

WASHINGTON WATCH

EPA Publishes Final Reporting Requirements for TSCA Mercury Inventory

By Lynn L. Bergeson

Section 8(b)(10)(B) of the Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act (Lautenberg), directs that "[n]ot later than April 1, 2017, and every 3 years thereafter, the Administrator shall carry out and publish" (Environmental Protection Agency [EPA], 2018a, p. 30056) an inventory of mercury or mercury-added products or uses of mercury in a manufacturing process. On June 27, 2018, the U.S. Environmental Protection Agency (EPA) published a final rule responding to this legislative mandate. The rule requires certain entities to provide information to assist in the preparation of this inventory. This column outlines the final rule and discusses its implications.

Overview of Final Rule

Mercury has long been the target of domestic and international regulation. The World Health Organization notes that exposure to even small amounts of mercury may cause serious adverse health effects and environmental harm. The Minamata Convention on Mercury is an international agreement intended to protect human health and the environment from anthropogenic emissions and releases of elemental mercury and mercury compounds. The United States entered into the Minamata Convention in 2013. Both Lautenberg and the Minamata Convention invited renewed scrutiny and regulatory measures to control mercury emissions.

The final rule applies to "any person" who manufactures (including imports) mercury or mercury-added products, or otherwise intentionally uses mercury in a manufacturing process. Importantly, this broad definition includes processes traditionally not subject to TSCA, such as for the manufacture of

pharmaceuticals and pesticides. EPA will use data from the 2018 reporting year for the 2020 mercury inventory. The 2018 reporting year is from January 1, 2018, to December 31, 2018, and the submission deadline for the 2018 reporting year is July 1, 2019. While TSCA directs EPA 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, 2018a, p. 30056). EPA notes that it is not making such identifications or recommendations at this time.

On March 29, 2017, EPA published a notice announcing the availability of its initial mercury inventory report (EPA, 2017). The report identified limitations that EPA encountered in its reliance on publicly available data on the mercury market in the United States. According to EPA, the final reporting requirements will help it narrow these resulting data gaps, prepare subsequent, triennial publications of the inventory, and execute the Congressional 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." (EPA, 2018a, p. 30056)

Based on comments submitted on the proposed rule, EPA 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." (EPA, 2018a, p. 30056). The reporting requirements include activities that are established TSCA terms, including manufacture, import, distribution in commerce, storage, and export. The reporting requirements also apply to the 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 must also identify specific mercury compounds, mercury-added products, manufacturing processes, and how mercury is used in manufacturing processes, as applicable, from preselected lists. For certain activities, reporters must provide additional, contextual data (e.g., North American Industry Classification System [NAICS] codes for mercury or mercury-added products distributed in commerce).

EPA notes that the final reporting requirements do not apply to: (1) persons who do not *first* manufacture, import, or otherwise intentionally use mercury (for example, as discussed more below, EPA notes that use or import of a mercury-containing component within an assembled item does not trigger a reporting requirement for that entity); (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.

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 final rule includes certain exemptions for persons who already report for mercury and mercury-added 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.

The rule is intended to satisfy an important Lautenberg goal, which is to identify, and thus better control, mercury emissions. There are, however, important nuances that need to be understood to ensure compliance. More detail is provided below regarding the provisions of the final rule, including EPA's rationale for fulfilling specific statutory provisions and terms. While the final rule includes summaries of public comments received and EPA's responses and determinations, EPA notes that some of these issues are discussed in greater detail in its *Response to Comments* (EPA, 2018b).

Definition of Mercury

As amended by Lautenberg, TSCA Section 8(b)(10)(A) states that "notwithstanding [TSCA] section 3(2)(B), the term 'mercury' means ... elemental mercury; and ... a mercury compound." (EPA, 2018a, p. 30054). This definition of 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 (EPA, 2018a, p. 30058). This is an important nuance that cannot be overlooked. Historically, manufacturers of drugs, cosmetics, and devices have been exempted from TSCA reporting obligations.

EPA proposed that where it distinguishes between elemental mercury and mercury compounds, elemental mercury be limited to elemental mercury as described by its Chemical Abstracts Service (CAS) Number (7439-97-6) and mercury compounds be inclusive of all instances where elemental mercury or a mercury compound is reacted with another chemical substance. EPA provides the following examples of mercury compounds from the TSCA Chemical Substance Inventory:

CAS Number	Mercury compound	
10045-94-0	Nitric acid, mercury(2+) salt (2:1)	
100-57-2	Mercury, hydroxyphenyl-	
10112-91-1	Mercury chloride (Hg2Cl2)	
10124-48-8	Mercury amide chloride (Hg(NH2)Cl)	
103-27-5	Mercury, phenyl(propanoatokappa.0)-	
10415-75-5	Nitric acid, mercury(1+) salt (1:1)	
104-60-9	Mercury, (9-octadecenoatokappa.O)phenyl-	
1191-80-6	9-Octadecenoic acid (9Z)-, mercury(2+) salt (2:1)	
12068-90-5	Mercury telluride (HgTe)	
13170-76-8	Hexanoic acid, 2-ethyl-, mercury(2+) salt (2:1)	
13302-00-6	Mercury, (2-ethylhexanoatokappa.O)phenyl-	
1335-31-5	Mercury cyanide oxide (Hg2(CN)2O)	
1344-48-5	Mercury sulfide (HgS)	
1345-09-1	Cadmium mercury sulfide	
13876-85-2	Mercurate(2-), tetraiodo-, copper(1+) (1:2), (T-4)-	
138-85-2	Mercurate(1-), (4-carboxylatophenyl)hydroxy-, sodium (1:1)	
141-51-5	Mercury, iodo(iodomethyl)-	
14783-59-6	Mercury, bis[(2-phenyldiazenecarbothioic acidkappa.S) 2-phenylhydrazidatokappa.N2]-, (T-4)-	

CAS Number	Mercury compound	
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)-3,5-cyclohexadiene-1,2-dionato(2-)]-	
3570-80-7	Mercury, bis(acetatokappa.O)[.mu(3',6'-dihydroxy-3-oxospiro[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 acidkappa.S) 2-phenylhydrazidatokappa.N2]-	

CAS Number	Mercury compound	
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	Cyclohexanebutanoic acid, mercury(2+) salt (2:1)	
627-44-1	Mercury, diethyl-	
6283-24-5	Mercury, (acetatokappa.O)(4-aminophenyl)-	
628-86-4	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	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-methyl-2(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 (HgI2)	
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-ethanediyl 1,2-	

CAS Number	Mercury compound	
	benzenedicarboxylatokappa.O2)(2-)]]diphenyldi-	

EPA describes the compounds listed in the table as "an extensive, though not comprehensive, list of compounds for which reporting is required" (EPA, 2018a, p. 30059) based on CAS number. In other words, mercury compounds not listed could be reportable.

Revised Descriptions of Supply, Use, and Trade Activities

EPA modified the specific descriptions of supply, use, and trade activities to reflect more accurately the language of TSCA Section 8(f) and EPA's interpretation of the statutory mandate at TSCA Section 8(b)(10)(C)(i). EPA is requiring reporting of the following activities when intentionally undertaken 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.

EPA states the following activities are part of supply, use, and trade 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.

Coordination with Existing Reporting Programs

EPA very much wishes 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. EPA reviewed four data collection systems applicable to the supply, use, and trade of mercury (including mercury-added products and mercury used in manufacturing processes): the IMERC Mercury-Added Products Database; the TSCA Section 8(a) CDR rule; the Toxics Release

Inventory (TRI) Program; and the US International Trade Commission Interactive Trade DataWeb (USITC DataWeb). After reviewing these reporting programs, EPA designed the reporting requirements in the final rule to be least burdensome for reporters already familiar with IMERC, CDR, TRI, and USITC DataWeb protocols. EPA incorporated comparable reporting concepts and tools from each program, and is 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.

Reporting Requirements for Existing CDR and IMERC Reporters

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, EPA "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." (EPA, 2018a, p. 30063). Based on comments received, EPA clarified that a person who currently reports to CDR or IMERC is not categorically exempt from the mercury inventory reporting requirements set forth in the final rule. Instead, EPA designed a bifurcated reporting structure 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).

EPA noted its understanding of the interest in aligning with IMERC's submission deadline. EPA states that the statutorily mandated publication date for the mercury inventory was April 1, 2017, and every three years thereafter; this falls on IMERC's data submission date. According to the notice, while mindful of incongruities in reporting frequency and years, EPA believes that the reporting schedule will achieve this goal to the greatest extent practicable.

Reporting Requirements for Products Regulated by Other Federal Agencies

EPA commented on a comment that urged the agency not to require reporting for uses of mercury regulated by other federal agencies. The commenter cited drugs, as regulated by the US Food and Drug Administration (FDA) and animal vaccines, as regulated by the US Department of Agriculture (USDA), noting 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. EPA rejected this comment. While the FDA and USDA may regulate mercury, EPA noted that neither collects 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." (EPA, 2018a, p. 30063).

Persons and Information Subject to the Rulemaking

Persons Who Must Report

In addition to persons described below, EPA states that it will provide examples of persons who will and will not be required to report under the final rule in reporting instructions and other support materials.

Persons Who Manufacture (Including Import) Mercury

Persons who manufacture (including import) in excess of 2,500 pounds (lbs.) of elemental mercury or in excess of 25,000 lbs. of 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. As described in the table below, such persons 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. EPA states that to decrease reporting burdens, it will provide preselected lists of mercury compounds to streamline reporting requirements as much as possible.

Information to Report – Mercury				
Persons Who Must Report	Applicable Reporting			
	Requirements			
Persons who manufacture (including	Country(ies) of origin for imported			
import) mercury in amounts greater	mercury			
than or equal to 2,500 lbs. for				

-- Country(ies) of destination for elemental mercury or greater than or equal to 25,000 lbs. for mercury exported mercury compounds for a specific reporting year (i.e., current CDR reporters) -- Amount of mercury stored (lbs.) -- Amount of mercury distributed in commerce (lbs.) NAICS code(s) for mercury distributed in commerce All other persons who manufacture -- Amount of mercury manufactured (including import) mercury (lbs.) -- Amount of mercury imported (lbs.) -- Country(ies) of origin for imported mercury -- Amount of mercury exported mercury prohibited (lbs.), except from export 15 U.S.C. at 2611(c)(1) and (7) -- Country(ies) of destination for exported mercury -- Amount of mercury stored (lbs.) -- Amount of mercury distributed in commerce (lbs.) NAICS code(s) for mercury distributed in commerce -- As applicable, specific mercury

compound(s) from preselected list.

Persons Who Manufacture or Import Mercury-Added Products

The final regulatory text also discusses reporting requirements for persons who report sales of mercury-added products to the IMERC and persons who manufacture or import mercury-added products. EPA proposed requiring reporting for the manufacture (including import) of mercury-added products, except for:

- Import of an assembled product that contains mercury solely within a component that is a mercury-added product; and
- Domestic manufacture of an assembled product, unless the person first manufactures or imports the mercury-added product that can be used as a component.

According to the final rule, EPA 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 for items that contain a component that is a mercury-added product. For imported assembled products that contain a component that is a mercury-added product, EPA states that it 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 combined general, specific, and contextual reporting requirements of the final rule "are designed not only to provide information that [is] 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." (EPA, 2018a, p. 30064).

Some commenters suggested that Lautenberg 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 stated that it interprets the statutory text to require only 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. EPA believes that it will be able to identify the various types of mercury-added products where mercury is intentionally added (e.g., mercury-added 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). This is another important nuance of the rule that should not be overlooked.

EPA states that the addition of a mercury-added product as a component to a more complex, assembled product does not change the nature of 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, as EPA would receive reports both on the manufacture of the component and the manufacture of the assembled product. For example, EPA can use the information reported on NAICS codes by a person who manufactures (or imports) mercury-added products that can be used as components (e.g., mercury-added lamp) to 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.

With respect to imports, based on EPA's review of the information available in the IMERC database and the rationale set forth in the preceding paragraph, the agency states that it 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 mercury-added products that can be used as components and those assembled products that contain a mercury-added component). The final rule requires reporting for the import of mercury-added products that can be used as components in assembled products. EPA notes that 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." (EPA, 2018a, p. 30065). EPA concludes that at this stage, it can best identify products that intentionally add mercury by requiring reporting only from 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 notes that persons who report to IMERC identify the amount of mercury sold in mercury-added products that may be manufactured, distributed, or

imported. EPA states that it 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 mercury-added products. Those persons must report quantitative and qualitative information for other applicable data elements (e.g., manufacture, import, and export of mercury-added products), however. As described in the table below, such persons are also required to report contextual information applicable to amounts, if any, of mercury in mercury-added products manufactured, imported, distributed in commerce, or exported. According to EPA, in further efforts to decrease reporting burdens, it will provide pre-selected lists of mercury-added product categories to streamline reporting requirements as much as possible.

Information to Report Mercury-Added Products		
Persons Who Must Report	Applicable Reporting	
	Requirements	
Persons who manufacture (including	Amount of mercury in	
import) mercury-added products,	manufactured products (lbs.)	
except a product that contains a		
component that is a mercury-added	Amount of mercury in imported	
product, who currently report to	products (lbs.)	
IMERC		
	Country(ies) of origin for imported	
	products	
	Amount of mercury in exported	
	products (lbs.)	
	Country(ies) of destination for	
	exported products	
	NAICC and (a) for maduate	
	NAICS code(s) for products	
	distributed in commerce	
	As applicable, specific product	
	category(ies) and subcategory(ies)	
	from pre-selected list	
	Hom pro-sciedica list	

All other persons who manufacture (including import) mercury-added products, except a product that contains a component that is a mercury-added product

- -- Amount of mercury in manufactured products (lbs.)
- -- Amount of mercury in imported products (lbs.)
- -- Country(ies) of origin for imported products
- -- Amount of mercury in exported products (lbs.)
- -- Country(ies) of destination for exported products
- -- Amount of mercury in products distributed in commerce (lbs.)
- -- NAICS code(s) for products distributed in commerce (lbs.)
- -- As applicable, specific product category(ies) and subcategory(ies) from pre-selected list

Persons Who Otherwise Intentionally Use Mercury in a Manufacturing Process

Lautenberg includes persons who intentionally use mercury in a manufacturing process among those who must report. EPA states that it 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." (EPA, 2018a, p. 30066). EPA intends the general, specific, and contextual reporting requirements in the following table to provide a complete picture of uses for which little information is currently available.

Information to Report Otherwise Intentional Use of Mercury in a		
Manufacturing Process 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	Amount of mercury intentionally used (lbs.) in pre-selected list of manufacturing processes Amount of mercury stored (lbs.) Country(ies) of destination for exported final product(s) NAICS code(s) for mercury in final	
	As applicable, specific manufacturing process from preselected list As applicable, specific use of mercury in manufacturing process from pre-selected list	

Persons Not Required to Report

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 reporting requirements. The agency states that aside from its reading of TSCA Section 8(b)(10)(D)(i), it "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." (EPA, 2018a, p. 30067). EPA believes that focusing on the initial introduction of mercury to the market prevents the possibility of double counting or undue burden that would occur if entities that do not first introduce mercury to supply, use, or trade were required to report.

Persons Who Generate, Handle, or Manage Mercury-Containing Waste

Persons "engaged in the generation, handling, or management of mercury-containing waste, unless that person manufactures or recovers mercury in the management of that waste" (EPA, 2018a, p. 30067) are not required to report under Lautenberg. EPA states that it interprets the statute to mean for immediate or eventual commercial purposes. EPA reportedly will provide examples of such persons in the reporting instructions and other support materials.

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. EPA states that it will provide examples of such persons in the reporting instructions and other support materials.

Persons Engaged in Activities Involving Mercury without the Purpose of Obtaining an Immediate or Eventual Commercial Advantage

Persons who do not manufacture (including import) mercury or mercuryadded 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. EPA intends to provide examples of such persons in the reporting instructions and other support materials.

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." (EPA, 2018a, p. 30067). The agency states that, to the extent that it 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. To clarify and streamline reporting requirements related to products that contain a component that is a mercury-added product, EPA modified the structure of the regulatory text in the final rule. EPA will provide examples of such persons in the reporting instructions and other support materials. EPA intends to make these materials available on EPA website six months prior to the reporting deadline.

Reporting Units and Threshold

While EPA "appreciates the suggestion to offer multiple/alternative units of measurement for reporting amounts of mercury," (EPA, 2018a, p. 30068), the agency states that it "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." (EPA, 2018a, p. 30068). According to the final rule, EPA believes it is not appropriate to establish a *de minimis* threshold. To address the concerns expressed in comments, and as an alternative to a reporting threshold, EPA "accepts the suggestions of commenters to offer a minimum unit." (EPA, 2018a, p. 30068). 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 lb. during a reporting year would be directed to round amounts of mercury to "1 lb." Because EPA is not requiring reporting for impurities, it believes the suggested parts per million unit of measurement associated with impurities will no longer be applicable. EPA will provide additional examples in the reporting instructions and support materials designed to assist reporters. These materials will be available on EPA website six months prior to the reporting deadline.

Reporting Requirements

Under TSCA Section 8(b)(10)(B), the general scope of the inventory is the "mercury supply, use, and trade in the United States." (EPA, 2018a, p.

30068). EPA states that it 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 ("i.e., manufacture, import, export, storage, distribution in commerce, and otherwise intentional use of mercury in a manufacturing process" [EPA, 2018a, p. 30068]). EPA determined that, for certain data elements, requiring reporting of more specific information would help to contextualize better reported quantities of mercury used in domestic and global supply, use, and trade. Below is more information on the general, specific, and contextual reporting requirements.

General Reporting Requirements

EPA states that it 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." (EPA, 2018a, p. 30068). For persons required to report, EPA is requiring reporting quantitative data for mercury, mercury-added products, and the otherwise intentional use of mercury in a manufacturing process as follows:

- 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.); and amount of mercury exported per year (lbs.);
- 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.); and amount of mercury exported per year (lbs.);
- 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.); and amount of mercury in exported products per year (lbs.);
- 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.); and amount of mercury in exported products per year (lbs.); and

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

EPA acknowledges that certain persons may report for multiple activities associated with the supply, use, and trade of mercury. EPA notes that there may be certain persons engaged in the supply, use, and trade of mercury for whom the inventory might not account, but "EPA views this omission of prospective reporters as an opportunity to limit undue burden and avoid double counting." (EPA, 2018a, p. 30068).

Specific Reporting Requirements

To understand better the categories of mercury-added products and the otherwise intentional use of mercury in a manufacturing process, EPA is requiring reporters to identify the specific categories and subcategories of products and functional uses for which quantitative data is reported. Persons required to report must provide the <u>total</u> amount of mercury used during the reporting year in pounds (lbs.) for general reporting activities associated with the supply, use, and trade, rather than per category and subcategory. Again, this is an important nuance to the final reporting rule.

EPA based its decision on "issues concerning burden and confidential business information (CBI)" (EPA, 2018a, p. 30069) that could be created by reporting quantitative information for increasingly specific categories and subcategories. For example, more specific reporting requirements could overlap with TSCA CDR obligations, or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Form 3540-16 Pesticide Report for Pesticide-Producing and Device-Producing Establishments.

- Mercury-added products: The final list of categories and subcategories includes:
- 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; and other (specify);

Dental amalgam;

- Formulated products (including 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 FIFRA; pesticides; paints; dyes; reagents (e.g., catalysts, buffers, fixatives); and 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; and other (specify);
- Measuring instruments: Barometer; fever thermometer; flow meter; hydrometer; hygrometer/psychrometer; manometer; non-fever thermometer; pyrometer; sphygmomanometer; and 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; and other (specify);
- ➤ Miscellaneous mercury-added products: Wheel weights; wheel rotation balancers/stabilizers; firearm recoil suppressors; carburetor

synchronizers; joint support/shock absorption bands; and other (specify);

■ Intentional mercury use in manufacturing processes: EPA refined the following manufacturing processes for which mercury may be intentionally used: chlorine production (*e.g.*, mercury-cell chloralkali process); acetaldehyde production; sodium/potassium methylate/ethylate production; polyurethane/plastic production; and other (specify). EPA also refined the following lists of uses of mercury in the manufacturing processes: catalyst; cathode; reactant; reagent; and other (specify).

Contextual Reporting Requirements

Within certain sectors of the mercury market, EPA determined that additional data requirements are important to provide context to the quantitative data reported. To understand fully the supply, use, and trade of mercury in the United States, the final rule includes the following reporting requirements:

- For imports of mercury or mercury-added products: Country of origin;
- For mercury or mercury-added products distributed in commerce: Identify the applicable purchasing or receiving industry sectors via NAICS codes; and
- For exported mercury or mercury-added products: Destination country.

Consideration of Small Entities

According to EPA, based on its economic analysis of the final rule, approximately 40% of all respondents will be small entities. EPA notes that small businesses are not exempt from reporting requirements, however, 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, 2018a, p. 30069). This is an important nuance of the final rule.

EPA intends to 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 questions and answers (Q&A) and other support. EPA states that these materials will be available on its website six months prior to the reporting deadline.

Frequency of Inventory Publication

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

Frequency of Data Collection and Reporting Deadline

While TSCA Section 8(b)(10)(D) provides EPA the authority to promulgate the rule to assist in the preparation of the triennial inventory publication, the agency notes that "TSCA offers no guidance on the frequency of collection or reporting deadline." (EPA, 2018a, 30070). EPA 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. EPA states that it determined that coinciding the mercury reporting with the triennial IMERC frequency of collection is appropriate given that the mercury inventory publication schedule is also triennial. EPA has set the mercury inventory deadline to coincide with the TRI program deadline "to align with a date with which certain, potential reporters might already be familiar." (EPA, 2018a, p. 30070). The final rule establishes a July 1 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).

Recordkeeping

The final rule requires that each person who is subject to the reporting requirements retain records that document any information reported to EPA. Records relevant to a reporting year must be retained for a period of three years beginning on the last day of the reporting year, but EPA states that "[s]ubmitters 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." (EPA, 2018a, p. 30070).

Reporting Requirements and CBI

Reporters may claim that their submitted information is CBI per the statutory provisions for CBI under TSCA Section 14. EPA notes that it received suggestions such as allowing reporting in ranges, not demarcating specific amounts of mercury in exports going to specific countries, and allowing trade associations to submit information collectively on behalf of their members. To maintain the alignment of general, specific, and contextual reporting requirements, EPA states that it requires that separate reports be filed for each person/company, however (*i.e.*, not submitted in aggregate if an agent assists multiple persons/companies to develop its report). According to the final rule, 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 states that, as necessary, it will follow established publication policies to aggregate data for public release and will not compromise CBI.

Electronic Reporting

The final rule requires electronic reporting of the mercury inventory data, using an EPA-provided, web-based reporting software to submit mercury inventory reports through the Internet to the EPA's Central Data Exchange (CDX). EPA states that it will develop reporting instructions and support materials to assist with reporting to the mercury inventory. These materials are expected to be available on EPA website six months prior to the reporting deadline.

Discussion

EPA is to be commended for its timely completion and issuance of the reporting rule for the mercury inventory. The rule's preamble offers a clear explanation of changes made in response to comments and EPA's logic for making or not making requested changes. As noted above, there are significant nuances to the final rule of which regulated entities should be aware -- both to assure compliance and to fulfill Lautenberg's goals.

EPA is also to be commended for its commitment to develop and issue additional reporting guidance for the 2018 reporting year six months prior to the reporting deadline of July 1, 2019. Guidance will be helpful in satisfying forthcoming reporting obligations, as the final rule is quite detailed and care will need to be taken to understand the requirements. This is especially true for entities who may not be expecting to be subject to TSCA reporting obligations, such as manufacturers of pharmaceuticals and pesticides --traditionally entities that have been exempt from TSCA regulations—and small business entities that may have thought the requirements do not apply.

References

Environmental Protection Agency (EPA) (2018a). Mercury; Reporting Requirements for the TSCA Mercury Inventory. Federal Register, 83(124), 30054-30077. Wednesday, June 27, 2018, Rules and Regulations. Available at: https://www.federalregister.gov/documents/2018/06/27/2018-13834/mercury-reporting-requirements-for-the-tsca-mercury-inventory

Environmental Protection Agency (EPA) (2018b). Mercury; Reporting Requirements for Toxic Substances Control Act Mercury Inventory Response to Comments. RIN 207-AK22, June 20, 2018. 23pp. Available at: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2017-0421-0102

Environmental Protection Agency (EPA) (2017). Mercury; Initial Inventory of Supply, Use, and Trade. Federal Register, 82(59), 15522-15523. March 29, 2017. Available at: https://www.gpo.gov/fdsys/granule/FR-2017-03-29/2017-06205