as the cathode in the electrolysis process which breaks down the sodium chloride molecule and recommended that EPA should therefore add the term "cathode" to the Table 4 list as one of the selections (Ref. 15). Another commenter requested the removal of "[v]inyl chloride monomer production" as a specific manufacturing process because the vinyl chloride monomer (VCM) process is no longer used and is not expected to be used, by any manufacturer in the United States and that all VCM producers utilize ethylene, rather than acetylene, as the feedstock, which does not require any use of mercury (Ref. 28).

The Agency appreciates and agrees with these comments. EPA amended the regulatory text for reporting requirements for specific data to add the term "Cathode" as an option to identify how mercury is used in manufacturing processes and to remove the term "Vinyl chloride monomer production" from the options of categories of manufacturing processes for which mercury may be intentionally used.

c. Contextual Reporting Requirements. Within certain sectors of the mercury market, the Agency determined that additional data requirements are important to provide context to the quantitative data reported. To fully understand the supply, use, and trade of mercury in the United States, EPA is finalizing the following reporting requirements: *i. For imports of mercury or mercury-*

added products: Country of origin. ii. For mercury or mercury-added products distributed in commerce: Identify the applicable purchasing or receiving industry sectors via NAICS codes.

*iii. For exported mercury or mercuryadded products:* Destination country.

The Agency determined that the combination of general, specific, and contextual reporting requirements provides for the body of information required to fulfill statutory mandates of TSCA sections 8(b)(10)(B) and (C). As much as possible, the Agency designed all requirements to be answered only where a reporter engages in the specific activity from the inclusive list of options. In fact, EPA believes that it is unlikely that the typical reporter would be engaged in and, as a result, be required to respond to all, or even many, of the reporting requirements.

Aside from issue-specific discussions of reporting requirements presented elsewhere in Unit III.D., commenters generally supported the Agency's proposed general, specific, and contextual reporting requirements, emphasized the utility requiring reporting of NAICS to help track mercury supply and use flows, and noted the consistency and comprehensiveness of EPA mercuryadded product categories and subcategories. The Agency appreciates this feedback from potentially affected persons.

5. Consideration of Small Entities. Based on EPA's economic analysis of this final rule (Ref. 6), approximately 40 percent of the respondents will be small entities. However, small businesses are not exempt from reporting requirements because, unlike the exemption for small manufacturers and processors provided under TSCA sections 8(a)(1)(A) and (B), reporting and recordkeeping requirements associated with TSCA section 8(b) are applicable to all affected entities. EPA requested public comment on what kinds of information would be particularly important to address for small entities (e.g., outreach and webinars for small businesses to introduce the online reporting environment and application, explain requirements, and offer Q&A and other support) (Ref. 3).

The Agency received a comment related to the EPA's estimation of costs and burdens for the proposed rule (Ref. 27), which expressed concerns that initial estimates may be low given the scope of products, processes, and other information that EPA proposed to require (Ref. 27). EPA prepared the economic analysis using the best available methods, consistent with EPA's Guidelines for Preparing Economic Analyses (see *https:// www.epa.gov/environmentaleconomic-analyses*). While individual reporters may experience costs either higher or lower than those estimated in the analysis, the Agency believes that the average costs for the categories of reporters described are well represented.

The Agency also received a comment related to the potential burden to small businesses (Ref. 30), which expressed concerns about how the estimated initial and subsequent annual costs may impose a major burden for a small manufacturer, particularly when added to other regulatory costs. EPA intends to minimize the burden on all respondents, including small entities, as much as possible. The Agency will develop reporting instructions tailored to small entities who will be required to comply with the reporting requirements. EPA expects to conduct outreach and webinars for small businesses to introduce the reporting database, explain requirements, and offer Q&A and other support. Those materials will be available on the EPA website six months prior to the reporting deadline. Under TSCA section 26(d), EPA also provides specialized assistance to respondents, particularly to small entities, including technical and other non-financial assistance to manufacturers (including importers) and processors of chemical substances. EPA's TSCA Hotline assists small businesses complying with TSCA rules and provides various materials such as copies of Federal Register notices, advisories, and other information upon request. Contact information for the TSCA Hotline is listed under FOR FURTHER INFORMATION CONTACT.

#### E. Frequency of Inventory Publication

TSCA section 8(b)(10)(B) sets the date for publication of initial and subsequent, triennial iterations of the mercury inventory to commence on April 1, 2017. Therefore, EPA expects to publish the first mercury inventory supported by the finalized reporting requirements by April 1, 2020 and every three years thereafter.

# *F.* Frequency of Data Collection and Reporting Deadline

TSCA section 8(b)(10)(D) provides the authority to promulgate this rule to assist in the preparation of the triennial inventory publication, but TSCA offers no guidance on the frequency of

collection or reporting deadline. To minimize reporting obligations, the Agency compared the respective collection frequencies and reporting deadlines for IMERC, the CDR rule, and the TRI program to when EPA is required to publish the mercury inventory. TSCA section 8(b)(10)(B) sets a publication date for the mercury inventory that falls on the reporting deadline for IMERC: April 1 in a triennial cycle starting in April 2017. Data collected under the CDR rule is submitted to the Agency on a quadrennial cycle; the next reporting cycle will occur from 2016–2019, with a reporting deadline of September 2020. The TRI program collects and publishes data on an annual cycle with a reporting deadline of July 1 of each year.

Based on such considerations, the Agency determined that coinciding with the triennial IMERC frequency of collection is appropriate given the mercury inventory publication schedule is also triennial. The Agency is setting the mercury inventory reporting deadline to coincide with the TRI program deadline to align with a date with which certain, potential reporters might already be familiar. Therefore, EPA is establishing a July 1st reporting deadline for 2019 and every three years thereafter. Data submitted should cover only the calendar year preceding the year in which the reporting deadline occurs (e.g., data for calendar year January 1 to December 31, 2018 are reported on or before July 1, 2019).

#### G. Recordkeeping

Consistent with the triennial reporting and publication cycle for the mercury inventory, EPA is requiring that each person who is subject to the reporting requirements must retain records that document any information reported to EPA. Records relevant to a reporting year must be retained for a period of 3 years beginning on the last day of the reporting year. Submitters are encouraged to retain their records longer than 3 years to ensure that past records are available as a reference when new submissions are being generated.

#### H. Reporting Requirements and Confidential Business Information

Reporters to the information collection of this rule may claim that their submitted information is CBI per statutory provisions for CBI under TSCA section 14.

The Agency received several comments concerning CBI, including suggestions to allow reporting in ranges and not demarcating specific amounts of mercury in exports going to specific countries (Ref. 27), as well as limiting

reporting to a total amount of mercury used in a year (as opposed to specific amounts in import, export, manufacture, and other activities) (Ref. 15; Ref. 24; Ref. 28) to obviate the potential for persons to elect to claim data as CBI. Commenters were particularly concerned where reporting by a few or only a single facility engaged in a particular manufacturing process could allow competitors to calculate proprietary information. Other commenters requested an allowance for trade associations to collectively submit information on behalf of their members, which expressed a preference for collective reporting to protect against the release of proprietary sales data and other CBI (Ref. 9; Ref. 18).

EPA's mercury reporting application will allow multiple roles in creating, certifying, and submitting data. However, to maintain the alignment of general, specific, and contextual reporting requirements, EPA requires that separate reports be filed for each person/company (*i.e.*, not submitted in aggregate if an agent assists multiple persons/companies to develop its report). In addition, the reporting application is designed as a tool for data collection only and will accept CBI claims submitted in accordance with TSCA section 14. Unlike information provided to IMERC, CDR, and TRI, the data received in support of the mercury inventory will not be publicly accessible in an online database. EPA intends to use these data to fulfill the statutory requirements to publish an inventory (15 U.S.C. 2607(b)(10)(B)) and make required identifications and recommendations related to mercury use (15 U.S.C. 2607(b)(10)(C)). EPA does not foresee receiving and handling such information as CBI as a potential hindrance to Agency processes. As necessary, EPA will follow established publication policies to aggregate data for public release and will not compromise confidential business information.

#### I. Electronic Reporting

As set forth in the proposed rule, the Agency determined that mandatory electronic reporting would: (1) Streamline the reporting process and reduce the administrative costs associated with information submission and recordkeeping; (2) eliminate paperbased submissions as part of broader government efforts to move to modern, electronic methods of information gathering; (3) allow for more efficient data transmittal and a reduction in errors with the built-in validation procedures; and (4) reduce the reporting burden for submitters by reducing the cost and time required to review. EPA

is requiring electronic reporting of the mercury inventory data, using an Agency-provided, web-based reporting software to submit mercury inventory reports through the internet to EPA's Central Data Exchange (CDX). CDX provides the capability for submitters to access their data through the use of web services. For more information about CDX, go to http://epa.gov/cdx.

The Agency received comments related to the proposal to require electronic reporting, which suggested that EPA should be prepared to provide additional assistance to companies that may be challenged by an electronic reporting system (Ref. 11; Ref. 23). The Agency appreciates these comments and will develop reporting instructions and support materials to assist with reporting to the mercury inventory. Those materials will be available on the EPA website six months prior to the reporting deadline. In addition, the EPA CDX maintains a helpdesk contract to provide support for CDX users.

#### **IV. 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. EPA. Mercury; Initial Inventory Report of Supply, Use, and Trade. (82 FR 15522; March 29, 2017).
- UNEP. Minamata Convention on Mercury. (No date). Available at http:// www.mercuryconvention.org. [Accessed August 4, 2017].
- 3. EPA. Mercury; Reporting Requirements for Toxic Substances Control Act Mercury Inventory—Proposed Rule. (82 FR 49564; October 26, 2017).
- EPA. Reporting Requirements for the TSCA Mercury Inventory: Mercury— Proposed Rule; Extension of Comment Period. (82 FR 60168; December 17, 2017).
- 5. EPA. Mercury; Reporting Requirements for Toxic Substances Control Act Mercury Inventory—Response to Comments. June 20, 2018.
- 6. EPA. Economic Analysis for the Reporting Requirements for the TSCA Mercury Inventory. June 20, 2018.
- 7. EPA. Subpoena and Information Request. March 20, 2015. Available at https:// www.epa.gov/mercury/2015-subpoenaand-information-request-epamercuryrecyclers.
- 8. Comment submitted by Kathleen M. Roberts, Executive Director, North American Metals Council.

- 9. Comment submitted by Lawrence E. Culleen, Arnold & Porter Kaye Scholer LLP for the Chemical Users Coalition.
- 10. Comment submitted by Peter Webster, General Counsel U.S., Barrick Gold North America, Inc.
- 11. Comment submitted by David Lennett, Senior Attorney, Natural Resources Defense Council.
- 12. Comment submitted by Carolyn Hanson, Acting Executive Director, Environmental Council of the States.
- 13. Comment submitted by Stephen Tarnowski, Office of Corporate Staff Counsel, Merck & Co, Inc.
- Comment submitted by Ross Eisenberg, Vice President, Energy and Resources Policy, National Association of Manufacturers.
- 15. Comment submitted by Kenneth G. Akins, Director, Environmental, Westlake Chemical Corporation.
- Comment submitted by Charles Franklin, Vice President and Counsel, Government Affairs, Portland Cement Association.
- 17. Comment submitted by Amandine Muskus, Manager, Environment & Energy Association of Global Automakers, Inc.; Stacy Tatman, Director of Environmental Affairs, Alliance of Automobile Manufacturers.
- 18. Comment submitted by Chris Cleet, QEP, Senior Director of Environment and Sustainability, Information Technology Industry Council; Katie Reilly, Senior Manager, Environmental and Sustainability Policy, Consumer Technology Association; Kyle Pistor, Vice President, Government Relations, National Electrical Manufacturers Association.
- Anonymous public comment (EPA–HQ– OPPT–2017–0421–0062).
- 20. Comment submitted by Phillip K. Bell, President, Steel Manufacturers Association.
- 21. Comment submitted by David Hickey, Vice President, Advocacy, International Sign Association.
- 22. Comment submitted by Michele P. Wilson, Environmental Compliance, Savannah River Nuclear Solutions, LLC.
- 23. Comment submitted by Chuck Schwer, Vermont Department of Environmental, Conservation, Chairperson, and Tom Metzner, Connecticut Department of Energy and Environmental Protection, Chairperson, Interstate Mercury Education and Reduction Clearinghouse.
- 24. Comment submitted by Theodore B. Lynn, Ph.D., Director of Research, Dexsil Corporation.
- NEWMOA. Mercury-Added Products Database. (No date). Available at http:// www.newmoa.org/prevention/mercury/ imerc/notification/. [Accessed August 4, 2017].
- 26. Comment submitted by David Isaacs, Semiconductor Industry Association.
- 27. Comment submitted by James C. Lee, Senior Compliance Analyst, Hach Company.
- Comment submitted by Richard Krock, Vice President, Regulatory and Technical Affairs, Vinyl Institute.
- 29. U.S. Food and Drug Administration. Mercury Poisoning Linked to Skin

Products. (July 26, 2016). Available at https://www.fda.gov/forconsumers/ consumerupdates/ucm294849.htm. [Accessed October 3, 2017].

- Anonymous public comment (EPA–HQ– OPPT–2017–0421–0038).
- EPA. Collection of Information for Mercury Inventory Reporting Rule; EPA ICR No. 2567.02; OMB Control No.: 2070–0207. June 20, 2018.

# V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at http://www2.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011). Any changes made in response to OMB recommendations have been documented in the docket for this action.

### B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is subject to the requirements for regulatory actions specified in Executive Order 13771 (82 FR 9339, February 3, 2017). EPA prepared an analysis of the estimated costs and benefits associated with this action. This analysis, "Economic Analysis for the Reporting Requirements for the TSCA Mercury Inventory" (Economic Analysis, Ref. 6), is available in the docket and is summarized in Unit I.E.

### C. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to OMB under the PRA, 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2567.02 and OMB Control No. 2070–0207 (Ref. 31). You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The reporting requirements identified in the final rule would provide EPA with information necessary to prepare and periodically update an inventory of mercury supply, use, and trade in the United States, as required by TSCA section 8(b)(10)(D). These reporting requirements would help the Agency to prepare subsequent, triennial publications of the inventory, as well as to carry out the requirement of TSCA section 8(b)(10)(C) to identify any manufacturing processes or products that intentionally add mercury and recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use. EPA intends to use information collected under the rule to assist in efforts to reduce the use of mercury in products and processes and to facilitate reporting on implementation of the Minamata Convention by the United States. Respondents may claim some of the information reported to EPA under the final rule as CBI under TSCA section 14. TSCA section 14(c) requires a supporting statement and certification for confidentiality claims asserted after June 22, 2016.

EPA estimated total burden and costs to industry associated with the information collection activities in the final rule over the first three years after its promulgation (Ref. 6). For the 750 companies anticipated to be subject to the reporting requirements, the average per respondent burden hours for Year 1 (of a triennial cycle for submitting information) was estimated to be 96.76 hours (Ref. 6). Years 2 and 3 are not data collection years, so there is no cost associated with the rule during these years (Ref. 6). Therefore, the average for total burden hours per the three-year reporting cycle is 32.25 hours per year (Ref. 6).

*Respondents/affected entities:* Manufacturers, importers, and processors of mercury.

Respondent's obligation to respond: Mandatory (15 U.S.C. 2607(b)(10)(D)). Estimated number of respondents: 750

Frequency of response: Triennially. Total estimated annual burden: 24,189 hours (averaged over 3 years). Burden is defined at 5 CFR 1320.3(b).

Total estimated annual cost: \$1,942,190 (averaged over 3 years), includes \$0 annualized capital or operation and maintenance costs.

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 the EPA's regulations in 40 CFR are listed in 40 CFR part 9. Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. You may also send your ICRrelated comments to OMB's Office of Information and Regulatory Affairs via

email to *oira\_submissions*<sup>@</sup> *omb.eop.gov*, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than July 27, 2018.

#### D. Regulatory Flexibility Act (RFA)

Pursuant to section 605(b) of the RFA, 5 U.S.C. 601 et seq., I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action include those that manufacture, including import, mercury or mercury-added products (manufacturers), or otherwise intentionally use mercury in a manufacturing process (processors). To identify the number of firms that are subject to the rule and considered small under SBA size standards, EPA compared the appropriate SBA size definition to the company's revenue or number of employees, as identified using Dun and Bradstreet or other market research websites. Of the 506 parent companies that are subject to the rule, 211 companies (42 percent) meet the SBA small business definitions for their respective NAICS classifications.

The small entity analysis estimated that no parent company would incur an impact of 3 percent or greater, and 4 parent companies (1.85 percent of total entities) would incur an impact of 1 to 3 percent. Details of this analysis are included in the accompanying Economic Analysis for this rule (Ref. 6).

#### E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531 through 1538, and does not significantly or uniquely affect small governments. As such, the requirements of sections 202, 203, 204, or 205 of UMRA do not apply to this action.

#### F. Executive Order 13132: Federalism

This action does not have federalism implications, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). 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.

#### *G.* Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive

Order 13175 (65 FR 67249, November 9, 2000). It will not have any effect on tribal governments, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in the Order. Thus, E.O. 13175 does not apply to this action.

### H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern environmental health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk, nor is this action economically significant as the impact of this action will be less than \$100 million.

#### I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This final rule is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not expected to affect energy supply, distribution, or use.

#### J. National Technology Transfer and Advancement Act (NTTAA)

Since this action does not involve any technical standards, section 12(d) of NTTAA, 15 U.S.C. 272 note, does not apply to this section.

#### K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

This action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not establish an environmental health or safety standard. This action establishes an information requirement and does not affect the level of protection provided to human health or the environment.

### VI. Congressional Review Act (CRA)

This action is subject to the CRA, 5 U.S.C. 801 *et seq.*, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

# List of Subjects in 40 CFR Part 713

Environmental protection, Exports, Imports, Manufacturing, Mercury, Trade practices.

Dated: June 21, 2018.

# E. Scott Pruitt,

Administrator.

Therefore, 40 CFR chapter I, subchapter R, is amended by adding a new part 713 to read as follows:

### PART 713—REPORTING **REQUIREMENTS FOR THE TSCA** INVENTORY OF MERCURY SUPPLY, **USE, AND TRADE**

Sec.

- 713.1 Purpose, scope, and compliance.
- Mercury for which information must 713.5 be reported.
- Persons who must report. 713.7
- 713.9 General requirements for which
- information must be reported. 713.11 Specific requirements for which
- information must be reported. 713.13 Contextual requirements for which
- information must be reported. Reporting information to EPA. 713.15
- 713.17 When to report.
- 713.19
- Recordkeeping requirements. 713.21 Electronic filing.

Authority: 15 U.S.C. 2607(b)(10)(D).

# §713.1 Purpose, scope, and compliance.

(a) This part specifies reporting and recordkeeping procedures under section 8(b)(10) of the Toxic Substances Control Act (TSCA) (15 U.S.C. 2607(b)(10)) for certain manufacturers (including importers) and processers of mercury as defined in section 8(b)(10)(A) to include elemental mercury and mercury compounds. Hereinafter "mercury" will refer to both elemental mercury and mercury compounds collectively, except where separately identified. Section 8(b)(10)(D) of TSCA authorizes the EPA Administrator to require reporting from

any person who manufactures mercury or mercury-added products or otherwise intentionally uses mercury in a manufacturing process to carry out and publish in the **Federal Register** an inventory of mercury supply, use, and trade in the United States. In administering this mercury inventory, EPA is directed to identify any manufacturing processes or products that intentionally add mercury and to recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use. EPA intends to use the collected information to implement TSCA and shape the Agency's efforts to recommend actions, both voluntary and regulatory, to reduce the use of mercury in commerce. In so doing, the Agency will conduct timely evaluation and refinement of these reporting requirements so that they are efficient and non-duplicative for reporters.

(b) This part applies to the activities associated with the periodic publication of information on mercury supply, use, and trade in the United States. Except as described at §713.7, the reporting requirements for mercury supply, use, and trade apply to the following activities:

(1) Activities undertaken with the purpose of obtaining an immediate or eventual commercial advantage:

(i) Import of mercury:

(ii) Manufacture (other than import) of mercury;

(iii) Import of a mercury-added product;

(iv) Manufacture (other than import) of a mercury-added product; and

(v) Intentional use of mercury in a

manufacturing process.

(2) Activities undertaken in relationship to those activities described in paragraph (b)(1) of this section:

#### TABLE 1-MERCURY COMPOUNDS

(i) Distribution in commerce, including domestic sale or transfer, of mercury;

(ii) Distribution in commerce, including domestic sale or transfer, of a mercury-added product;

(iii) Storage of mercury (including import);

(iv) Export of a mercury compound (unless specifically prohibited); and

(v) Export of a mercury-added product.

(c) Section 15(3) of TSCA makes it unlawful for any person to fail or refuse to submit information required under this part. In addition, TSCA section 15(3) makes it unlawful for any person to fail to: Establish or maintain records, or permit access to records required by this part. Section 16 of TSCA provides that any person who violates a provision of TSCA section 15 is liable to the United States for a civil penalty and may be criminally prosecuted. Pursuant to TSCA section 17, the Federal Government may seek judicial relief to compel submission of TSCA section 8 information and to otherwise restrain any violation of TSCA section 15.

(d) Each person who reports under this part must certify the accuracy and maintain records of the information reported under this part and, in accordance with TSCA, permit access to, and the copying of, such records by EPA officials.

#### §713.5 Mercury for which information must be reported.

(a) Elemental mercury (Chemical Abstracts Service Registry Number 7439-97-6); or

(b) A mercury compound, including but not limited to the mercury compounds listed in Table 1 of this part by Chemical Abstracts Service Registry Number:

Chemical Abstracts Service Registry No.	Mercury compound
10045–94–0 100–57–2	Nitric acid, mercury(2+) salt (2:1). Mercury, hydroxyphenyl
10112–91–1 10124–48–8	Mercury chloride (Hg2Cl2). Mercury amide chloride (Hg(NH2)Cl).
103–27–5	
10415–75–5	
104–60–9 1191–80–6	
12068–90–5	
13170–76–8 13302–00–6	
1335–31–5	
1344–48–5	
1345–09–1	
13876–85–2 138–85–2	
	Mercury, iodo(iodomethyl)

Chemical Abstracts Service Registry No.	Mercury compound
14783–59–6	Mercury, bis[(2-phenyldiazenecarbothioic acidkappa.S) 2-phenylhydrazidatokappa.N2]-, (T-4)
15385–58–7	Mercury, dibromodi-, (Hg-Hg).
15785–93–0	Mercury, chloro[4-[(2,4-dinitrophenyl)amino]phenyl]
15829–53–5	Mercury oxide (Hg2O).
1600–27–7	Acetic acid, mercury(2+) salt (2:1).
1785–43–9	Mercury, chloro(ethanethiolato)
19447–62–2	Mercury, (acetatokappa.O)[4-[2-[4-(dimethylamino)phenyl]diazenyl]phenyl]
20582–71–2	Mercurate(2-), tetrachloro-, potassium (1:2), (T-4)
20601–83–6	Mercury selenide (HgSe).
21908–53–2	Mercury oxide (HgO).
22450–90–4	Mercury(1+), amminephenyl-, acetate (1:1).
24579–90–6	Mercury, chloro(2-hydroxy-5-nitrophenyl)
24806–32–4	Mercury, [.mu[2-dodecylbutanedioato(2-).kappa.O1:.kappa.O4]]diphenyldi
26545–49–3	Mercury, (neodecanoatokappa.O)phenyl
27685–51–4	Cobaltate(2-), tetrakis(thiocyanatokappa.N)-, mercury(2+) (1:1), (T-4)
29870–72–2	Cadmium mercury telluride ((Cd,Hg)Te).
3294–57–3	Mercury, phenyl(trichloromethyl)
33770–60–4	Mercury, [3,6-dichloro-4,5-di(hydroxykappa.O)-3,5cyclohexadiene-1,2-dionato(2-)]
3570–80–7	Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-3oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',7'diyl)]di
537–64–4	Mercury, bis(4-methylphenyl)
539–43–5	Mercury, chloro(4-methylphenyl)
54-64-8	Mercurate(1-), ethyl[2-(mercaptokappa.S)benzoato(2-).kappa.O]-, sodium (1:1).
55–68–5	Mercury, (nitratokappa.O)phenyl
56724-82-4	Mercury, phenyl[(2-phenyldiazenecarbothioic acid.kappa.S) 2-phenylhydrazidatokappa.N2]
587-85-9	Mercury, diphenyl-
592–04–1	Mercury cyanide (Hg(CN)2).
592-85-8	Thiocyanic acid, mercury(2+) salt (2:1).
593–74–8	Mercury, dimethyl
59-85-8	Mercurate(1-), (4-carboxylatophenyl)chloro-, hydrogen.
623–07–4	Mercury, chloro(4-hydroxyphenyl)
62–38–4	Mercury, (acetatokappa.O)phenyl
62638–02–2 627–44–1	Cyclohexanebutanoic acid, mercury(2+) salt (2:1).
6283–24–5	Mercury, diethyl
628–86–4	Mercury, (acetatokappa.O)(4-aminophenyl) Mercury, bis(fulminatokappa.C)
629–35–6	Mercury, dibutyl
63325–16–6	Mercurate(2-), tetraiodo-, (T-4)-, hydrogen, compd. with 5-iodo-2-pyridinamine (1:2:2).
63468–53–1	Mercurate(2-), tetralouo-, (1-4)-, hydrogen, comput. with 5-louo-2-pyndinamine (1.2.2). Mercury, (acetatokappa.O)(2-hydroxy-5-nitrophenyl)
63549–47–3	Mercury, bis(acetatokappa.O)(benzenamine)
68201–97–8	Mercury, (acetatokappa.O)diamminephenyl-, (T-4)
72379–35–2	Mercurate(1-), triiodo-, hydrogen, compd. with 3-methyl2(3H)-benzothiazolimine (1:1:1).
7439–97–6	Mercury.
7487–94–7	Mercury chloride (HgCl2).
7546–30–7	Mercury chloride (HgCl).
7616–83–3	Perchloric acid, mercury(2+) salt (2:1).
7774–29–0	Mercury iodide (Hgl2).
7783–33–7	Mercurate(2-), tetraiodo-, potassium (1:2), (T-4)
7783–35–9	Sulfuric acid, mercury(2+) salt (1:1).
7783–39–3	Mercury fluoride (HgF2).
7789–47–1	Mercury bromide (HgBr2).
90–03–9	Mercury, chloro(2-hydroxyphenyl)
94070–93–6	Mercury, [.mu[(oxydi-2,1-ethanediy] 1,2benzenedicarboxylatokappa.O2)(2-)]]diphenyldi

# TABLE 1—MERCURY COMPOUNDS—Continued

#### §713.7 Persons who must report.

(a) Any person who manufactures (including imports) mercury, except:

(1) A person who does not manufacture (including import) mercury with the purpose of obtaining an immediate or eventual commercial advantage;

(2) A person who manufactures (including imports) mercury only as an impurity; or

(3) A person engaged only in the generation, handling, or management of mercury-containing waste, including

recovered mercury that is discarded or elemental mercury that is managed for long-term storage and management under section 6939f(g)(2) of the Resource Conservation and Recovery Act;

(b) Any person who manufactures (including imports) a mercury-added product, except:

(1) A person who does not manufacture (including import) a mercury-added product with the purpose of obtaining an immediate or eventual commercial advantage; (2) A person engaged only in the import of a product that contains a component that is a mercury-added product; or

(3) A person engaged only in the manufacture (other than import) of a product that contains a component that is a mercury-added product who did not first manufacture (including import) the component that is a mercury-added product; and

(c) Any person who otherwise intentionally uses mercury in a manufacturing process, except a person who does not intentionally use mercury in a manufacturing process with the purpose of obtaining an immediate or eventual commercial advantage.

# §713.9 General requirements for which information must be reported.

Except as described at § 713.7:

(a) Persons who manufacture (including import) mercury in amounts greater than or equal to 2,500 pounds (lbs.) for elemental mercury or greater than or equal to 25,000 lbs. for mercury compounds for a specific reporting year must report, as applicable:

(1) Amount of mercury stored (lbs.); and

(2) Amount of mercury distributed in commerce (lbs.).

(b) All other persons who manufacture (including import) mercury must report, as applicable:

(1) Amount of mercury manufactured (other than imported) (lbs.);

(2) Amount of mercury imported (lbs.);

(3) Amount of mercury exported (lbs.), except mercury prohibited from export at 15 U.S.C. 2611(c)(1) and (7);

(4) Amount of mercury stored (lbs.); and

(5) Amount of mercury distributed in commerce (lbs.).

(c) Persons who report sales of mercury-added products to the Interstate Mercury Education and Reduction Clearinghouse (IMERC) must report, as applicable:

(1) Amount of mercury in manufactured (other than imported) products (lbs.);

(2) Amount of mercury in imported products (lbs.); and

(3) Amount of mercury in exported products (lbs.).

(d) All other persons who manufacture (including import) mercury-added products must report, as applicable:

(1) Amount of mercury in manufactured (other than imported) products (lbs.):

(2) Amount of mercury in imported products (lbs.);

(3) Amount of mercury in exported products (lbs.); and

(4) Amount of mercury in products distributed in commerce (lbs.).

(e) Persons who otherwise intentionally use mercury in a manufacturing process must report, as applicable:

(1) Amount of mercury otherwise intentionally used (lbs.) in a manufacturing process; and

(2) Amount of mercury stored (lbs.).

# §713.11 Specific requirements for which information must be reported.

Except as described at § 713.7: (a) Any person who manufactures (including imports) mercury must specify, as applicable, the specific mercury compound(s) from a preselected list (as listed in Table 1 of this part).

(b) Any person who manufactures (including imports) a mercury-added product must specify as applicable, the specific category(ies) and subcategory(ies) from a pre-selected list, as listed in Table 2 of this part:

# TABLE 2—CATEGORIES AND SUBCATEGORIES OF MERCURY-ADDED PRODUCTS

Category	Subcategory
Batteries	-Button cell, silver.
	-Button cell, zinc-air.
	-Button cell, alkaline.
	-Stacked button cell batteries.
	Manganese oxide.
	—Silver oxide.
	—Mercuric oxide, non-button cell.
	—Button cell, mercuric oxide.
	—Button cell, zinc carbon.
	Other (specify).
Dental amalgam	[No subcategories].
Formulated products (includes uses in cosmetics, pesticides, and lab-	-Skin-lightening creams.
oratory chemicals).	-Lotions.
	-Soaps and sanitizers.
	—Bath oils and salts.
	—Topical antiseptics.
	-Preservatives (e.g., for use in vaccines and eye-area cosmetics
	when no preservative alternatives are available).
	-Pharmaceuticals (including prescription and over-the-counter drug
	products).
	-Cleaning products (not registered as pesticides under the Federal In-
	secticide, Fungicide, and Rodenticide Act).
	—Pesticides. —Paints.
	—Reagents ( <i>e.g.</i> , catalysts, buffers, fixatives). —Other (specify).
inkting laws bulks	
Lighting, lamps, bulbs	—Linear fluorescent.     —Compact fluorescent.
	-Cold cathode fluorescent.
	-External electrode fluorescent.
	-Mercury vapor.
	—High pressure sodium.
	-Mercury short arc.
	-Neon.
	-Other (specify).

Category	Subcategory
Measuring instruments Pump seals Switches, relays, sensors, valves	<ul> <li>Barometer.</li> <li>Fever thermometer.</li> <li>Flow meter.</li> <li>Hydrometer.</li> <li>Hygrometer/psychrometer.</li> <li>Manometer.</li> <li>Non-fever thermometer.</li> <li>Pyrometer.</li> <li>Sphygmomanometer.</li> <li>Other (specify).</li> <li>[No subcategories].</li> <li>Tilt switch.</li> <li>Vibration switch.</li> <li>Float switch.</li> <li>Pressure switch.</li> <li>Temperature switch.</li> </ul>
Miscellaneous/novelty mercury-added products	<ul> <li>—Displacement relay.</li> <li>—Wetted reed relay.</li> <li>—Contact relay.</li> <li>—Flame sensor.</li> <li>—Thermostat.</li> <li>—Other (specify).</li> <li>—Wheel weights.</li> <li>—Wheel rotation balancers/stabilizers.</li> <li>—Firearm recoil suppressors.</li> <li>—Carburetor synchronizers.</li> <li>—Joint support/shock absorption bands.</li> <li>—Other (specify).</li> </ul>

### TABLE 2—CATEGORIES AND SUBCATEGORIES OF MERCURY-ADDED PRODUCTS—Continued

(c) Any person who otherwise intentionally uses mercury in a manufacturing process, other than the manufacture of a mercury compound or a mercury-added product, must identify, as applicable:

(1) The specific manufacturing process for which mercury is otherwise intentionally used from a pre-selected list, as listed in Table 3 of this part:

TABLE 3—MANUFACTURING PROCESS FOR WHICH MERCURY IS OTHER-WISE INTENTIONALLY USED

Chlorine production (*e.g.*, mercury-cell chloralkali process).

Acetaldehyde production.

Sodium/potassium methylate/ethylate production.

Polyurethane/plastic production.

Other (specify).

(2) The specific use of mercury in a manufacturing process from a preselected list, as listed in Table 4 of this part:

TABLE 4—SPECIFIC USE OF MERCURY IN A MANUFACTURING PROCESS

Catalyst. Cathode. Reactant. Reagent. Other (specify).

# §713.13 Contextual requirements for which information must be reported.

Except as described at § 713.7:

(a) Persons who manufacture (including import) mercury in amounts greater than or equal to 2,500 lbs. for elemental mercury or greater than or equal to 25,000 lbs. for mercury compounds for a specific reporting year must report, as applicable:

(1) Country(ies) of origin for imported mercury;

(2) Country(ies) of destination for exported mercury; and

(3) NAICS code(s) for mercury

distributed in commerce.

(b) All other persons who manufacture (including import) mercury

must report, as applicable: (1) Country(ies) of origin for imported

mercury;

(2) Country(ies) of destination for exported mercury; and

(3) NAICS code(s) for mercury distributed in commerce.

(c) Persons who report sales of mercury-added products to IMERC must report, as applicable:

(1) Country(ies) of origin for imported products;

(2) Country(ies) of destination for exported products; and

(3) NAICS code(s) for products distributed in commerce.

(d) All other persons who manufacture (including import) mercury-added products must report, as applicable: (1) Country(ies) of origin for imported products;

(2) Country(ies) of destination for exported products; and

(3) NAICS code(s) for products distributed in commerce.

(e) Persons who otherwise intentionally use mercury in a manufacturing process, other than the manufacture of a mercury compound or a mercury-added product, must report, as applicable:

(1) Country(ies) of destination for exported final product(s); and

(2) NAICS code(s) for mercury in final product(s) distributed in commerce.

#### §713.15 Reporting information to EPA.

Any person who must report under this part must report for the submission period described at § 713.17:

(a) Quantities of mercury in pounds per applicable activity listed under the general requirements for which information must be reported described at § 713.9;

(b) Specific requirements for which information must be reported described at § 713.11;

(c) Contextual requirements for which information must be reported described at § 713.13; and

(d) According to the procedures described at § 713.21.

#### §713.17 When to report.

(a) Any person who must report under this part must report for the reporting year described as follows. A reporting year is the year during which mercury activity, required to be reported by this rule, has occurred. The 2018 reporting year is from January 1, 2018 to December 31, 2018. Subsequent reporting years are from January 1 to December 31 at 3-year intervals, beginning in 2021.

(b) All information reported for an applicable reporting year must be submitted on or before the first day of July following the reporting year. The submission deadline for the 2018 reporting year is July 1, 2019. Subsequent submission deadlines are on or before the first day of July following the reporting year, in 3-year intervals, beginning in 2022.

(c) The data from the 2018 reporting year will be used for the 2020 mercury inventory, the data from the 2021 reporting year will be used for the 2023 mercury inventory, and so forth at threeyear intervals.

### §713.19 Recordkeeping requirements.

Each person who is subject to the reporting requirements of this part must retain records that document any information reported to EPA. Records relevant to a reporting year must be retained for a period of 3 years beginning on the last day of the reporting year. Submitters are encouraged to retain their records longer than 3 years to ensure that past records are available as a reference when new submissions are being generated.

#### §713.21 Electronic filing.

(a) You must use the Mercury Electronic Reporting (MER) application to complete and submit required information as set forth in § 713.17. Submissions may only be made as set forth in this section.

(b) Submissions must be sent electronically to EPA via CDX.

(c) Access MER and instructions, as follows:

(1) By website. Access MER via the CDX homepage at *https://cdx.epa.gov/* and follow the appropriate links.

(2) By phone or email. Contact the EPA TSCA Hotline at (202) 554–1404 or *TSCA-Hotline@epa.gov.* 

[FR Doc. 2018–13834 Filed 6–26–18; 8:45 am] BILLING CODE 6560–50–P

# GENERAL SERVICES ADMINISTRATION

41 CFR Parts 300–3 and 301–11, Appendices B and D to Chapter 301, and Parts 302–9 and 302–11

[FTR Amendment 2018–01; FTR Case 2018– 301; Docket No. 2018–0007, Sequence 1]

RIN 3090-AJ99

Federal Travel Regulation (FTR); Removal of the Meals and Incidental Expenses (M&IE) Deduction Table, Allocation of M&IE Rates To Be Used in Making Deductions From the M&IE Allowance, and the Glossary of Acronyms

**AGENCY:** Office of Government-wide Policy, U.S. General Services Administration (GSA). **ACTION:** Direct final rule.

**SUMMARY:** GSA is amending the Federal Travel Regulation (FTR), to remove the meals and incidental expenses (M&IE) deduction table, Allocation of M&IE Rates To Be Used in Making Deductions From the M&IE Allowance, and the Glossary of Acronyms.

**DATES:** This rule is effective August 13, 2018 without further action, unless adverse comments are received by July 27, 2018. GSA will consider whether these comments are significant enough to publish a timely withdrawal in the **Federal Register** informing the public that this direct final rule will not take effect.

**ADDRESSES:** Submit comments in response to FTR Case 2018–301 by any of the following methods:

• Regulations.gov: http:// www.regulations.gov. Submit comments via the Federal eRulemaking portal by entering "FTR Case 2018–301", under the heading "Enter Keyword or ID" and select "Search". Select the link "Submit a Comment" that corresponds with "FTR Case 2018–301" and follow the instructions provided at the "Comment Now" screen. Please include your name, company name (if any), and "FTR Case 2018–301" on your attached document.

• *Mail:* General Services Administration, Regulatory Secretariat (MVCB), ATTN: Ms. Lois Mandell, 1800 F Street NW, Washington, DC 20405.

Instructions: Please submit comments only and cite FTR Case 2018–301 in all correspondence related to this case. All comments received will be posted without change to http:// www.regulations.gov, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check www.regulations.gov approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

FOR FURTHER INFORMATION CONTACT: For clarification of content, contact Ms. Jill Denning, Program Analyst, Office of Government-wide Policy, at 202–208– 7642 or *jill.denning@gsa.gov*. Contact the Regulatory Secretariat Division (MVCB), 1800 F Street NW, Washington, DC 20405, 202–501–4755, for information pertaining to status or publication schedules. Please cite FTR case 2018–301.

# SUPPLEMENTARY INFORMATION:

### **A. Public Participation**

GSA is publishing this direct final rule without a prior proposed rule as this is a noncontroversial action, and GSA anticipates no significant adverse comments. A significant adverse comment is defined as one where the comment explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. In determining whether a significant adverse comment is sufficient to terminate a direct final rulemaking, GSA will consider whether the comment raises an issue serious enough to warrant a substantive response in a notice-and-comment process. GSA notes that comments that are frivolous, insubstantial, or outside the scope of the rule would not be considered adverse under this procedure. A comment recommending a rule change in addition to the rule would not be considered a significant adverse comment, unless the comment states why the rule would be ineffective without the additional change. In addition, if a significant adverse comment applies to part of a rule and that part can be severed from the remainder of the rule (e.g., where a rule deletes several unrelated regulations), GSA may adopt as final those parts of the rule that are not the subject of a significant adverse comment. For further information about commenting on this rule, please see the ADDRESSES section of this document.

### **B. Background**

As part of a comprehensive review of the FTR, GSA is removing the M&IE deduction table from appendix B to chapter 301, Allocation of M&IE Rates To Be Used in Making Deductions From the M&IE Allowance; and all of appendix D to chapter 301, Glossary of Acronyms. The table in appendix B is publicly available on the internet at *https://www.gsa.gov/mie* thus its