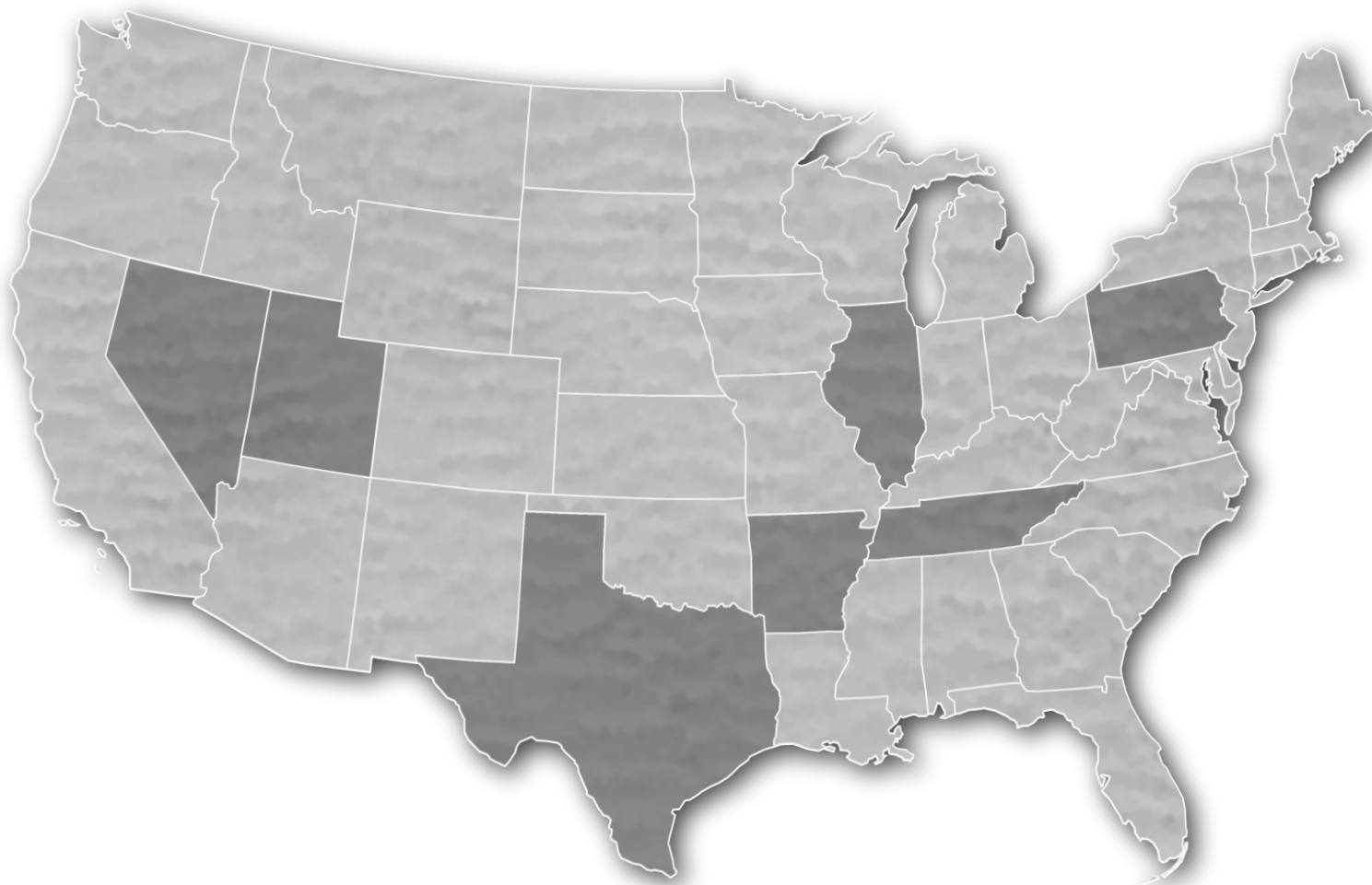


**DRAFT**

# LONG-TERM MANAGEMENT AND STORAGE OF ELEMENTAL MERCURY

*Supplemental Environmental Impact Statement*



**Volume 2**  
*Appendices*

U.S. Department of Energy  
Office of Environmental Management  
Washington, DC



Draft Mercury Storage SEIS-II

METRIC TO ENGLISH			ENGLISH TO METRIC		
Multiply	by	To get	Multiply	by	To get
<b>Area</b>					
Square meters	10.764	Square feet	Square feet	0.092903	Square meters
Square kilometers	247.1	Acres	Acres	0.0040469	Square kilometers
Square kilometers	0.3861	Square miles	Square miles	2.59	Square kilometers
Hectares	2.471	Acres	Acres	0.40469	Hectares
<b>Concentration</b>					
Kilograms/square meter	0.16667	Tons/acre	Tons/acre	0.5999	Kilograms/square meter
Milligrams/liter	1 <sup>a</sup>	Parts/million	Parts/million	1 <sup>a</sup>	Milligrams/liter
Micrograms/liter	1 <sup>a</sup>	Parts/billion	Parts/billion	1 <sup>a</sup>	Micrograms/liter
Micrograms/cubic meter	1 <sup>a</sup>	Parts/trillion	Parts/trillion	1 <sup>a</sup>	Micrograms/cubic meter
<b>Density</b>					
Grams/cubic centimeter	62.428	Pounds/cubic foot	Pounds/cubic foot	0.016018	Grams/cubic centimeter
Grams/cubic meter	0.0000624	Pounds/cubic foot	Pounds/cubic foot	16,018.5	Grams/cubic meter
<b>Length</b>					
Centimeters	0.3937	Inches	Inches	2.54	Centimeters
Meters	3.2808	Feet	Feet	0.3048	Meters
Kilometers	0.62137	Miles	Miles	1.6093	Kilometers
<b>Radiation</b>					
Sieverts	100	Rem	Rem	0.01	Sieverts
<b>Temperature</b>					
<i>Absolute</i>					
Degrees C + 17.78	1.8	Degrees F	Degrees F - 32	0.55556	Degrees C
<i>Relative</i>					
Degrees C	1.8	Degrees F	Degrees F	0.55556	Degrees C
<b>Velocity/Rate</b>					
Cubic meters/second	2118.9	Cubic feet/minute	Cubic feet/minute	0.00047195	Cubic meters/second
Grams/second	7.9366	Pounds/hour	Pounds/hour	0.126	Grams/second
Meters/second	2.237	Miles/hour	Miles/hour	0.44704	Meters/second
<b>Volume</b>					
Liters	0.26418	Gallons	Gallons	3.7854	Liters
Liters	0.035316	Cubic feet	Cubic feet	28.316	Liters
Liters	0.001308	Cubic yards	Cubic yards	764.54	Liters
Cubic meters	264.17	Gallons	Gallons	0.0037854	Cubic meters
Cubic meters	35.314	Cubic feet	Cubic feet	0.028317	Cubic meters
Cubic meters	1.3079	Cubic yards	Cubic yards	0.76456	Cubic meters
Cubic meters	0.0008107	Acre-feet	Acre-feet	1233.49	Cubic meters
<b>Weight/Mass</b>					
Grams	0.035274	Ounces	Ounces	28.35	Grams
Kilograms	2.2046	Pounds	Pounds	0.45359	Kilograms
Kilograms	0.0011023	Tons (short)	Tons (short)	907.18	Kilograms
Metric tons	1.1023	Tons (short)	Tons (short)	0.90718	Metric tons
<b>ENGLISH TO ENGLISH</b>					
Acre-foot	325,850.7	Gallons	Gallons	0.00003046	Acre-foot
Acres	43,560	Square feet	Square feet	0.00022957	Acres
Square miles	640	Acres	Acres	0.0015625	Square miles

a. This conversion is only valid for concentrations of contaminants (or other materials) in water.

METRIC PREFIXES

Prefix	Symbol	Multiplication factor
exa-	E	1,000,000,000,000,000,000 = 10 <sup>18</sup>
peta-	P	1,000,000,000,000,000 = 10 <sup>15</sup>
tera-	T	1,000,000,000,000 = 10 <sup>12</sup>
giga-	G	1,000,000,000 = 10 <sup>9</sup>
mega-	M	1,000,000 = 10 <sup>6</sup>
kilo-	k	1,000 = 10 <sup>3</sup>
deca-	D	10 = 10 <sup>1</sup>
deci-	d	0.1 = 10 <sup>-1</sup>
centi-	c	0.01 = 10 <sup>-2</sup>
milli-	m	0.001 = 10 <sup>-3</sup>
micro-	μ	0.000 001 = 10 <sup>-6</sup>
nano-	n	0.000 000 001 = 10 <sup>-9</sup>
pico-	p	0.000 000 000 001 = 10 <sup>-12</sup>

**COVER SHEET**

**Responsible Federal Agency:** U.S. Department of Energy (DOE)

**Title:** Draft Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement (DOE/EIS-0423-S2D) (Mercury Storage SEIS-II)

**Candidate Locations for Storage Facilities:** Arkansas, Illinois, Nevada, Pennsylvania, Tennessee, Texas, and Utah.

<p><i>For further information or for copies of this Draft Mercury Storage SEIS-II, please contact:</i></p> <p>Julia Donkin NEPA Document Manager U.S. Department of Energy Office of Environmental Management 1000 Independence Avenue, SW Washington, DC 20585-0103 Telephone: (202) 586-5000 Email: <a href="mailto:Julia.donkin@em.doe.gov">Julia.donkin@em.doe.gov</a></p>	<p><i>For general information on the DOE-Office of Environmental Management National Environmental Policy Act (NEPA) process, contact:</i></p> <p>William Ostrum NEPA Compliance Officer U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-0103 Email: <a href="mailto:William.ostrum@hq.doe.gov">William.ostrum@hq.doe.gov</a></p>
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This document is available for viewing and downloading on the DOE NEPA website (<http://energy.gov/nepa/>).

**Abstract:** Pursuant to the *Mercury Export Ban Act of 2008* (Public Law [P.L.] 110-414), and the *Frank R. Lautenberg Chemical Safety for the 21st Century Act* (P.L. 114-182) (together referred herein as MEBA), DOE has been directed to designate a facility or facilities for the long-term management and storage of elemental mercury generated within the United States. DOE issued the *Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (Mercury Storage EIS) (DOE/EIS-0423) in January 2011 and the *Final Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement* (Mercury Storage SEIS) (DOE/EIS-0423-S1) in September 2013. DOE is analyzing the storage of up to 7,000 metric tons (7,700 tons) of elemental mercury in an existing facility or facilities operated in accordance with the *Solid Waste Disposal Act*, as amended by the *Resource Conservation and Recovery Act*. DOE has prepared this Mercury Storage SEIS-II in accordance with the *National Environmental Policy Act of 1969*, as amended (NEPA; Title 42 of the *United States Code* [U.S.C.] § 4321 et seq.), the Council on Environmental Quality (CEQ) implementing regulations (Title 40 of the *Code of Federal Regulations* [CFR] Parts 1500–1508), and DOE’s NEPA implementing procedures (10 CFR Part 1021) to evaluate the reasonable alternatives for a facility or facilities for the long-term management and storage of elemental mercury. This Mercury Storage SEIS-II analyzes the potential environmental, human health, and socioeconomic impacts of elemental mercury storage at existing facilities in eight candidate locations: Hawthorne Army Depot near Hawthorne, Nevada; Waste Control Specialists LLC, near Andrews, Texas; Bethlehem Apparatus in Bethlehem, Pennsylvania; Perma-Fix Environmental Services in

Kingston, Tennessee; Veolia Environmental Services in Gum Springs, Arkansas; and Clean Harbors Environmental Services, with three potential locations in Tooele, Utah; Greenbrier, Tennessee; and Pecatonica, Illinois. As required by CEQ NEPA regulations, the No-Action Alternative is also analyzed. DOE's Preferred Alternative is to designate one or more of the existing commercial facilities evaluated in this Draft SEIS-II.

**Public Comments:** On May 24, 2021, DOE issued a Notice of Intent in the *Federal Register* (86 FR 27838) notifying the public of DOE's intent to prepare this Draft SEIS-II. (In accordance with 10 CFR § 1021.311(f), a public scoping process is not required for a DOE-issued SEIS.) Comments on this Draft SEIS-II may be submitted during the 45-day comment period, which will begin upon publication of the U.S. Environmental Protection Agency's Notice of Availability in the *Federal Register*. A virtual, online public hearing on this Draft SEIS-II will be held during this 45-day comment period. The dates, times, and locations of the public hearing will be published in a DOE *Federal Register* notice, posted online at [www.energy.gov/nepa](http://www.energy.gov/nepa), and announced through other media. DOE will consider any comments received after the comment period ends to the extent practicable.

**APPENDIX A**  
**Pertinent Legislation and Notices**

## **CONTENTS**

### **APPENDIX A – PERTINENT LEGISLATION AND NOTICES**

Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Long-Term Management and Storage of Elemental Mercury (86 FR 27838)  
Letter from Acting Assistant Secretary for Environmental Management RE: Identification of Potential Long-Term Storage Facilities for Elemental Mercury  
Mercury Export Ban Act of 2008  
Frank R. Lautenberg Chemical Safety for the 21st Century Act

This information collection request contains: (1) *OMB No.*: 1910–5166; (2) *Information Collection Request Title*: Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Commercialization Survey; (3) *Type of Request*: Three-year extension; (4) *Purpose*: The DOE needs this information to satisfy the program requirements of the Small Business Act, including requirements established in the SBIR program reauthorization legislation, Public Law 106–554 and Public Law 107–50. This data will be collected by the DOE and provided to the Small Business Administration (SBA) to maintain information about SBIR/STTR awards issued through the two programs. This data will be provided by DOE based on information collected from SBIR/STTR awardees. This data will be used by DOE, SBA, and Congress to assess the commercial impact of these two programs; (5) *Annual Estimated Number of Respondents*: 1,200; (6) *Annual Estimated Number of Total Responses*: 800; (7) *Annual Estimated Number of Burden Hours*: 1,200; (8) *Annual Estimated Reporting and Recordkeeping Cost Burden*: \$60,000.

*Statutory Authority*: Section 9 of the Small Business Act, as amended, codified at 15 U.S.C. 638(g).

**Signing Authority**

This document of the Department of Energy was signed on May 18, 2021, by Manny Oliver, Director, Office of Small Business Innovation Research and Small Business Technology Transfer, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on May 18, 2021.

**Treena V. Garrett,**

*Federal Register Liaison Officer, U.S. Department of Energy.*

[FR Doc. 2021–10854 Filed 5–21–21; 8:45 am]

**BILLING CODE 6450–01–P**

**DEPARTMENT OF ENERGY**

**Agency Information Collection Extension; Revision to Currently Approved Collection**

**AGENCY**: U.S. Department of Energy.

**ACTION**: Notice of request for comments.

**SUMMARY**: The Department of Energy (DOE), pursuant to the Paperwork Reduction Act of 1995, intends to extend for three years, an information collection request with the Office of Management and Budget (OMB).

**DATES**: Comments regarding this proposed information collection must be received on or before July 23, 2021. If you anticipate difficulty in submitting comments within that period, contact the person listed below as soon as possible.

**ADDRESSES**: Written comments may be sent to Jonathan Parthum, GC–62, U.S. Department of Energy, 1000 Independence Ave. SW, Washington, DC 20585, by fax at (202) 586–2805, or by email at [jonathan.parthum@hq.doe.gov](mailto:jonathan.parthum@hq.doe.gov).

**FOR FURTHER INFORMATION CONTACT**:

Requests for additional information or copies of the information collection instrument and instructions should be directed by phone to Jonathan Parthum at (202) 586–5120 or by email at [jonathan.parthum@hq.doe.gov](mailto:jonathan.parthum@hq.doe.gov).

**SUPPLEMENTARY INFORMATION**: Comments are invited on: (a) Whether the extended collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden on respondents, including through the use of automated collection techniques or other forms of information technology.

This information collection request contains: (1) *OMB No.*: 1910–0800; (2) *Information Collection Request Title*: Legal Collections; (3) *Type of Review*: Renewal and Revision; (4) *Purpose*: To continue to maintain DOE oversight of responsibilities relating to DOE and Contractor invention reporting and related matters; (5) *Annual Estimated Number of Respondents*: 1525; (6) *Annual Estimated Number of Total Responses*: 1830; (7) *Annual Estimated Number of Burden Hours*: 4412.4; (8) *Annual Estimated Reporting and*

*Recordkeeping Cost Burden*:

\$337,239.73.00.

The revision consists of updates to two documents: DOE F 482.2 and DOE F 2050.11. For DOE F 482.2, the form is modified to add a Patents Rights-Waiver Clause Including U.S. Competitiveness terms and conditions acceptance to the beginning of the document. As for DOE F 2050.11, this form is modified to add the appropriate Paperwork Reduction Act statement that is currently included in each of the other documents within the collection.

*Statutory Authority*: 42 U.S.C. 5908(a) (b) and (c); 37 CFR part 404; 10 CFR part 784.

*Signing Authority*: This document of the Department of Energy was signed on May 18, 2021, by Brian Lally, Assistant General Counsel for Technology Transfer and Intellectual Property, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect on this document upon publication in the **Federal Register**.

Signed in Washington, DC, on May 18, 2021.

**Treena V. Garrett,**

*Federal Register Liaison Officer, U.S. Department of Energy.*

[FR Doc. 2021–10823 Filed 5–21–21; 8:45 am]

**BILLING CODE 6450–01–P**

**DEPARTMENT OF ENERGY**

**Notice of Intent To Prepare a Supplemental Environmental Impact Statement for the Long-Term Management and Storage of Elemental Mercury**

**AGENCY**: Office of Environmental Management, Department of Energy.

**ACTION**: Notice of intent.

**SUMMARY**: As required by the *Mercury Export Ban Act of 2008*, as amended (MEBA), the U.S. Department of Energy (DOE) must identify a facility or facilities for the long-term management and storage of elemental mercury generated within the United States. To this end, DOE intends to prepare a supplemental environmental impact statement (DOE/EIS–0423–S2; SEIS–II) to supplement both the January 2011

*Environmental Impact Statement for the Long-Term Management and Storage of Elemental Mercury* (DOE/EIS-0423; 2011 Mercury Storage EIS) and the September 2013 *Supplemental Environmental Impact Statement for the Long-Term Management and Storage of Elemental Mercury* (DOE/EIS-0423-S1; 2013 Mercury Storage SEIS) by updating these previous analyses of potential environmental impacts and analyzing additional alternatives, in accordance with the *National Environmental Policy Act* (NEPA).

**ADDRESSES:** Questions concerning the SEIS-II development or requests to be placed on the SEIS-II distribution list can be sent to: Mrs. Julia Donkin, NEPA Document Manager, Office of Environmental Management, U.S. Department of Energy, EM-4.22, 1000 Independence Avenue SW, Washington, DC 20585, [elementalmercury\\_nepa@em.doe.gov](mailto:elementalmercury_nepa@em.doe.gov) or (202) 586-5000.

Questions related to DOE's elemental mercury program should be directed to Mr. David Haught, Mercury Program Manager, Office of Environmental Management, U.S. Department of Energy, EM-4.22, 1000 Independence Avenue SW, Washington, DC 20585, [David.Haught@hq.doe.gov](mailto:David.Haught@hq.doe.gov) or (202) 586-5000.

**FOR FURTHER INFORMATION CONTACT:** Additional information regarding the SEIS-II, the 2011 Mercury Storage EIS, 2013 Mercury Storage SEIS, other related documents, and the scope of DOE's elemental mercury program is available online at <https://www.energy.gov/nepa/doeeis-0423-long-term-management-and-storage-elemental-mercury>. For general information concerning DOE's Office of Environmental Management NEPA process, please contact Mr. William Ostrum, Office of Environmental Management NEPA Compliance Officer, U.S. Department of Energy, EM-4.31, 1000 Independence Avenue SW, Washington, DC 20585, [William.Ostrum@hq.doe.gov](mailto:William.Ostrum@hq.doe.gov) or (202) 586-2513.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

The *Mercury Export Ban Act of 2008* (Pub. L. 110-414), as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act* (Pub. L. 114-182) (MEBA), amends the *Toxic Substances Control Act* (TSCA; 15 U.S.C. 2601-2629) to prohibit the sale, distribution, or transfer by Federal agencies to any other Federal agency, any state or local government agency, or any private individual or entity, of any elemental mercury under the control or

jurisdiction of a Federal agency (with certain limited exceptions). MEBA also amends TSCA to prohibit the export of elemental mercury from the United States (with certain limited exceptions). Section 5 of MEBA, "Long-Term Storage" (42 U.S.C. 6939f), is codified with the *Resource Conservation and Recovery Act* (RCRA; 42 U.S.C. 6901 *et seq.*) and directs DOE to designate a facility or facilities for the long-term management and storage of elemental mercury generated within the United States. MEBA also requires DOE to assess a fee based upon the pro rata costs of long-term management and storage of elemental mercury delivered to the facility or facilities.

The primary sources of elemental mercury in the United States include elemental mercury generated as a byproduct of the gold mining process and mercury reclaimed from recycling and waste recovery activities. In addition, DOE's National Nuclear Security Administration (NNSA) stores approximately 1,200 metric tons of elemental mercury at the Oak Ridge Reservation in Tennessee, which was generated in support of NNSA's mission.

The 2011 Mercury Storage EIS evaluated seven candidate locations for the elemental mercury storage facility, as well as a No Action Alternative. The locations included new facility construction, use of existing facilities, or both. The candidate locations were: DOE Grand Junction Disposal site near Grand Junction, Colorado (new construction); DOE Hanford Site near Richland, Washington (new construction); Hawthorne Army Depot near Hawthorne, Nevada (existing facility); DOE Idaho National Laboratory near Idaho Falls, Idaho (new construction and existing facility); Bannister Federal Complex in Kansas City, Missouri (existing facility); DOE Savannah River Site near Aiken, South Carolina (new construction); and the Waste Control Specialists LLC (WCS) site near Andrews, Texas (new construction and existing facility).

The 2013 Mercury Storage SEIS evaluated three additional alternative locations, at and in the vicinity of the Waste Isolation Pilot Plant near Carlsbad, New Mexico (all new construction). The 2013 Mercury Storage SEIS also updated the analysis of the alternatives presented in the 2011 Mercury Storage EIS.

For the 2011 Mercury Storage EIS and the 2013 Mercury Storage SEIS, DOE estimated that up to approximately 10,000 metric tons of elemental mercury would need to be managed and stored

at the DOE facility during the 40-year period of analysis.

On December 6, 2019, DOE issued a Record of Decision (ROD) to document its designation of the WCS site near Andrews, Texas, for the management and storage of up to 6,800 metric tons of elemental mercury in leased portions of existing buildings, the Container Storage Building and Bin Storage Unit 1, at the WCS site (84 FR 66890). The ROD was supported by DOE's *Supplemental Analysis of the Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (DOE/EIS-0423-SA-1), which determined that the long-term management and storage of up to 6,800 metric tons of elemental mercury in existing buildings at the WCS facility would not constitute a substantial change from the proposal evaluated in the 2011 Mercury Storage EIS and updated in the 2013 Mercury Storage SEIS. On December 23, 2019, DOE published a final rule to establish the fee for long-term management and storage of elemental mercury (84 FR 70402; Fee Rule).

Two domestic generators of elemental mercury subsequently filed complaints in United States District Court challenging, among other things, the validity of the Fee Rule and the ROD (*Coeur Rochester, Inc. v. Brouillette et al.*, Case No. 1:19-cv-03860-RJL (D.D.C. filed December 31, 2019); *Nevada Gold Mines LLC v. Brouillette et al.*, Case No. 1:20-cv-00141-RJL (D.D.C. filed January 17, 2020)). On August 21, 2020, DOE and Nevada Gold Mines, LLC (NGM) executed a settlement agreement intended to resolve NGM's complaint in its entirety. Consistent with that agreement, on September 3, 2020, DOE filed a motion in the District Court asking the Court to vacate and remand the Fee Rule. The District Court granted the motion to vacate and remand the Fee Rule on September 5, 2020. Given the rulemaking process required to establish a fee for the long-term management and storage of elemental mercury, and the expiration of DOE's current lease with WCS in June 2021, DOE also agreed in the settlement with NGM to withdraw the designation of WCS pursuant to MEBA Section 5(a)(1) as a facility of DOE for the purpose of long-term management and storage of elemental mercury. DOE subsequently withdrew the designation of WCS under MEBA in an amended ROD on October 6, 2020 (85 FR 63105). The District Court granted a joint stipulation to dismiss the litigation from Coeur Rochester, Inc. on April 23, 2021.



### Purpose and Need for Action

DOE must designate a facility for the long-term management and storage of elemental mercury generated within the United States, as required by MEBA. MEBA also requires DOE to assess and collect a fee to cover certain costs of long-term management and storage of elemental mercury.

MEBA establishes that by January 1, 2019, a DOE-designated facility shall be operational and accept custody, for the purpose of long-term management and storage, of elemental mercury generated within the United States. Fiscal Year 2021 Appropriations Act Explanatory Statements for Division D, Energy and Water Development and Related Agencies, includes the following statement, “The Department [DOE] is directed to finalize the Fee Rule for mercury storage as expeditiously as possible.”

### Proposed Action

DOE proposes to designate one or more facilities for the long-term management and storage of elemental mercury in accordance with MEBA. Facilities must comply with applicable requirements of Section 5(d) of MEBA, “Management Standards for a Facility,” including the requirements of the *Solid Waste Disposal Act* as amended by RCRA, and other state-specific permitting requirements. Consistent with the Supplement Analysis prepared in 2019 but updated to account for accumulation of elemental mercury since then, the SEIS–II will evaluate the potential environmental impacts of an estimated inventory of up to 7,000 metric tons of elemental mercury that could require management and storage during the 40-year period of analysis.

After completion of DOE’s Proposed Action, DOE would establish the fee for long-term management and storage of elemental mercury through rulemaking conducted pursuant to the Administrative Procedure Act (5 U.S.C. 551 *et seq.*). DOE would evaluate the potential environmental impacts of the rulemaking in accordance with NEPA implementing procedures at 10 CFR 1021.213.

### Proposed Alternatives

The 2011 Mercury Storage EIS and the 2013 Mercury Storage SEIS evaluated both new construction and the designation of existing facilities for management and storage of elemental mercury. In the SEIS–II, DOE’s range of reasonable alternatives includes existing facilities that could be designated with only minor modifications to meet the permitting requirements for elemental

mercury storage. Construction of new facilities would further negatively impact the schedule for DOE’s receipt of elemental mercury, which was required by MEBA to begin acceptance by January 2019.

Of the four existing facilities evaluated in the 2011 Mercury Storage EIS, two remain as reasonable alternatives. Since 2011, portions of the Bannister Federal Complex in Kansas City have been transferred from DOE to a private entity and rezoned as an urban redevelopment district. Therefore, this facility is no longer considered a reasonable alternative for the storage of elemental mercury. Additionally, the planning basis for the existing facilities at the Idaho National Laboratory Radioactive Waste Management Complex (RWMC) has changed and those facilities are no longer considered a reasonable alternative for storage of elemental mercury. DOE is planning to demolish these facilities and close the RWMC once its current radioactive waste mission is completed. Therefore, the SEIS–II will update the analysis for the Hawthorne Army Depot in Nevada and the WCS site in Texas.

In addition to the two sites identified previously, the SEIS–II will also evaluate other facilities that maintain or would be capable of maintaining a RCRA Part B permit for the long-term management and storage of elemental mercury. DOE used four methods to identify these additional facilities: (1) DOE contacted commercial facilities that had previously certified to DOE that they meet the requirements to accept and store elemental mercury at least until the DOE-designated facility opens (<https://www.energy.gov/em/downloads/permitted-mercury-storage-facility-notifications>); (2) on December 3, 2020, DOE issued basic ordering agreements to companies to conduct nationwide waste management services, including ancillary services such as management and storage of elemental mercury; (3) on October 14, 2020, DOE issued a Sources Sought Synopsis/Request for Information to identify potential offerors to provide leased space and associated services for the management and storage of elemental mercury; and (4) DOE is re-evaluating existing facilities on DOE property that could be repurposed for management and storage of elemental mercury. Past and ongoing procurement actions were used only to assist in the identification of potential reasonable alternatives for consideration in the SEIS. They do not have a bearing on what future procurement actions that DOE would take to contract for services related to

long-term management and storage of elemental mercury.

Through these outreach efforts, DOE has identified the following additional reasonable alternative locations that will be evaluated in the SEIS–II (in addition to those previously evaluated as discussed previously):

- Bethlehem Apparatus in Bethlehem, Pennsylvania;
- Clean Harbors (facilities in Pecatonica, Illinois; Greenbrier, Tennessee; and Tooele, Utah);
- Veolia North America in Gum Springs, Arkansas; and
- Perma-Fix Diversified Scientific Services, Inc., in Kingston, Tennessee.

As part of the SEIS–II, DOE will update the analysis of the No-Action Alternative.

### Potential Areas of Environmental Analysis

DOE has tentatively identified the following resource areas for analysis in the SEIS–II. The following list is not intended to be comprehensive or to pre-determine the potential impacts to be analyzed: Land use and visual resources; geology and soils; water resources; air quality and noise; ecological resources; cultural and paleontological resources; infrastructure; waste management; occupational and public health and safety; socioeconomic; transportation; and environmental justice.

### NEPA Process and Public Participation in the SEIS–II

DOE will prepare the SEIS–II in accordance with the Council on Environmental Quality (CEQ) regulations at 40 CFR parts 1500–1508<sup>1</sup> and DOE NEPA implementing procedures at 10 CFR part 1021. In accordance with 10 CFR 1021.311(f), a public scoping process is not required for a DOE-issued SEIS. DOE will issue a **Federal Register** notice detailing the release of the draft SEIS–II, dates of one or more internet-based public hearings, and directions on submitting public comments. DOE expects to issue the Draft SEIS–II in late 2021.

### Signing Authority

This document of the Department of Energy was signed on May 17, 2021, by Mark Gilbertson, Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs, pursuant

<sup>1</sup> On July 16, 2020, the CEQ issued a final rule to update its regulations for Federal agencies to implement NEPA (85 FR 43304). The effective date for the new regulations is September 14, 2020. Because the SEIS–II was initiated after that effective date, it will be prepared in accordance with the new CEQ regulations.

to delegated authority from the Secretary of the Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with the requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on May 19, 2021.

**Treena V. Garrett,**

*Federal Register Liaison Officer, U.S. Department of Energy.*

[FR Doc. 2021-10905 Filed 5-21-21; 8:45 am]

**BILLING CODE 6450-01-P**

## DEPARTMENT OF ENERGY

### Energy Information Administration

#### Agency Information Collection Extension

**AGENCY:** Energy Information Administration (EIA), Department of Energy (DOE).

**ACTION:** Notice.

**SUMMARY:** EIA submitted an information collection request for extension as required by the Paperwork Reduction Act of 1995. The information collection requests a three-year extension of its Form EIA-111 *Quarterly Electricity Imports and Exports Report*, OMB Control Number 1905-0208. Form EIA-111 collects information on U.S. imports and exports of electricity. Data are used to obtain estimates on the flows of electricity into and out of the United States.

**DATES:** Comments on this information collection must be received no later than June 23, 2021. Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to [www.reginfo.gov/public/do/PRAMain](http://www.reginfo.gov/public/do/PRAMain). Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function.

**FOR FURTHER INFORMATION CONTACT:** If you need additional information, contact Tosha Beckford at (202) 287-6597 or by email at [tosha.beckford@eia.gov](mailto:tosha.beckford@eia.gov). The forms and instructions are available on EIA's website at <http://www.eia.gov/survey/changes/electricity/>.

**SUPPLEMENTARY INFORMATION:** This information collection request contains

(1) *OMB No.:* 1905-0208;

(2) *Information Collection Request Title:* Quarterly Electricity Imports and Exports Report;

(3) *Type of Request:* Three-year extension without change;

(4) *Purpose:* Form EIA-111 collects U.S. electricity import and export data on a quarterly basis. The data are used to measure the flow of electricity into and out of the United States. The import and export data are reported by U.S. purchasers, sellers and transmitters of wholesale electricity, including persons authorized by Order to export electric energy from the United States to foreign countries, persons authorized by Presidential Permit to construct, operate, maintain, or connect electric power transmission lines that cross the U.S. international border, and U.S. Balancing Authorities that are directly interconnected with foreign Balancing Authorities. Such entities report monthly flows of electric energy received or delivered across the border, the cost associated with the transactions, and actual and implemented interchange.

(4a) *Proposed Changes to Information Collection:* No changes;

(5) *Annual Estimated Number of Respondents:* 180;

(6) *Annual Estimated Number of Total Responses:* 720;

(7) *Annual Estimated Number of Burden Hours:* 1,080;

(8) *Annual Estimated Reporting and Recordkeeping Cost Burden:* \$88,182 (1,080 burden hours times \$81.65 per hour). EIA estimates that respondents will have no additional costs associated with the surveys other than the burden hours and the maintenance of the information as part of the normal course of business.

*Comments are invited on whether or not:* (a) The proposed collection of information is necessary for the proper performance of agency functions, including whether the information will have a practical utility; (b) EIA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used, is accurate; (c) EIA can improve the quality, utility, and clarity of the information it will collect; and (d) EIA can minimize the burden of the collection of information on respondents, such as automated collection techniques or other forms of information technology.

**Statutory Authority:** 15 U.S.C. 772(b), 42 U.S.C. 7101 *et seq.*

Signed in Washington, DC, on May 18, 2021.

**Samson A. Adeshiyan,**

*Director, Office of Statistical Methods and Research, U. S. Energy Information Administration.*

[FR Doc. 2021-10884 Filed 5-21-21; 8:45 am]

**BILLING CODE 6450-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. ER21-1916-000]

#### Assembly Solar III, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced Assembly Solar III, LLC's application for market-based rate authority, with an accompanying rate tariff, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability, is June 7, 2021.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at <http://www.ferc.gov>. To facilitate electronic service, persons with internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.


Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

**Department of Energy**

Washington, DC 20585

May 3, 2021

## MEMORANDUM FOR DISTRIBUTION

FROM: WILLIAM I. WHITE  
ACTING ASSISTANT SECRETARY  
FOR ENVIRONMENTAL MANAGEMENT 

SUBJECT: Identification of Potential Long-Term Storage Facilities for  
Elemental Mercury

This memorandum requests your assistance in the identification of existing Department of Energy (DOE) facilities that are potentially available for the long-term storage of elemental (non-radioactive) mercury. Section 5(a)(1) of the Mercury Export Ban Act (MEBA), 42 U.S.C. §6939f(a)(1), as amended, directed DOE to provide a facility or facilities for the storage of elemental mercury generated in the U.S., but specifically prohibits the facility from being sited on the Oak Ridge Reservation.

On March 30, 2009, the Assistant Secretary for Environmental Management (EM), requested a list of viable candidate facilities and areas for consideration from DOE field element managers and sought interest from parties outside of DOE. EM evaluated multiple reasonable alternatives in accordance with the National Environmental Policy Act in 2011, 2013, and 2019. In December 2019 a leased portion of an existing facility on the Waste Control Specialists, LLC (WCS) site in Andrews County, Texas, was designated as the elemental mercury storage facility of DOE under MEBA. The designation was challenged in complaints filed by two domestic generators of elemental mercury in U.S. District Court, and DOE subsequently withdrew the designation of WCS. Consequently, EM has initiated a second Supplemental Environmental Impact Statement (SEIS-II) and is in the process of identifying viable existing facilities at Federal and commercial sites as reasonable alternatives to support designation of a long-term storage facility under MEBA. The SEIS-II will evaluate only existing facilities as reasonable alternatives (no new construction) due to the need to begin accepting elemental mercury as soon as possible.

The minimum requirements, fully or with minor modifications, for potential elemental mercury storage facilities are as follows:

- 1) capability to be permitted within a year of the designation, for the storage of elemental mercury in accordance with the Resource Conservation and Recovery Act;
- 2) availability for a period of up to 40 years;
- 3) minimum of 1,200 metric ton (MT) dedicated storage capacity;
- 4) security and access control and fire suppression systems;
- 5) ventilated storage and handling areas;
- 6) enclosed weather-protected buildings; and

- 7) reinforced concrete floors able to withstand structural loads of mercury storage (minimum of 500 pounds per square foot based on single stacked, 1 MT ton containers).

Please respond to the EM Office of Waste Disposal, EM-4.22, by May 22, 2021, with a listing of any existing facilities within your existing program mission constraints that meet these requirements. Negative responses are also requested. Your response or questions should be directed to Mr. David Haught, the DOE elemental mercury program lead, at (301) 903-1765 or [David.haught@hq.doe.gov](mailto:David.haught@hq.doe.gov).

Distribution

Charles P. Verdon, Acting Under Secretary for Nuclear Security and Administrator, NNSA  
Carmelo Melendez, Director, Office of Legacy Management  
Dennis Miotla, Acting Assistant Secretary for Nuclear Energy  
J. Stephen Binkley, Acting Director, Office of Science  
Reinhard Knerr, Manager, Carlsbad Field Office  
Jack Zimmerman, Director, Environmental Management Consolidated Business Center  
Connie M. Flohr, Manager, Idaho Cleanup Project  
Kirk Lachman, Manager for Environmental Management, Los Alamos Field Office  
Brian T. Vance, Manager, Office of River Protection  
Robert E. Edwards III, Manager, Portsmouth/Paducah Project Office  
Brian T. Vance, Manager, Richland Operations Office  
Michael D. Budney, Manager, Savannah River Operations Office

cc: John Mullis, OR  
Todd Shrader, EM-2  
Erik Olds, EM-2.1 COS (Acting)  
Nicole Nelson-Jean, EM-3  
Mark Gilbertson, EM-4  
Dae Chung, EM-5  
R. M. Hendrickson, EM-5  
Gregory Sosson, EM-3.1  
Catherine Hampton, EM-5.3 (Acting)



Public Law 110-414  
110th Congress

An Act

To prohibit the sale, distribution, transfer, and export of elemental mercury, and for other purposes.

Oct. 14, 2008  
[S. 906]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

Mercury Export  
Ban Act of 2008.  
15 USC 2601  
note.

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Mercury Export Ban Act of 2008”.

**SEC. 2. FINDINGS.**

15 USC 2611  
note.

Congress finds that—

(1) mercury is highly toxic to humans, ecosystems, and wildlife;

(2) as many as 10 percent of women in the United States of childbearing age have mercury in the blood at a level that could put a baby at risk;

(3) as many as 630,000 children born annually in the United States are at risk of neurological problems related to mercury;

(4) the most significant source of mercury exposure to people in the United States is ingestion of mercury-contaminated fish;

(5) the Environmental Protection Agency reports that, as of 2004—

(A) 44 States have fish advisories covering over 13,000,000 lake acres and over 750,000 river miles;

(B) in 21 States the freshwater advisories are statewide; and

(C) in 12 States the coastal advisories are statewide;

(6) the long-term solution to mercury pollution is to minimize global mercury use and releases to eventually achieve reduced contamination levels in the environment, rather than reducing fish consumption since uncontaminated fish represents a critical and healthy source of nutrition worldwide;

(7) mercury pollution is a transboundary pollutant, depositing locally, regionally, and globally, and affecting water bodies near industrial sources (including the Great Lakes) and remote areas (including the Arctic Circle);

(8) the free trade of elemental mercury on the world market, at relatively low prices and in ready supply, encourages the continued use of elemental mercury outside of the United States, often involving highly dispersive activities such as artisanal gold mining;

(9) the intentional use of mercury is declining in the United States as a consequence of process changes to manufactured products (including batteries, paints, switches, and measuring devices), but those uses remain substantial in the developing world where releases from the products are extremely likely due to the limited pollution control and waste management infrastructures in those countries;

(10) the member countries of the European Union collectively are the largest source of elemental mercury exports globally;

(11) the European Commission has proposed to the European Parliament and to the Council of the European Union a regulation to ban exports of elemental mercury from the European Union by 2011;

(12) the United States is a net exporter of elemental mercury and, according to the United States Geological Survey, exported 506 metric tons of elemental mercury more than the United States imported during the period of 2000 through 2004; and

(13) banning exports of elemental mercury from the United States will have a notable effect on the market availability of elemental mercury and switching to affordable mercury alternatives in the developing world.

**SEC. 3. PROHIBITION ON SALE, DISTRIBUTION, OR TRANSFER OF ELEMENTAL MERCURY.**

Section 6 of the Toxic Substances Control Act (15 U.S.C. 2605) is amended by adding at the end the following:

“(f) MERCURY.—

Effective date.

“(1) PROHIBITION ON SALE, DISTRIBUTION, OR TRANSFER OF ELEMENTAL MERCURY BY FEDERAL AGENCIES.—Except as provided in paragraph (2), effective beginning on the date of enactment of this subsection, no Federal agency shall convey, sell, or distribute to any other Federal agency, any State or local government agency, or any private individual or entity any elemental mercury under the control or jurisdiction of the Federal agency.

“(2) EXCEPTIONS.—Paragraph (1) shall not apply to—

“(A) a transfer between Federal agencies of elemental mercury for the sole purpose of facilitating storage of mercury to carry out this Act; or

“(B) a conveyance, sale, distribution, or transfer of coal.

“(3) LEASES OF FEDERAL COAL.—Nothing in this subsection prohibits the leasing of coal.”.

**SEC. 4. PROHIBITION ON EXPORT OF ELEMENTAL MERCURY.**

Section 12 of the Toxic Substances Control Act (15 U.S.C. 2611) is amended—

(1) in subsection (a) by striking “subsection (b)” and inserting “subsections (b) and (c)”; and

(2) by adding at the end the following:

“(c) PROHIBITION ON EXPORT OF ELEMENTAL MERCURY.—

Effective date.

“(1) PROHIBITION.—Effective January 1, 2013, the export of elemental mercury from the United States is prohibited.

“(2) INAPPLICABILITY OF SUBSECTION (a).—Subsection (a) shall not apply to this subsection.

“(3) REPORT TO CONGRESS ON MERCURY COMPOUNDS.—



“(A) REPORT.—Not later than one year after the date of enactment of the Mercury Export Ban Act of 2008, the Administrator shall publish and submit to Congress a report on mercuric chloride, mercurous chloride or calomel, mercuric oxide, and other mercury compounds, if any, that may currently be used in significant quantities in products or processes. Such report shall include an analysis of—

Publication.

“(i) the sources and amounts of each of the mercury compounds imported into the United States or manufactured in the United States annually;

“(ii) the purposes for which each of these compounds are used domestically, the amount of these compounds currently consumed annually for each purpose, and the estimated amounts to be consumed for each purpose in 2010 and beyond;

“(iii) the sources and amounts of each mercury compound exported from the United States annually in each of the last three years;

“(iv) the potential for these compounds to be processed into elemental mercury after export from the United States; and

“(v) other relevant information that Congress should consider in determining whether to extend the export prohibition to include one or more of these mercury compounds.

“(B) PROCEDURE.—For the purpose of preparing the report under this paragraph, the Administrator may utilize the information gathering authorities of this title, including sections 10 and 11.

“(4) ESSENTIAL USE EXEMPTION.—(A) Any person residing in the United States may petition the Administrator for an exemption from the prohibition in paragraph (1), and the Administrator may grant by rule, after notice and opportunity for comment, an exemption for a specified use at an identified foreign facility if the Administrator finds that—

“(i) nonmercury alternatives for the specified use are not available in the country where the facility is located;

“(ii) there is no other source of elemental mercury available from domestic supplies (not including new mercury mines) in the country where the elemental mercury will be used;

“(iii) the country where the elemental mercury will be used certifies its support for the exemption;

“(iv) the export will be conducted in such a manner as to ensure the elemental mercury will be used at the identified facility as described in the petition, and not otherwise diverted for other uses for any reason;

“(v) the elemental mercury will be used in a manner that will protect human health and the environment, taking into account local, regional, and global human health and environmental impacts;

“(vi) the elemental mercury will be handled and managed in a manner that will protect human health and the environment, taking into account local, regional, and global human health and environmental impacts; and

“(vii) the export of elemental mercury for the specified use is consistent with international obligations of the United States intended to reduce global mercury supply, use, and pollution.

“(B) Each exemption issued by the Administrator pursuant to this paragraph shall contain such terms and conditions as are necessary to minimize the export of elemental mercury and ensure that the conditions for granting the exemption will be fully met, and shall contain such other terms and conditions as the Administrator may prescribe. No exemption granted pursuant to this paragraph shall exceed three years in duration and no such exemption shall exceed 10 metric tons of elemental mercury.

“(C) The Administrator may by order suspend or cancel an exemption under this paragraph in the case of a violation described in subparagraph (D).

“(D) A violation of this subsection or the terms and conditions of an exemption, or the submission of false information in connection therewith, shall be considered a prohibited act under section 15, and shall be subject to penalties under section 16, injunctive relief under section 17, and citizen suits under section 20.

“(5) CONSISTENCY WITH TRADE OBLIGATIONS.—Nothing in this subsection affects, replaces, or amends prior law relating to the need for consistency with international trade obligations.

“(6) EXPORT OF COAL.—Nothing in this subsection shall be construed to prohibit the export of coal.”.

Deadline.  
42 USC 6939f.

**SEC. 5. LONG-TERM STORAGE.**

(a) DESIGNATION OF FACILITY.—

(1) IN GENERAL.—Not later than January 1, 2010, the Secretary of Energy (referred to in this section as the “Secretary”) shall designate a facility or facilities of the Department of Energy, which shall not include the Y-12 National Security Complex or any other portion or facility of the Oak Ridge Reservation of the Department of Energy, for the purpose of long-term management and storage of elemental mercury generated within the United States.

(2) OPERATION OF FACILITY.—Not later than January 1, 2013, the facility designated in paragraph (1) shall be operational and shall accept custody, for the purpose of long-term management and storage, of elemental mercury generated within the United States and delivered to such facility.

(b) FEES.—

(1) IN GENERAL.—After consultation with persons who are likely to deliver elemental mercury to a designated facility for long-term management and storage under the program prescribed in subsection (a), and with other interested persons, the Secretary shall assess and collect a fee at the time of delivery for providing such management and storage, based on the pro rata cost of long-term management and storage of elemental mercury delivered to the facility. The amount of such fees—

(A) shall be made publically available not later than October 1, 2012;

(B) may be adjusted annually; and

Public  
information.

(C) shall be set in an amount sufficient to cover the costs described in paragraph (2).

(2) COSTS.—The costs referred to in paragraph (1)(C) are the costs to the Department of Energy of providing such management and storage, including facility operation and maintenance, security, monitoring, reporting, personnel, administration, inspections, training, fire suppression, closure, and other costs required for compliance with applicable law. Such costs shall not include costs associated with land acquisition or permitting of a designated facility under the Solid Waste Disposal Act or other applicable law. Building design and building construction costs shall only be included to the extent that the Secretary finds that the management and storage of elemental mercury accepted under the program under this section cannot be accomplished without construction of a new building or buildings.

(c) REPORT.—Not later than 60 days after the end of each Federal fiscal year, the Secretary shall transmit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on all of the costs incurred in the previous fiscal year associated with the long-term management and storage of elemental mercury. Such report shall set forth separately the costs associated with activities taken under this section.

(d) MANAGEMENT STANDARDS FOR A FACILITY.—

(1) GUIDANCE.—Not later than October 1, 2009, the Secretary, after consultation with the Administrator of the Environmental Protection Agency and all appropriate State agencies in affected States, shall make available, including to potential users of the long-term management and storage program established under subsection (a), guidance that establishes procedures and standards for the receipt, management, and long-term storage of elemental mercury at a designated facility or facilities, including requirements to ensure appropriate use of flasks or other suitable shipping containers. Such procedures and standards shall be protective of human health and the environment and shall ensure that the elemental mercury is stored in a safe, secure, and effective manner. In addition to such procedures and standards, elemental mercury managed and stored under this section at a designated facility shall be subject to the requirements of the Solid Waste Disposal Act, including the requirements of subtitle C of that Act, except as provided in subsection (g)(2) of this section. A designated facility in existence on or before January 1, 2013, is authorized to operate under interim status pursuant to section 3005(e) of the Solid Waste Disposal Act until a final decision on a permit application is made pursuant to section 3005(c) of the Solid Waste Disposal Act. Not later than January 1, 2015, the Administrator of the Environmental Protection Agency (or an authorized State) shall issue a final decision on the permit application.

Procedures.  
Standards.

Deadline.

(2) TRAINING.—The Secretary shall conduct operational training and emergency training for all staff that have responsibilities related to elemental mercury management, transfer, storage, monitoring, or response.

(3) EQUIPMENT.—The Secretary shall ensure that each designated facility has all equipment necessary for routine operations, emergencies, monitoring, checking inventory, loading, and storing elemental mercury at the facility.

(4) FIRE DETECTION AND SUPPRESSION SYSTEMS.—The Secretary shall—

(A) ensure the installation of fire detection systems at each designated facility, including smoke detectors and heat detectors; and

(B) ensure the installation of a permanent fire suppression system, unless the Secretary determines that a permanent fire suppression system is not necessary to protect human health and the environment.

(e) INDEMNIFICATION OF PERSONS DELIVERING ELEMENTAL MERCURY.—

(1) IN GENERAL.—(A) Except as provided in subparagraph (B) and subject to paragraph (2), the Secretary shall hold harmless, defend, and indemnify in full any person who delivers elemental mercury to a designated facility under the program established under subsection (a) from and against any suit, claim, demand or action, liability, judgment, cost, or other fee arising out of any claim for personal injury or property damage (including death, illness, or loss of or damage to property or economic loss) that results from, or is in any manner predicated upon, the release or threatened release of elemental mercury as a result of acts or omissions occurring after such mercury is delivered to a designated facility described in subsection (a).

(B) To the extent that a person described in subparagraph (A) contributed to any such release or threatened release, subparagraph (A) shall not apply.

(2) CONDITIONS.—No indemnification may be afforded under this subsection unless the person seeking indemnification—

(A) notifies the Secretary in writing within 30 days after receiving written notice of the claim for which indemnification is sought;

(B) furnishes to the Secretary copies of pertinent papers the person receives;

(C) furnishes evidence or proof of any claim, loss, or damage covered by this subsection; and

(D) provides, upon request by the Secretary, access to the records and personnel of the person for purposes of defending or settling the claim or action.

(3) AUTHORITY OF SECRETARY.—(A) In any case in which the Secretary determines that the Department of Energy may be required to make indemnification payments to a person under this subsection for any suit, claim, demand or action, liability, judgment, cost, or other fee arising out of any claim for personal injury or property damage referred to in paragraph (1)(A), the Secretary may settle or defend, on behalf of that person, the claim for personal injury or property damage.

(B) In any case described in subparagraph (A), if the person to whom the Department of Energy may be required to make indemnification payments does not allow the Secretary to settle or defend the claim, the person may not be afforded indemnification with respect to that claim under this subsection.

Records.

Notification.  
Deadline.

(f) **TERMS, CONDITIONS, AND PROCEDURES.**—The Secretary is authorized to establish such terms, conditions, and procedures as are necessary to carry out this section.

(g) **EFFECT ON OTHER LAW.**—

(1) **IN GENERAL.**—Except as provided in paragraph (2), nothing in this section changes or affects any Federal, State, or local law or the obligation of any person to comply with such law.

(2) **EXCEPTION.**—(A) Elemental mercury that the Secretary is storing on a long-term basis shall not be subject to the storage prohibition of section 3004(j) of the Solid Waste Disposal Act (42 U.S.C. 6924(j)). For the purposes of section 3004(j) of the Solid Waste Disposal Act, a generator accumulating elemental mercury destined for a facility designated by the Secretary under subsection (a) for 90 days or less shall be deemed to be accumulating the mercury to facilitate proper treatment, recovery, or disposal.

(B) Elemental mercury may be stored at a facility with respect to which any permit has been issued under section 3005(c) of the Solid Waste Disposal Act (42 U.S.C. 6925(c)), and shall not be subject to the storage prohibition of section 3004(j) of the Solid Waste Disposal Act (42 U.S.C. 6924(j)) if—

Certification.

(i) the Secretary is unable to accept the mercury at a facility designated by the Secretary under subsection (a) for reasons beyond the control of the owner or operator of the permitted facility;

(ii) the owner or operator of the permitted facility certifies in writing to the Secretary that it will ship the mercury to the designated facility when the Secretary is able to accept the mercury; and

(iii) the owner or operator of the permitted facility certifies in writing to the Secretary that it will not sell, or otherwise place into commerce, the mercury.

This subparagraph shall not apply to mercury with respect to which the owner or operator of the permitted facility fails to comply with a certification provided under clause (ii) or (iii).

(h) **STUDY.**—Not later than July 1, 2014, the Secretary shall transmit to the Congress the results of a study, conducted in consultation with the Administrator of the Environmental Protection Agency, that—

Deadline.

(1) determines the impact of the long-term storage program under this section on mercury recycling; and

(2) includes proposals, if necessary, to mitigate any negative impact identified under paragraph (1).

#### **SEC. 6. REPORT TO CONGRESS.**

At least 3 years after the effective date of the prohibition on export of elemental mercury under section 12(c) of the Toxic Substances Control Act (15 U.S.C. 2611(c)), as added by section 4 of this Act, but not later than January 1, 2017, the Administrator of the Environmental Protection Agency shall transmit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the global supply and trade of elemental mercury, including but not limited to the amount of elemental mercury

traded globally that originates from primary mining, where such primary mining is conducted, and whether additional primary mining has occurred as a consequence of this Act.

Approved October 14, 2008.

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LEGISLATIVE HISTORY—S. 906:

SENATE REPORTS: No. 110-477 (Comm. on Environment and Public Works).

CONGRESSIONAL RECORD, Vol. 154 (2008):

Sept. 26, considered and passed Senate.

Sept. 27, 29, considered and passed House.



PUBLIC LAW 114–182—JUNE 22, 2016

FRANK R. LAUTENBERG CHEMICAL SAFETY  
FOR THE 21ST CENTURY ACT

Public Law 114–182  
114th Congress

An Act

June 22, 2016  
[H.R. 2576]

Frank R.  
Lautenberg  
Chemical Safety  
for the 21st  
Century Act.  
15 USC 2601  
note.

To modernize the Toxic Substances Control Act, and for other purposes.

*Be it enacted by the Senate and House of Representatives of  
the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

(a) **SHORT TITLE.**—This Act may be cited as the “Frank R. Lautenberg Chemical Safety for the 21st Century Act”.

(b) **TABLE OF CONTENTS.**—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

**TITLE I—CHEMICAL SAFETY**

Sec. 2. Findings, policy, and intent.

Sec. 3. Definitions.

Sec. 4. Testing of chemical substances and mixtures.

Sec. 5. Manufacturing and processing notices.

Sec. 6. Prioritization, risk evaluation, and regulation of chemical substances and mixtures.

Sec. 7. Imminent hazards.

Sec. 8. Reporting and retention of information.

Sec. 9. Relationship to other Federal laws.

Sec. 10. Exports of elemental mercury.

Sec. 11. Confidential information.

Sec. 12. Penalties.

Sec. 13. State-Federal relationship.

Sec. 14. Judicial review.

Sec. 15. Citizens’ civil actions.

Sec. 16. Studies.

Sec. 17. Administration of the Act.

Sec. 18. State programs.

Sec. 19. Conforming amendments.

Sec. 20. No retroactivity.

Sec. 21. Trevor’s Law.

**TITLE II—RURAL HEALTHCARE CONNECTIVITY**

Sec. 201. Short title.

Sec. 202. Telecommunications services for skilled nursing facilities.

**TITLE I—CHEMICAL SAFETY**

**SEC. 2. FINDINGS, POLICY, AND INTENT.**

Section 2(c) of the Toxic Substances Control Act (15 U.S.C. 2601(c)) is amended by striking “proposes to take” and inserting “proposes as provided”.

**SEC. 3. DEFINITIONS.**

Section 3 of the Toxic Substances Control Act (15 U.S.C. 2602) is amended—



(1) by redesignating paragraphs (4) through (14) as paragraphs (5), (6), (8), (9), (10), (11), (13), (14), (15), (16), and (17), respectively;

(2) by inserting after paragraph (3) the following:

“(4) The term ‘conditions of use’ means the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of.”;

(3) by inserting after paragraph (6), as so redesignated, the following:

“(7) The term ‘guidance’ means any significant written guidance of general applicability prepared by the Administrator.”; and

(4) by inserting after paragraph (11), as so redesignated, the following:

“(12) The term ‘potentially exposed or susceptible subpopulation’ means a group of individuals within the general population identified by the Administrator who, due to either greater susceptibility or greater exposure, may be at greater risk than the general population of adverse health effects from exposure to a chemical substance or mixture, such as infants, children, pregnant women, workers, or the elderly.”.

#### SEC. 4. TESTING OF CHEMICAL SUBSTANCES AND MIXTURES.

Section 4 of the Toxic Substances Control Act (15 U.S.C. 2603) is amended—

(1) by striking “standards” each place it appears and inserting “protocols and methodologies”;

(2) in subsection (a)—

(A) by striking “If the Administrator finds” and inserting “(1) If the Administrator finds”;

(B) in paragraph (1), as so designated—

(i) by striking “(1)(A)(i)” and inserting “(A)(i)(I)”;

(ii) by striking “(ii)” each place it appears and inserting “(II)”;

(iii) by striking “are insufficient data” and inserting “is insufficient information” each place it appears;

(iv) by striking “(iii)” each place it appears and inserting “(III)”;

(v) by striking “such data” and inserting “such information” each place it appears;

(vi) by striking “(B)(i)” and inserting “(ii)(I)”;

(vii) by striking “(I)” and inserting “(aa)”;

(viii) by striking “(II)” and inserting “(bb)”;

(ix) by striking “(2)” and inserting “(B)”;

(x) in the matter following subparagraph (B), as so redesignated—

(I) by inserting “, or, in the case of a chemical substance or mixture described in subparagraph (A)(i), by rule, order, or consent agreement,” after “rule”;

(II) by striking “data” each place it appears and inserting “information”; and

(III) by striking “and which are relevant” and inserting “and which is relevant”; and

(C) by adding at the end the following:

- Determination. “(2) ADDITIONAL TESTING AUTHORITY.—In addition to the authority provided under paragraph (1), the Administrator may, by rule, order, or consent agreement—
- “ (A) require the development of new information relating to a chemical substance or mixture if the Administrator determines that the information is necessary—
- Review. “ (i) to review a notice under section 5 or to perform  
Notice. a risk evaluation under section 6(b);  
Evaluation. “ (ii) to implement a requirement imposed in a rule, order, or consent agreement under subsection (e) or (f) of section 5 or in a rule promulgated under section 6(a);
- “ (iii) at the request of a Federal implementing authority under another Federal law, to meet the regulatory testing needs of that authority with regard to toxicity and exposure; or
- “ (iv) pursuant to section 12(a)(2); and
- “ (B) require the development of new information for the purposes of prioritizing a chemical substance under section 6(b) only if the Administrator determines that such information is necessary to establish the priority of the substance, subject to the limitations that—
- Deadline. “ (i) not later than 90 days after the date of receipt of information regarding a chemical substance complying with a rule, order, or consent agreement under this subparagraph, the Administrator shall designate the chemical substance as a high-priority substance or a low-priority substance; and
- “ (ii) information required by the Administrator under this subparagraph shall not be required for the purposes of establishing or implementing a minimum information requirement of broader applicability.
- “ (3) STATEMENT OF NEED.—When requiring the development of new information relating to a chemical substance or mixture under paragraph (2), the Administrator shall identify the need for the new information, describe how information reasonably available to the Administrator was used to inform the decision to require new information, explain the basis for any decision that requires the use of vertebrate animals, and, as applicable, explain why issuance of an order is warranted instead of promulgating a rule or entering into a consent agreement.
- “ (4) TIERED TESTING.—When requiring the development of new information under this subsection, the Administrator shall employ a tiered screening and testing process, under which the results of screening-level tests or assessments of available information inform the decision as to whether 1 or more additional tests are necessary, unless information available to the Administrator justifies more advanced testing of potential health or environmental effects or potential exposure without first conducting screening-level testing.”;
- (3) in subsection (b)—
- (A) in paragraph (1)—
- (i) in subparagraph (B), by striking “test data” and inserting “information”;
- (ii) in subparagraph (C), by striking “data” and inserting “information”; and

- (iii) in the matter following subparagraph (C), by striking “data” and inserting “information”;
  - (B) in paragraph (2)—
    - (i) in subparagraph (A)—
      - (I) by striking “test data” and inserting “information”;
      - (II) by inserting “Protocols and methodologies for the development of information may also be prescribed for the assessment of exposure or exposure potential to humans or the environment.” after the first sentence; and
      - (III) by striking “hierarchical tests” and inserting “tiered testing”; and
    - (ii) in subparagraph (B), by striking “data” and inserting “information”;
  - (C) in paragraph (3)—
    - (i) by striking “data” each place it appears and inserting “information”;
    - (ii) in subparagraph (A), by inserting “or (C), as applicable,” after “subparagraph (B)”;
    - (iii) by striking “(a)(1)(A)(ii) or (a)(1)(B)(ii)” each place it appears in subparagraph (B) and inserting “(a)(1)(A)(i)(II) or (a)(1)(A)(ii)(II)”;
    - (iv) in subparagraph (B), in the matter before clause (i), by striking “subsection (a)” and inserting “subsection (a)(1)”;
    - (v) by adding at the end the following:

“(C) A rule or order under paragraph (1) or (2) of subsection (a) may require the development of information by any person who manufactures or processes, or intends to manufacture or process, a chemical substance or mixture subject to the rule or order.”;
  - (D) in paragraph (4)—
    - (i) by striking “of data” each place it appears and inserting “of information”;
    - (ii) by striking “test data” each place it appears and inserting “information”;
  - (E) by striking paragraph (5);
- (4) in subsection (c)—
- (A) in paragraph (1), by striking “data” and inserting “information”;
  - (B) in paragraph (2), by striking “data” each place it appears and inserting “information”;
  - (C) in paragraph (3)—
    - (i) by striking “test data” each place it appears and inserting “information”;
    - (ii) by striking “such data” each place it appears and inserting “such information”;
  - (D) in paragraph (4) by striking “test data” each place it appears and inserting “information”;
- (5) in subsection (d)—
- (A) by striking “test data” each place it appears and inserting “information”;
  - (B) by striking “such data” each place it appears and inserting “such information”;
  - (C) by striking “for which data have” and inserting “for which information has”;

Federal Register,  
publication.

- (6) in subsection (e)—
- (A) in paragraph (1)—
- (i) in subparagraph (A)—
- (I) by striking “promulgation of a rule” and inserting “development of information”; and
- (II) by striking “data” each place it appears and inserting “information”; and
- (ii) in subparagraph (B), by striking “either initiate a rulemaking proceeding under subsection (a) or if such a proceeding is not initiated within such period, publish in the Federal Register the Administrator’s reason for not initiating such a proceeding” and insert “issue an order, enter into a consent agreement, or initiate a rulemaking proceeding under subsection (a), or, if such an order or consent agreement is not issued or such a proceeding is not initiated within such period, publish in the Federal Register the Administrator’s reason for not issuing such an order, entering into such a consent agreement, or initiating such a proceeding”; and
- (B) in paragraph (2)(A)—
- (i) by striking “eight members” and inserting “ten members”; and
- (ii) by adding at the end the following:
- “(ix) One member appointed by the Chairman of the Consumer Product Safety Commission from Commissioners or employees of the Commission.
- “(x) One member appointed by the Commissioner of Food and Drugs from employees of the Food and Drug Administration.”;
- (7) in subsection (f)—
- (A) in paragraph (1), by striking “test data” and inserting “information”; and
- (B) in the matter following paragraph (2)—
- (i) by striking “or will present”;
- (ii) by striking “from cancer, gene mutations, or birth defects”;
- (iii) by striking “data or”;
- (iv) by striking “appropriate” and inserting “applicable”; and
- (v) by inserting “, made without consideration of costs or other nonrisk factors,” after “publish in the Federal Register a finding”;
- (8) in subsection (g)—
- (A) by amending the subsection heading to read as follows: “PETITION FOR PROTOCOLS AND METHODOLOGIES FOR THE DEVELOPMENT OF INFORMATION”;
- (B) by striking “test data” each place it appears and inserting “information”; and
- (C) by striking “submit data” and inserting “submit information”; and
- (9) by adding at the end the following:
- “(h) REDUCTION OF TESTING ON VERTEBRATES.—
- “(1) IN GENERAL.—The Administrator shall reduce and replace, to the extent practicable, scientifically justified, and consistent with the policies of this title, the use of vertebrate

animals in the testing of chemical substances or mixtures under this title by—

“(A) prior to making a request or adopting a requirement for testing using vertebrate animals, and in accordance with subsection (a)(3), taking into consideration, as appropriate and to the extent practicable and scientifically justified, reasonably available existing information, including—

“(i) toxicity information;

“(ii) computational toxicology and bioinformatics;

and

“(iii) high-throughput screening methods and the prediction models of those methods; and

“(B) encouraging and facilitating—

“(i) the use of scientifically valid test methods and strategies that reduce or replace the use of vertebrate animals while providing information of equivalent or better scientific quality and relevance that will support regulatory decisions under this title;

“(ii) the grouping of 2 or more chemical substances into scientifically appropriate categories in cases in which testing of a chemical substance would provide scientifically valid and useful information on other chemical substances in the category; and

“(iii) the formation of industry consortia to jointly conduct testing to avoid unnecessary duplication of tests, provided that such consortia make all information from such testing available to the Administrator.

“(2) IMPLEMENTATION OF ALTERNATIVE TESTING METHODS.—

To promote the development and timely incorporation of new scientifically valid test methods and strategies that are not based on vertebrate animals, the Administrator shall—

“(A) not later than 2 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, develop a strategic plan to promote the development and implementation of alternative test methods and strategies to reduce, refine, or replace vertebrate animal testing and provide information of equivalent or better scientific quality and relevance for assessing risks of injury to health or the environment of chemical substances or mixtures through, for example—

“(i) computational toxicology and bioinformatics;

“(ii) high-throughput screening methods;

“(iii) testing of categories of chemical substances;

“(iv) tiered testing methods;

“(v) in vitro studies;

“(vi) systems biology;

“(vii) new or revised methods identified by validation bodies such as the Interagency Coordinating Committee on the Validation of Alternative Methods or the Organization for Economic Co-operation and Development; or

“(viii) industry consortia that develop information submitted under this title;

“(B) as practicable, ensure that the strategic plan developed under subparagraph (A) is reflected in the development of requirements for testing under this section;

Deadline.  
Strategic plan.

- List. “(C) include in the strategic plan developed under subparagraph (A) a list, which the Administrator shall update on a regular basis, of particular alternative test methods or strategies the Administrator has identified that do not require new vertebrate animal testing and are scientifically reliable, relevant, and capable of providing information of equivalent or better scientific reliability and quality to that which would be obtained from vertebrate animal testing;
- Public information. “(D) provide an opportunity for public notice and comment on the contents of the plan developed under subparagraph (A), including the criteria for considering scientific reliability and relevance of the test methods and strategies that may be identified pursuant to subparagraph (C);
- Effective date. Deadlines. Reports. “(E) beginning on the date that is 5 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and every 5 years thereafter, submit to Congress a report that describes the progress made in implementing the plan developed under subparagraph (A) and goals for future alternative test methods and strategies implementation; and
- Assessment. “(F) prioritize and, to the extent consistent with available resources and the Administrator’s other responsibilities under this title, carry out performance assessment, validation, and translational studies to accelerate the development of scientifically valid test methods and strategies that reduce, refine, or replace the use of vertebrate animals, including minimizing duplication, in any testing under this title.
- “(3) VOLUNTARY TESTING.—
- “(A) IN GENERAL.—Any person developing information for submission under this title on a voluntary basis and not pursuant to any request or requirement by the Administrator shall first attempt to develop the information by means of an alternative test method or strategy identified by the Administrator pursuant to paragraph (2)(C), if the Administrator has identified such a test method or strategy for the development of such information, before conducting new vertebrate animal testing.
- “(B) EFFECT OF PARAGRAPH.—Nothing in this paragraph shall, under any circumstance, limit or restrict the submission of any existing information to the Administrator.
- “(C) RELATIONSHIP TO OTHER LAW.—A violation of this paragraph shall not be a prohibited act under section 15.
- “(D) REVIEW OF MEANS.—This paragraph authorizes, but does not require, the Administrator to review the means by which a person conducted testing described in subparagraph (A).”.

#### SEC. 5. MANUFACTURING AND PROCESSING NOTICES.

Section 5 of the Toxic Substances Control Act (15 U.S.C. 2604) is amended—

- (1) in subsection (a)—  
 (A) in paragraph (1)—

(i) by striking “Except as provided in” and inserting “(A) Except as provided in subparagraph (B) of this paragraph and”;

(ii) by redesignating subparagraphs (A) and (B) as clauses (i) and (ii), respectively;

(iii) by striking all that follows “significant new use” and inserting a period; and

(iv) by adding at the end the following:

“(B) A person may take the actions described in subparagraph (A) if—

“(i) such person submits to the Administrator, at least 90 days before such manufacture or processing, a notice, in accordance with subsection (d), of such person’s intention to manufacture or process such substance and such person complies with any applicable requirement of, or imposed pursuant to, subsection (b), (e), or (f); and

Deadline.

“(ii) the Administrator—

“(I) conducts a review of the notice; and

Review.

“(II) makes a determination under subparagraph (A), (B), or (C) of paragraph (3) and takes the actions required in association with that determination under such subparagraph within the applicable review period.”; and

Determination.

(B) by adding at the end the following new paragraphs:

“(3) REVIEW AND DETERMINATION.—Within the applicable review period, subject to section 18, the Administrator shall review such notice and determine—

“(A) that the relevant chemical substance or significant new use presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use, in which case the Administrator shall take the actions required under subsection (f);

“(B) that—

“(i) the information available to the Administrator is insufficient to permit a reasoned evaluation of the health and environmental effects of the relevant chemical substance or significant new use; or

“(ii)(I) in the absence of sufficient information to permit the Administrator to make such an evaluation, the manufacture, processing, distribution in commerce, use, or disposal of such substance, or any combination of such activities, may present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator; or

“(II) such substance is or will be produced in substantial quantities, and such substance either enters or may reasonably be anticipated to enter the environment in substantial quantities or there is or may be significant or substantial human exposure to the substance,

in which case the Administrator shall take the actions required under subsection (e); or

“(C) that the relevant chemical substance or significant new use is not likely to present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use, in which case the submitter of the notice may commence manufacture of the chemical substance or manufacture or processing for a significant new use.

“(4) FAILURE TO RENDER DETERMINATION.—

Refund.

“(A) FAILURE TO RENDER DETERMINATION.—If the Administrator fails to make a determination on a notice under paragraph (3) by the end of the applicable review period and the notice has not been withdrawn by the submitter, the Administrator shall refund to the submitter all applicable fees charged to the submitter for review of the notice pursuant to section 26(b), and the Administrator shall not be relieved of any requirement to make such determination.

“(B) LIMITATIONS.—(i) A refund of applicable fees under subparagraph (A) shall not be made if the Administrator certifies that the submitter has not provided information required under subsection (b) or has otherwise unduly delayed the process such that the Administrator is unable to render a determination within the applicable review period.

“(ii) A failure of the Administrator to render a decision shall not be deemed to constitute a withdrawal of the notice.

“(iii) Nothing in this paragraph shall be construed as relieving the Administrator or the submitter of the notice from any requirement of this section.

“(5) ARTICLE CONSIDERATION.—The Administrator may require notification under this section for the import or processing of a chemical substance as part of an article or category of articles under paragraph (1)(A)(ii) if the Administrator makes an affirmative finding in a rule under paragraph (2) that the reasonable potential for exposure to the chemical substance through the article or category of articles subject to the rule justifies notification.”;

(2) in subsection (b)—

(A) in the subsection heading, by striking “TEST DATA” and inserting “INFORMATION”;

(B) in paragraph (1)—

(i) in subparagraph (A)—

(I) by striking “test data” and inserting “information”; and

(II) by striking “such data” and inserting “such information”; and

(ii) in subparagraph (B)—

(I) by striking “test data” and inserting “information”;

(II) by striking “subsection (a)(1)(A)” and inserting “subsection (a)(1)(A)(i)”; and



- (III) by striking “subsection (a)(1)(B)” and inserting “subsection (a)(1)(A)(ii)”;
- (C) in paragraph (2)—
  - (i) in subparagraph (A)—
    - (I) by striking “test data” in clause (ii) and inserting “information”;
    - (II) by striking “shall” and inserting “may”;
    - and
    - (III) by striking “data prescribed” and inserting “information prescribed”; and
  - (ii) in subparagraph (B)—
    - (I) by striking “Data” and inserting “Information”;
    - (II) by striking “data” both places it appears and inserting “information”;
    - (III) by striking “show” and inserting “shows”;
    - (IV) by striking “subsection (a)(1)(A)” in clause (i) and inserting “subsection (a)(1)(A)(i)”; and
    - (V) by striking “subsection (a)(1)(B)” in clause (ii) and inserting “subsection (a)(1)(A)(ii)”;
- (D) in paragraph (3)—
  - (i) by striking “Data” and inserting “Information”;
  - and
  - (ii) by striking “paragraph (1) or (2)” and inserting “paragraph (1) or (2) of this subsection or under subsection (e)”;
- (E) in paragraph (4)—
  - (i) in subparagraph (A)(i), by inserting “, without consideration of costs or other nonrisk factors” after “health or the environment”; and
  - (ii) in subparagraph (C), by striking “, except that” and all that follows through “subparagraph (A)”;
- (3) in subsection (c)—
  - (A) in the subsection heading, by striking “NOTICE” and inserting “REVIEW”; and
  - (B) by striking “before which” and all that follows through “subsection may begin”;
- (4) in subsection (d)—
  - (A) by striking “test data” in paragraph (1)(B) and inserting “information”;
  - (B) by striking “data” each place it appears in paragraph (1)(C) and paragraph (2) and inserting “information”;
  - (C) in paragraph (2)(B), by striking “uses or intended uses of such substance” and inserting “uses of such substance identified in the notice”; and
  - (D) in paragraph (3)—
    - (i) by striking “for which the notification period prescribed by subsection (a), (b), or (c)” and inserting “for which the applicable review period”; and
    - (ii) by striking “such notification period” and inserting “such period”;
- (5) in subsection (e)—
  - (A) in paragraph (1)(A)—
    - (i) in clause (i), by striking “; and” and inserting “; or”;
    - (ii) in clause (ii)(I), by inserting “without consideration of costs or other nonrisk factors, including an

unreasonable risk to a potentially exposed subpopulation identified as relevant by the Administrator under the conditions of use;” after “health or the environment,”; and

(iii) in the matter after clause (ii)(II)—

(I) by striking “may issue a proposed order” and inserting “shall issue an order”;

(II) by striking “notification period applicable to the manufacturing or processing of such substance under subsection (a), (b), (c)” and inserting “applicable review period”; and

(III) by inserting “to the extent necessary to protect against an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use, and the submitter of the notice may commence manufacture of the chemical substance, or manufacture or processing of the chemical substance for a significant new use, including while any required information is being developed, only in compliance with the order” before the period at the end;

(B) in paragraph (1)(B)—

(i) by striking “A proposed order” and inserting “An order”;

(ii) by striking “notification period applicable to the manufacture or processing of such substance under subsection (a), (b), (c)” and inserting “applicable review period”; and

(iii) by striking “of the proposed order” and inserting “of the order”;

(C) by striking paragraph (1)(C); and

(D) by striking paragraph (2);

(6) in subsection (f)—

(A) in paragraph (1)—

(i) by striking “finds that there is a reasonable basis to conclude that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance with” and inserting “determines that a chemical substance or significant new use with”;

(ii) by striking “, or that any combination of such activities,”;

(iii) by striking “or will present”;

(iv) by striking “before a rule promulgated under section 6 can protect against such risk,” and inserting “, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed subpopulation identified as relevant by the Administrator under the conditions of use,”; and

(v) by striking “notification period applicable under subsection (a), (b), or (c) to the manufacturing or processing of such substance” and inserting “applicable review period”;

(B) in paragraph (2), the matter following subparagraph (C), by striking “Section 6(d)(2)(B)” and inserting “Section 6(d)(3)(B)”;

(C) in paragraph (3)—

(i) in subparagraph (A)—

(I) by striking “Administrator may” and all that follows through “issue a proposed order to prohibit the” and inserting “Administrator may issue an order to prohibit or limit the”; and

(II) by striking “under paragraph (1)” and all that follows through “processing of such substance.” and inserting “under paragraph (1). Such order shall take effect on the expiration of the applicable review period.”;

(ii) by striking subparagraph (B) and redesignating subparagraph (C) as subparagraph (B);

(iii) in subparagraph (B), as so redesignated—

(I) by striking “subparagraphs (B) and (C)” and inserting “subparagraph (B)”;

(II) by striking “clause (i) of”; and

(III) by striking “; and the provisions of subparagraph (C) of subsection (e)(2) shall apply with respect to an injunction issued under subparagraph (B)”;

(iv) by striking subparagraph (D); and

(D) by adding at the end the following:

“(4) TREATMENT OF NONCONFORMING USES.—Not later than 90 days after taking an action under paragraph (2) or (3) or issuing an order under subsection (e) relating to a chemical substance with respect to which the Administrator has made a determination under subsection (a)(3)(A) or (B), the Administrator shall consider whether to promulgate a rule pursuant to subsection (a)(2) that identifies as a significant new use any manufacturing, processing, use, distribution in commerce, or disposal of the chemical substance that does not conform to the restrictions imposed by the action or order, and, as applicable, initiate such a rulemaking or publish a statement describing the reasons of the Administrator for not initiating such a rulemaking.

Deadline.  
Regulations.  
Publication.

“(5) WORKPLACE EXPOSURES.—To the extent practicable, the Administrator shall consult with the Assistant Secretary of Labor for Occupational Safety and Health prior to adopting any prohibition or other restriction relating to a chemical substance with respect to which the Administrator has made a determination under subsection (a)(3)(A) or (B) to address workplace exposures.”;

Consultation.

(7) by amending subsection (g) to read as follows:

“(g) STATEMENT ON ADMINISTRATOR FINDING.—If the Administrator finds in accordance with subsection (a)(3)(C) that a chemical substance or significant new use is not likely to present an unreasonable risk of injury to health or the environment, then notwithstanding any remaining portion of the applicable review period, the submitter of the notice may commence manufacture of the chemical substance or manufacture or processing for the significant new use, and the Administrator shall make public a statement of the Administrator’s finding. Such a statement shall be submitted for publication in the Federal Register as soon as

Public  
information.

Federal Register,  
publication.

is practicable before the expiration of such period. Publication of such statement in accordance with the preceding sentence is not a prerequisite to the manufacturing or processing of the substance with respect to which the statement is to be published.”;

(8) in subsection (h)—

(A) in paragraph (1)(A), by inserting “, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified by the Administrator for the specific conditions of use identified in the application” after “health or the environment”;

(B) in paragraph (2), by striking “data” each place it appears and inserting “information”; and

(C) in paragraph (4), by striking “. A rule promulgated” and all that follows through “section 6(c)” and inserting “, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified by the Administrator under the conditions of use”; and

(9) by amending subsection (i) to read as follows:

“(i) DEFINITIONS.—(1) For purposes of this section, the terms ‘manufacture’ and ‘process’ mean manufacturing or processing for commercial purposes.

“(2) For purposes of this Act, the term ‘requirement’ as used in this section shall not displace any statutory or common law.

“(3) For purposes of this section, the term ‘applicable review period’ means the period starting on the date the Administrator receives a notice under subsection (a)(1) and ending 90 days after that date, or on such date as is provided for in subsection (b)(1) or (c).”.

**SEC. 6. PRIORITIZATION, RISK EVALUATION, AND REGULATION OF CHEMICAL SUBSTANCES AND MIXTURES.**

Section 6 of the Toxic Substances Control Act (15 U.S.C. 2605) is amended—

(1) by striking the section heading and inserting “**PRIORITIZATION, RISK EVALUATION, AND REGULATION OF CHEMICAL SUBSTANCES AND MIXTURES**”;

(2) in subsection (a)—

(A) by striking “finds that there is a reasonable basis to conclude” and inserting “determines in accordance with subsection (b)(4)(A)”;

(B) by striking “or will present”;

(C) by inserting “and subject to section 18, and in accordance with subsection (c)(2),” after “shall by rule”;

(D) by striking “to protect adequately against such risk using the least burdensome requirements” and inserting “so that the chemical substance or mixture no longer presents such risk”;

(E) by inserting “or otherwise restricting” after “prohibiting” in paragraphs (1)(A) and (2)(A);

(F) by inserting “minimum” before “warnings” both places it appears in paragraph (3);

(G) by striking “and monitor or conduct tests” and inserting “or monitor or conduct tests” in paragraph (4); and

(H) in paragraph (7)—

(i) by striking “such unreasonable risk of injury” and inserting “such determination”; and

(ii) by striking “such risk of injury” and inserting “such determination”;

(3) by amending subsection (b) to read as follows:

“(b) RISK EVALUATIONS.—

“(1) PRIORITIZATION FOR RISK EVALUATIONS.—

“(A) ESTABLISHMENT OF PROCESS.—Not later than 1 year after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall establish, by rule, a risk-based screening process, including criteria for designating chemical substances as high-priority substances for risk evaluations or low-priority substances for which risk evaluations are not warranted at the time. The process to designate the priority of chemical substances shall include a consideration of the hazard and exposure potential of a chemical substance or a category of chemical substances (including consideration of persistence and bioaccumulation, potentially exposed or susceptible subpopulations and storage near significant sources of drinking water), the conditions of use or significant changes in the conditions of use of the chemical substance, and the volume or significant changes in the volume of the chemical substance manufactured or processed.

Deadline.  
Criteria.

“(B) IDENTIFICATION OF PRIORITIES FOR RISK EVALUATION.—

“(i) HIGH-PRIORITY SUBSTANCES.—The Administrator shall designate as a high-priority substance a chemical substance that the Administrator concludes, without consideration of costs or other nonrisk factors, may present an unreasonable risk of injury to health or the environment because of a potential hazard and a potential route of exposure under the conditions of use, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator.

“(ii) LOW-PRIORITY SUBSTANCES.—The Administrator shall designate a chemical substance as a low-priority substance if the Administrator concludes, based on information sufficient to establish, without consideration of costs or other nonrisk factors, that such substance does not meet the standard identified in clause (i) for designating a chemical substance a high-priority substance.

“(C) INFORMATION REQUEST AND REVIEW AND PROPOSED AND FINAL PRIORITIZATION DESIGNATION.—The rulemaking required in subparagraph (A) shall ensure that the time required to make a priority designation of a chemical substance be no shorter than nine months and no longer than 1 year, and that the process for such designations includes—

Time periods.

“(i) a requirement that the Administrator request interested persons to submit relevant information on a chemical substance that the Administrator has initiated the prioritization process on, before proposing a priority designation for the chemical substance, and provide 90 days for such information to be provided;

Publication.  
Public  
information.

“(ii) a requirement that the Administrator publish each proposed designation of a chemical substance as a high- or low-priority substance, along with an identification of the information, analysis, and basis used to make the proposed designations, and provide 90 days for public comment on each such proposed designation; and

“(iii) a process by which the Administrator may extend the deadline in clause (i) for up to three months in order to receive or evaluate information required to be submitted in accordance with section 4(a)(2)(B), subject to the limitation that if the information available to the Administrator at the end of such an extension remains insufficient to enable the designation of the chemical substance as a low-priority substance, the Administrator shall designate the chemical substance as a high-priority substance.

“(2) INITIAL RISK EVALUATIONS AND SUBSEQUENT DESIGNATIONS OF HIGH- AND LOW-PRIORITY SUBSTANCES.—

Deadline.  
Publication.  
Lists.  
Time period.

“(A) INITIAL RISK EVALUATIONS.—Not later than 180 days after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall ensure that risk evaluations are being conducted on 10 chemical substances drawn from the 2014 update of the TSCA Work Plan for Chemical Assessments and shall publish the list of such chemical substances during the 180 day period.

Deadline.

“(B) ADDITIONAL RISK EVALUATIONS.—Not later than three and one half years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall ensure that risk evaluations are being conducted on at least 20 high-priority substances and that at least 20 chemical substances have been designated as low-priority substances, subject to the limitation that at least 50 percent of all chemical substances on which risk evaluations are being conducted by the Administrator are drawn from the 2014 update of the TSCA Work Plan for Chemical Assessments.

“(C) CONTINUING DESIGNATIONS AND RISK EVALUATIONS.—The Administrator shall continue to designate priority substances and conduct risk evaluations in accordance with this subsection at a pace consistent with the ability of the Administrator to complete risk evaluations in accordance with the deadlines under paragraph (4)(G).

“(D) PREFERENCE.—In designating high-priority substances, the Administrator shall give preference to—

“(i) chemical substances that are listed in the 2014 update of the TSCA Work Plan for Chemical Assessments as having a Persistence and Bioaccumulation Score of 3; and

“(ii) chemical substances that are listed in the 2014 update of the TSCA Work Plan for Chemical Assessments that are known human carcinogens and have high acute and chronic toxicity.

“(E) METALS AND METAL COMPOUNDS.—In identifying priorities for risk evaluation and conducting risk evaluations of metals and metal compounds, the Administrator

shall use the Framework for Metals Risk Assessment of the Office of the Science Advisor, Risk Assessment Forum, and dated March 2007, or a successor document that addresses metals risk assessment and is peer reviewed by the Science Advisory Board.

“(3) INITIATION OF RISK EVALUATIONS; DESIGNATIONS.—

“(A) RISK EVALUATION INITIATION.—Upon designating a chemical substance as a high-priority substance, the Administrator shall initiate a risk evaluation on the substance.

“(B) REVISION.—The Administrator may revise the designation of a low-priority substance based on information made available to the Administrator.

“(C) ONGOING DESIGNATIONS.—The Administrator shall designate at least one high-priority substance upon the completion of each risk evaluation (other than risk evaluations for chemical substances designated under paragraph (4)(C)(ii)).

“(4) RISK EVALUATION PROCESS AND DEADLINES.—

“(A) IN GENERAL.—The Administrator shall conduct risk evaluations pursuant to this paragraph to determine whether a chemical substance presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant to the risk evaluation by the Administrator, under the conditions of use.

Determination.

“(B) ESTABLISHMENT OF PROCESS.—Not later than 1 year after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall establish, by rule, a process to conduct risk evaluations in accordance with subparagraph (A).

Deadline.

“(C) REQUIREMENT.—The Administrator shall conduct and publish risk evaluations, in accordance with the rule promulgated under subparagraph (B), for a chemical substance—

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“(i) that has been identified under paragraph (2)(A) or designated under paragraph (1)(B)(i); and

“(ii) subject to subparagraph (E), that a manufacturer of the chemical substance has requested, in a form and manner and using the criteria prescribed by the Administrator in the rule promulgated under subparagraph (B), be subjected to a risk evaluation.

“(D) SCOPE.—The Administrator shall, not later than 6 months after the initiation of a risk evaluation, publish the scope of the risk evaluation to be conducted, including the hazards, exposures, conditions of use, and the potentially exposed or susceptible subpopulations the Administrator expects to consider, and, for each designation of a high-priority substance, ensure not less than 12 months between the initiation of the prioritization process for the chemical substance and the publication of the scope of the risk evaluation for the chemical substance, and for risk evaluations conducted on chemical substances that have been identified under paragraph (2)(A) or selected under subparagraph (E)(iv)(II) of this paragraph, ensure

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not less than 3 months before the Administrator publishes the scope of the risk evaluation.

“(E) LIMITATION AND CRITERIA.—

“(i) PERCENTAGE REQUIREMENTS.—The Administrator shall ensure that, of the number of chemical substances that undergo a risk evaluation under clause (i) of subparagraph (C), the number of chemical substances undergoing a risk evaluation under clause (ii) of subparagraph (C) is—

“(I) not less than 25 percent, if sufficient requests are made under clause (ii) of subparagraph (C); and

“(II) not more than 50 percent.

“(ii) REQUESTED RISK EVALUATIONS.—Requests for risk evaluations under subparagraph (C)(ii) shall be subject to the payment of fees pursuant to section 26(b), and the Administrator shall not expedite or otherwise provide special treatment to such risk evaluations.

“(iii) PREFERENCE.—In deciding whether to grant requests under subparagraph (C)(ii), the Administrator shall give preference to requests for risk evaluations on chemical substances for which the Administrator determines that restrictions imposed by 1 or more States have the potential to have a significant impact on interstate commerce or health or the environment.

“(iv) EXCEPTIONS.—(I) Chemical substances for which requests have been granted under subparagraph (C)(ii) shall not be subject to section 18(b).

“(II) Requests for risk evaluations on chemical substances which are made under subparagraph (C)(ii) and that are drawn from the 2014 update of the TSCA Work Plan for Chemical Assessments shall be granted at the discretion of the Administrator and not be subject to clause (i)(II).

“(F) REQUIREMENTS.—In conducting a risk evaluation under this subsection, the Administrator shall—

Assessment.

“(i) integrate and assess available information on hazards and exposures for the conditions of use of the chemical substance, including information that is relevant to specific risks of injury to health or the environment and information on potentially exposed or susceptible subpopulations identified as relevant by the Administrator;

“(ii) describe whether aggregate or sentinel exposures to a chemical substance under the conditions of use were considered, and the basis for that consideration;

“(iii) not consider costs or other nonrisk factors;

“(iv) take into account, where relevant, the likely duration, intensity, frequency, and number of exposures under the conditions of use of the chemical substance; and

“(v) describe the weight of the scientific evidence for the identified hazard and exposure.

“(G) DEADLINES.—The Administrator—



“(i) shall complete a risk evaluation for a chemical substance as soon as practicable, but not later than 3 years after the date on which the Administrator initiates the risk evaluation under subparagraph (C); and

“(ii) may extend the deadline for a risk evaluation for not more than 6 months.

“(H) NOTICE AND COMMENT.—The Administrator shall provide no less than 30 days public notice and an opportunity for comment on a draft risk evaluation prior to publishing a final risk evaluation.”;

Time period.

(4) by amending subsection (c) to read as follows:

“(c) PROMULGATION OF SUBSECTION (a) RULES.—

“(1) DEADLINES.—If the Administrator determines that a chemical substance presents an unreasonable risk of injury to health or the environment in accordance with subsection (b)(4)(A), the Administrator—

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Federal Register,  
publication.

“(A) shall propose in the Federal Register a rule under subsection (a) for the chemical substance not later than 1 year after the date on which the final risk evaluation regarding the chemical substance is published;

“(B) shall publish in the Federal Register a final rule not later than 2 years after the date on which the final risk evaluation regarding the chemical substance is published; and

“(C) may extend the deadlines under this paragraph for not more than 2 years, subject to the condition that the aggregate length of extensions under this subparagraph and subsection (b)(4)(G)(ii) does not exceed 2 years, and subject to the limitation that the Administrator may not extend a deadline for the publication of a proposed or final rule regarding a chemical substance drawn from the 2014 update of the TSCA Work Plan for Chemical Assessments or a chemical substance that, with respect to persistence and bioaccumulation, scores high for 1 and either high or moderate for the other, pursuant to the TSCA Work Plan Chemicals Methods Document published by the Administrator in February 2012 (or a successor scoring system), without adequate public justification that demonstrates, following a review of the information reasonably available to the Administrator, that the Administrator cannot complete the proposed or final rule without additional information regarding the chemical substance.

“(2) REQUIREMENTS FOR RULE.—

“(A) STATEMENT OF EFFECTS.—In proposing and promulgating a rule under subsection (a) with respect to a chemical substance or mixture, the Administrator shall consider and publish a statement based on reasonably available information with respect to—

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“(i) the effects of the chemical substance or mixture on health and the magnitude of the exposure of human beings to the chemical substance or mixture;

“(ii) the effects of the chemical substance or mixture on the environment and the magnitude of the exposure of the environment to such substance or mixture;

“(iii) the benefits of the chemical substance or mixture for various uses; and

“(iv) the reasonably ascertainable economic consequences of the rule, including consideration of—

“(I) the likely effect of the rule on the national economy, small business, technological innovation, the environment, and public health;

“(II) the costs and benefits of the proposed and final regulatory action and of the 1 or more primary alternative regulatory actions considered by the Administrator; and

“(III) the cost effectiveness of the proposed regulatory action and of the 1 or more primary alternative regulatory actions considered by the Administrator.

“(B) SELECTING REQUIREMENTS.—In selecting among prohibitions and other restrictions, the Administrator shall factor in, to the extent practicable, the considerations under subparagraph (A) in accordance with subsection (a).

“(C) CONSIDERATION OF ALTERNATIVES.—Based on the information published under subparagraph (A), in deciding whether to prohibit or restrict in a manner that substantially prevents a specific condition of use of a chemical substance or mixture, and in setting an appropriate transition period for such action, the Administrator shall consider, to the extent practicable, whether technically and economically feasible alternatives that benefit health or the environment, compared to the use so proposed to be prohibited or restricted, will be reasonably available as a substitute when the proposed prohibition or other restriction takes effect.

“(D) REPLACEMENT PARTS.—

Exemption.

“(i) IN GENERAL.—The Administrator shall exempt replacement parts for complex durable goods and complex consumer goods that are designed prior to the date of publication in the Federal Register of the rule under subsection (a), unless the Administrator finds that such replacement parts contribute significantly to the risk, identified in a risk evaluation conducted under subsection (b)(4)(A), to the general population or to an identified potentially exposed or susceptible subpopulation.

“(ii) DEFINITIONS.—In this subparagraph—

“(I) the term ‘complex consumer goods’ means electronic or mechanical devices composed of multiple manufactured components, with an intended useful life of 3 or more years, where the product is typically not consumed, destroyed, or discarded after a single use, and the components of which would be impracticable to redesign or replace; and

“(II) the term ‘complex durable goods’ means manufactured goods composed of 100 or more manufactured components, with an intended useful life of 5 or more years, where the product is typically not consumed, destroyed, or discarded after a single use.

- “(E) ARTICLES.—In selecting among prohibitions and other restrictions, the Administrator shall apply such prohibitions or other restrictions to an article or category of articles containing the chemical substance or mixture only to the extent necessary to address the identified risks from exposure to the chemical substance or mixture from the article or category of articles so that the substance or mixture does not present an unreasonable risk of injury to health or the environment identified in the risk evaluation conducted in accordance with subsection (b)(4)(A).”
- “(3) PROCEDURES.—When prescribing a rule under subsection (a) the Administrator shall proceed in accordance with section 553 of title 5, United States Code (without regard to any reference in such section to sections 556 and 557 of such title), and shall also—
- “(A) publish a notice of proposed rulemaking stating with particularity the reason for the proposed rule;”
- “(B) allow interested persons to submit written data, views, and arguments, and make all such submissions publicly available;”
- “(C) promulgate a final rule based on the matter in the rulemaking record; and
- “(D) make and publish with the rule the determination described in subsection (a).”;
- (5) in subsection (d)—
- (A) by redesignating paragraph (2) as paragraph (3);
- (B) by striking paragraph (1) and inserting the following:
- “(1) IN GENERAL.—In any rule under subsection (a), the Administrator shall—
- “(A) specify the date on which it shall take effect, which date shall be as soon as practicable;
- “(B) except as provided in subparagraphs (C) and (D), specify mandatory compliance dates for all of the requirements under a rule under subsection (a), which shall be as soon as practicable, but not later than 5 years after the date of promulgation of the rule, except in a case of a use exempted under subsection (g);
- “(C) specify mandatory compliance dates for the start of ban or phase-out requirements under a rule under subsection (a), which shall be as soon as practicable, but not later than 5 years after the date of promulgation of the rule, except in the case of a use exempted under subsection (g);
- “(D) specify mandatory compliance dates for full implementation of ban or phase-out requirements under a rule under subsection (a), which shall be as soon as practicable; and
- “(E) provide for a reasonable transition period.”
- “(2) VARIABILITY.—As determined by the Administrator, the compliance dates established under paragraph (1) may vary for different affected persons.”; and
- (C) in paragraph (3), as so redesignated by subparagraph (A) of this paragraph—
- (i) in subparagraph (A)—
- (I) by striking “upon its publication” and all that follows through “respecting such rule if” and

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Notice.Public  
information.

Publication.

Compliance  
dates.  
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inserting “, and compliance with the proposed requirements to be mandatory, upon publication in the Federal Register of the proposed rule and until the compliance dates applicable to such requirements in a final rule promulgated under section 6(a) or until the Administrator revokes such proposed rule, in accordance with subparagraph (B), if”; and

(II) in clause (i)(I), by inserting “without consideration of costs or other non-risk factors” after “effective date”; and

(ii) in subparagraph (B), by striking “, provide reasonable opportunity” and all that follows through the period at the end and inserting “in accordance with subsection (c), and either promulgate such rule (as proposed or with modifications) or revoke it.”;

(6) in subsection (e)(4), by striking “paragraphs (2), (3), and (4)” and inserting “paragraph (3)”; and

(7) by adding at the end the following new subsections:  
“(g) EXEMPTIONS.—

“(1) CRITERIA FOR EXEMPTION.—The Administrator may, as part of a rule promulgated under subsection (a), or in a separate rule, grant an exemption from a requirement of a subsection (a) rule for a specific condition of use of a chemical substance or mixture, if the Administrator finds that—

“(A) the specific condition of use is a critical or essential use for which no technically and economically feasible safer alternative is available, taking into consideration hazard and exposure;

“(B) compliance with the requirement, as applied with respect to the specific condition of use, would significantly disrupt the national economy, national security, or critical infrastructure; or

“(C) the specific condition of use of the chemical substance or mixture, as compared to reasonably available alternatives, provides a substantial benefit to health, the environment, or public safety.

“(2) EXEMPTION ANALYSIS AND STATEMENT.—In proposing an exemption under this subsection, the Administrator shall analyze the need for the exemption, and shall make public the analysis and a statement describing how the analysis was taken into account.

“(3) PERIOD OF EXEMPTION.—The Administrator shall establish, as part of a rule under this subsection, a time limit on any exemption for a time to be determined by the Administrator as reasonable on a case-by-case basis, and, by rule, may extend, modify, or eliminate an exemption if the Administrator determines, on the basis of reasonably available information and after adequate public justification, the exemption warrants extension or modification or is no longer necessary.

“(4) CONDITIONS.—As part of a rule promulgated under this subsection, the Administrator shall include conditions, including reasonable recordkeeping, monitoring, and reporting requirements, to the extent that the Administrator determines the conditions are necessary to protect health and the environment while achieving the purposes of the exemption.

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information.

Determination.

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Reports.  
Determination.

“(h) CHEMICALS THAT ARE PERSISTENT, BIOACCUMULATIVE, AND TOXIC.—

“(1) EXPEDITED ACTION.—Not later than 3 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall propose rules under subsection (a) with respect to chemical substances identified in the 2014 update of the TSCA Work Plan for Chemical Assessments—

Deadline.

“(A) that the Administrator has a reasonable basis to conclude are toxic and that with respect to persistence and bioaccumulation score high for one and either high or moderate for the other, pursuant to the TSCA Work Plan Chemicals Methods Document published by the Administrator in February 2012 (or a successor scoring system), and are not a metal or a metal compound, and for which the Administrator has not completed a Work Plan Problem Formulation, initiated a review under section 5, or entered into a consent agreement under section 4, prior to the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act; and

“(B) exposure to which under the conditions of use is likely to the general population or to a potentially exposed or susceptible subpopulation identified by the Administrator, or the environment, on the basis of an exposure and use assessment conducted by the Administrator.

“(2) NO RISK EVALUATION REQUIRED.—The Administrator shall not be required to conduct risk evaluations on chemical substances that are subject to paragraph (1).

“(3) FINAL RULE.—Not later than 18 months after proposing a rule pursuant to paragraph (1), the Administrator shall promulgate a final rule under subsection (a).

Deadline.

“(4) SELECTING RESTRICTIONS.—In selecting among prohibitions and other restrictions promulgated in a rule under subsection (a) pursuant to paragraph (1), the Administrator shall address the risks of injury to health or the environment that the Administrator determines are presented by the chemical substance and shall reduce exposure to the substance to the extent practicable.

“(5) RELATIONSHIP TO SUBSECTION (b).—If, at any time prior to the date that is 90 days after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator makes a designation under subsection (b)(1)(B)(i), or receives a request under subsection (b)(4)(C)(ii), such chemical substance shall not be subject to this subsection, except that in selecting among prohibitions and other restrictions promulgated in a rule pursuant to subsection (a), the Administrator shall both ensure that the chemical substance meets the rulemaking standard under subsection (a) and reduce exposure to the substance to the extent practicable.

Time period.

“(i) FINAL AGENCY ACTION.—Under this section and subject to section 18—

“(1) a determination by the Administrator under subsection (b)(4)(A) that a chemical substance does not present an unreasonable risk of injury to health or the environment shall be issued by order and considered to be a final agency action, effective beginning on the date of issuance of the order; and

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Effective date.

“(2) a final rule promulgated under subsection (a), including the associated determination by the Administrator under subsection (b)(4)(A) that a chemical substance presents an unreasonable risk of injury to health or the environment, shall be considered to be a final agency action, effective beginning on the date of promulgation of the final rule.

“(j) DEFINITION.—For the purposes of this Act, the term ‘requirement’ as used in this section shall not displace statutory or common law.”

#### SEC. 7. IMMINENT HAZARDS.

Section 7 of the Toxic Substances Control Act (15 U.S.C. 2606) is amended—

(1) in subsection (b)(1), by inserting “(as identified by the Administrator without consideration of costs or other nonrisk factors)” after “from the unreasonable risk”; and

(2) in subsection (f), by inserting “, without consideration of costs or other nonrisk factors” after “widespread injury to health or the environment”.

#### SEC. 8. REPORTING AND RETENTION OF INFORMATION.

(a) IN GENERAL.—Section 8 of the Toxic Substances Control Act (15 U.S.C. 2607) is amended—

(1) in subsection (a)—

(A) in paragraph (2), by striking the matter that follows subparagraph (G);

(B) in paragraph (3), by adding at the end the following:

“(C) Not later than 180 days after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and not less frequently than once every 10 years thereafter, the Administrator, after consultation with the Administrator of the Small Business Administration, shall—

“(i) review the adequacy of the standards prescribed under subparagraph (B); and

“(ii) after providing public notice and an opportunity for comment, make a determination as to whether revision of the standards is warranted.”; and

(C) by adding at the end the following:

“(4) CONTENTS.—The rules promulgated pursuant to paragraph (1)—

“(A) may impose differing reporting and recordkeeping requirements on manufacturers and processors; and

“(B) shall include the level of detail necessary to be reported, including the manner by which use and exposure information may be reported.

“(5) ADMINISTRATION.—In carrying out this section, the Administrator shall, to the extent feasible—

“(A) not require reporting which is unnecessary or duplicative;

“(B) minimize the cost of compliance with this section and the rules issued thereunder on small manufacturers and processors; and

“(C) apply any reporting obligations to those persons likely to have information relevant to the effective implementation of this title.

“(6) NEGOTIATED RULEMAKING.—(A) The Administrator shall enter into a negotiated rulemaking pursuant to subchapter III of chapter 5 of title 5, United States Code, to develop

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Consultation.

Review.

Public  
information.  
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and publish, not later than 3 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, a proposed rule providing for limiting the reporting requirements, under this subsection, for manufacturers of any inorganic byproducts, when such byproducts, whether by the byproduct manufacturer or by any other person, are subsequently recycled, reused, or reprocessed.

“(B) Not later than 3 and one-half years after such date of enactment, the Administrator shall publish a final rule resulting from such negotiated rulemaking.”; and

(2) in subsection (b), by adding at the end the following:

“(3) NOMENCLATURE.—

“(A) IN GENERAL.—In carrying out paragraph (1), the Administrator shall—

“(i) maintain the use of Class 2 nomenclature in use on the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act;

“(ii) maintain the use of the Soap and Detergent Association Nomenclature System, published in March 1978 by the Administrator in section 1 of addendum III of the document entitled ‘Candidate List of Chemical Substances’, and further described in the appendix A of volume I of the 1985 edition of the Toxic Substances Control Act Substances Inventory (EPA Document No. EPA–560/7–85–002a); and

“(iii) treat the individual members of the categories of chemical substances identified by the Administrator as statutory mixtures, as defined in Inventory descriptions established by the Administrator, as being included on the list established under paragraph (1).

“(B) MULTIPLE NOMENCLATURE LISTINGS.—If a manufacturer or processor demonstrates to the Administrator that a chemical substance appears multiple times on the list published under paragraph (1) under different CAS numbers, the Administrator may recognize the multiple listings as a single chemical substance.

“(4) CHEMICAL SUBSTANCES IN COMMERCE.—

“(A) RULES.—

“(i) IN GENERAL.—Not later than 1 year after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator, by rule, shall require manufacturers, and may require processors, subject to the limitations under subsection (a)(5)(A), to notify the Administrator, by not later than 180 days after the date on which the final rule is published in the Federal Register, of each chemical substance on the list published under paragraph (1) that the manufacturer or processor, as applicable, has manufactured or processed for a nonexempt commercial purpose during the 10-year period ending on the day before the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act.

“(ii) ACTIVE SUBSTANCES.—The Administrator shall designate chemical substances for which notices are received under clause (i) to be active substances on the list published under paragraph (1).

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Federal Register,  
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Time period.

- “(iii) INACTIVE SUBSTANCES.—The Administrator shall designate chemical substances for which no notices are received under clause (i) to be inactive substances on the list published under paragraph (1).
- “(iv) LIMITATION.—No chemical substance on the list published under paragraph (1) shall be removed from such list by reason of the implementation of this subparagraph, or be subject to section 5(a)(1)(A)(i) by reason of a change to active status under paragraph (5)(B).
- Claims. “(B) CONFIDENTIAL CHEMICAL SUBSTANCES.—In promulgating a rule under subparagraph (A), the Administrator shall—
- List. “(i) maintain the list under paragraph (1), which shall include a confidential portion and a nonconfidential portion consistent with this section and section 14;
- Notice. “(ii) require any manufacturer or processor of a chemical substance on the confidential portion of the list published under paragraph (1) that seeks to maintain an existing claim for protection against disclosure of the specific chemical identity of the chemical substance as confidential pursuant to section 14 to submit a notice under subparagraph (A) that includes such request;
- “(iii) require the substantiation of those claims pursuant to section 14 and in accordance with the review plan described in subparagraph (C); and
- “(iv) move any active chemical substance for which no request was received to maintain an existing claim for protection against disclosure of the specific chemical identity of the chemical substance as confidential from the confidential portion of the list published under paragraph (1) to the nonconfidential portion of that list.
- Regulations. “(C) REVIEW PLAN.—Not later than 1 year after the date on which the Administrator compiles the initial list of active substances pursuant to subparagraph (A), the Administrator shall promulgate a rule that establishes a plan to review all claims to protect the specific chemical identities of chemical substances on the confidential portion of the list published under paragraph (1) that are asserted pursuant to subparagraph (B).
- Claims. “(D) REQUIREMENTS OF REVIEW PLAN.—In establishing the review plan under subparagraph (C), the Administrator shall—
- Time period. “(i) require, at a time specified by the Administrator, all manufacturers or processors asserting claims under subparagraph (B) to substantiate the claim, in accordance with section 14, unless the manufacturer or processor has substantiated the claim in a submission made to the Administrator during the 5-year period ending on the last day of the of the time period specified by the Administrator; and
- “(ii) in accordance with section 14—
- “(I) review each substantiation—



- “(aa) submitted pursuant to clause (i) to determine if the claim qualifies for protection from disclosure; and
- “(bb) submitted previously by a manufacturer or processor and relied on in lieu of the substantiation required pursuant to clause (i), if the substantiation has not been previously reviewed by the Administrator, to determine if the claim warrants protection from disclosure;
- “(II) approve, approve in part and deny in part, or deny each claim; and
- “(III) except as provided in this section and section 14, protect from disclosure information for which the Administrator approves such a claim for a period of 10 years, unless, prior to the expiration of the period—
- “(aa) the person notifies the Administrator that the person is withdrawing the claim, in which case the Administrator shall not protect the information from disclosure; or
- “(bb) the Administrator otherwise becomes aware that the information does not qualify for protection from disclosure, in which case the Administrator shall take the actions described in section 14(g)(2).
- “(E) TIMELINE FOR COMPLETION OF REVIEWS.—
- “(i) IN GENERAL.—The Administrator shall implement the review plan so as to complete reviews of all claims specified in subparagraph (C) not later than 5 years after the date on which the Administrator compiles the initial list of active substances pursuant to subparagraph (A).
- “(ii) CONSIDERATIONS.—
- “(I) IN GENERAL.—The Administrator may extend the deadline for completion of the reviews for not more than 2 additional years, after an adequate public justification, if the Administrator determines that the extension is necessary based on the number of claims needing review and the available resources.
- “(II) ANNUAL REVIEW GOAL AND RESULTS.—At the beginning of each year, the Administrator shall publish an annual goal for reviews and the number of reviews completed in the prior year.
- “(5) ACTIVE AND INACTIVE SUBSTANCES.—
- “(A) IN GENERAL.—The Administrator shall keep designations of active substances and inactive substances on the list published under paragraph (1) current.
- “(B) CHANGE TO ACTIVE STATUS.—
- “(i) IN GENERAL.—Any person that intends to manufacture or process for a nonexempt commercial purpose a chemical substance that is designated as an inactive substance shall notify the Administrator before the date on which the inactive substance is manufactured or processed.

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Notification.

- Claims. “(ii) CONFIDENTIAL CHEMICAL IDENTITY.—If a person submitting a notice under clause (i) for an inactive substance on the confidential portion of the list published under paragraph (1) seeks to maintain an existing claim for protection against disclosure of the specific chemical identity of the inactive substance as confidential, the person shall, consistent with the requirements of section 14—
- “(I) in the notice submitted under clause (i), assert the claim; and
- “(II) by not later than 30 days after providing the notice under clause (i), substantiate the claim.
- “(iii) ACTIVE STATUS.—On receiving a notification under clause (i), the Administrator shall—
- “(I) designate the applicable chemical substance as an active substance;
- “(II) pursuant to section 14, promptly review any claim and associated substantiation submitted pursuant to clause (ii) for protection against disclosure of the specific chemical identity of the chemical substance and approve, approve in part and deny in part, or deny the claim;
- “(III) except as provided in this section and section 14, protect from disclosure the specific chemical identity of the chemical substance for which the Administrator approves a claim under subclause (II) for a period of 10 years, unless, prior to the expiration of the period—
- “(aa) the person notifies the Administrator that the person is withdrawing the claim, in which case the Administrator shall not protect the information from disclosure; or
- “(bb) the Administrator otherwise becomes aware that the information does not qualify for protection from disclosure, in which case the Administrator shall take the actions described in section 14(g)(2); and
- “(IV) pursuant to section 6(b), review the priority of the chemical substance as the Administrator determines to be necessary.
- “(C) CATEGORY STATUS.—The list of inactive substances shall not be considered to be a category for purposes of section 26(c).
- “(6) INTERIM LIST OF ACTIVE SUBSTANCES.—Prior to the promulgation of the rule required under paragraph (4)(A), the Administrator shall designate the chemical substances reported under part 711 of title 40, Code of Federal Regulations (as in effect on the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act), during the reporting period that most closely preceded the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, as the interim list of active substances for the purposes of section 6(b).
- “(7) PUBLIC INFORMATION.—Subject to this subsection and section 14, the Administrator shall make available to the public—
- Review.
- Time period.
- Notification.
- Review.

“(A) each specific chemical identity on the nonconfidential portion of the list published under paragraph (1) along with the Administrator’s designation of the chemical substance as an active or inactive substance;

“(B) the unique identifier assigned under section 14, accession number, generic name, and, if applicable, premanufacture notice case number for each chemical substance on the confidential portion of the list published under paragraph (1) for which a claim of confidentiality was received; and

“(C) the specific chemical identity of any active substance for which—

“(i) a claim for protection against disclosure of the specific chemical identity of the active substance was not asserted, as required under this subsection or section 14;

“(ii) all claims for protection against disclosure of the specific chemical identity of the active substance have been denied by the Administrator; or

“(iii) the time period for protection against disclosure of the specific chemical identity of the active substance has expired.

“(8) LIMITATION.—No person may assert a new claim under this subsection or section 14 for protection from disclosure of a specific chemical identity of any active or inactive substance for which a notice is received under paragraph (4)(A)(i) or (5)(B)(i) that is not on the confidential portion of the list published under paragraph (1).

“(9) CERTIFICATION.—Under the rules promulgated under this subsection, manufacturers and processors, as applicable, shall be required—

“(A) to certify that each notice or substantiation the manufacturer or processor submits complies with the requirements of the rule, and that any confidentiality claims are true and correct; and

“(B) to retain a record documenting compliance with the rule and supporting confidentiality claims for a period of 5 years beginning on the last day of the submission period.”

(b) MERCURY INVENTORY.—Section 8(b) of the Toxic Substances Control Act (15 U.S.C. 2607(b)) (as amended by subsection (a)) is further amended by adding at the end the following:

“(10) MERCURY.—

“(A) DEFINITION OF MERCURY.—In this paragraph, notwithstanding section 3(2)(B), the term ‘mercury’ means—

“(i) elemental mercury; and

“(ii) a mercury compound.

“(B) PUBLICATION.—Not 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.

“(C) PROCESS.—In carrying out the inventory under subparagraph (B), the Administrator shall—

“(i) identify any manufacturing processes or products that intentionally add mercury; and

Records.  
Time period.  
Effective date.

Federal Register,  
publication.

Determination.  
Regulations.

“(ii) recommend actions, including proposed revisions of Federal law or regulations, to achieve further reductions in mercury use.

“(D) REPORTING.—

“(i) IN GENERAL.—To assist in the preparation of the inventory under subparagraph (B), 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, at such time and including such information as the Administrator shall determine by rule promulgated not later than 2 years after the date of enactment of this paragraph.

“(ii) COORDINATION.—To avoid duplication, the Administrator shall coordinate the reporting under this subparagraph with the Interstate Mercury Education and Reduction Clearinghouse.

“(iii) EXEMPTION.—Clause (i) shall not apply to a person engaged in the generation, handling, or management of mercury-containing waste, unless that person manufactures or recovers mercury in the management of that waste.”.

#### SEC. 9. RELATIONSHIP TO OTHER FEDERAL LAWS.

Section 9 of the Toxic Substances Control Act (15 U.S.C. 2608) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by striking “has reasonable basis to conclude” and inserting “determines”;

(ii) by striking “or will present”; and

(iii) by inserting “, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator, under the conditions of use,” after “or the environment”;

(B) in paragraph (2)—

(i) in subparagraph (A), by inserting “, within the time period specified by the Administrator in the report,” after “issues an order”; and

(ii) in subparagraph (B), by inserting “responds within the time period specified by the Administrator in the report and” before “initiates, within 90”;

(C) by redesignating paragraph (3) as paragraph (6);

and

(D) by inserting after paragraph (2) the following:

“(3) The Administrator shall take the actions described in paragraph (4) if the Administrator makes a report under paragraph (1) with respect to a chemical substance or mixture and the agency to which the report was made does not—

“(A) issue the order described in paragraph (2)(A) within the time period specified by the Administrator in the report; or

“(B)(i) respond under paragraph (1) within the timeframe specified by the Administrator in the report; and

“(ii) initiate action within 90 days of publication in the Federal Register of the response described in clause (i).

Reports.  
Time period.  
Deadline.

“(4) If an agency to which a report is submitted under paragraph (1) does not take the actions described in subparagraph (A) or (B) of paragraph (3), the Administrator shall—

“(A) initiate or complete appropriate action under section 6; or

“(B) take any action authorized or required under section 7, as applicable.

“(5) This subsection shall not relieve the Administrator of any obligation to take any appropriate action under section 6(a) or 7 to address risks from the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or mixture, or any combination of those activities, that are not identified in a report issued by the Administrator under paragraph (1).”;

(2) in subsection (b)—

(A) by striking “The Administrator shall coordinate” and inserting “(1) The Administrator shall coordinate”; and

(B) by adding at the end the following:

“(2) In making a determination under paragraph (1) that it is in the public interest for the Administrator to take an action under this title with respect to a chemical substance or mixture rather than under another law administered in whole or in part by the Administrator, the Administrator shall consider, based on information reasonably available to the Administrator, all relevant aspects of the risk described in paragraph (1) and a comparison of the estimated costs and efficiencies of the action to be taken under this title and an action to be taken under such other law to protect against such risk.”; and

Determination.

(3) by adding at the end the following:

“(e) EXPOSURE INFORMATION.—In addition to the requirements of subsection (a), if the Administrator obtains information related to exposures or releases of a chemical substance or mixture that may be prevented or reduced under another Federal law, including a law not administered by the Administrator, the Administrator shall make such information available to the relevant Federal agency or office of the Environmental Protection Agency.”.

#### SEC. 10. EXPORTS.

(a) IN GENERAL.—Section 12(a)(2) of the Toxic Substances Control Act (15 U.S.C. 2611(a)(2)) is amended by striking “will present” and inserting “presents”.

(b) PROHIBITION ON EXPORT OF CERTAIN MERCURY COMPOUNDS.—Section 12(c) of the Toxic Substances Control Act (15 U.S.C. 2611(c)) is amended—

(1) in the subsection heading, by inserting “AND MERCURY COMPOUNDS” after “MERCURY”; and

(2) by adding at the end the following:

“(7) PROHIBITION ON EXPORT OF CERTAIN MERCURY COMPOUNDS.—

“(A) IN GENERAL.—Effective January 1, 2020, the export of the following mercury compounds is prohibited:

Effective date.

“(i) Mercury (I) chloride or calomel.

“(ii) Mercury (II) oxide.

“(iii) Mercury (II) sulfate.

“(iv) Mercury (II) nitrate.

“(v) Cinnabar or mercury sulphide.

“(vi) Any mercury compound that the Administrator adds to the list published under subparagraph

(B) by rule, on determining that exporting that mercury compound for the purpose of regenerating elemental mercury is technically feasible.

Deadline.  
Federal Register,  
publication.  
List.

“(B) PUBLICATION.—Not later than 90 days after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and as appropriate thereafter, the Administrator shall publish in the Federal Register a list of the mercury compounds that are prohibited from export under this paragraph.

“(C) PETITION.—Any person may petition the Administrator to add a mercury compound to the list published under subparagraph (B).

“(D) ENVIRONMENTALLY SOUND DISPOSAL.—This paragraph does not prohibit the export of mercury compounds on the list published under subparagraph (B) to member countries of the Organization for Economic Co-operation and Development for environmentally sound disposal, on the condition that no mercury or mercury compounds so exported are to be recovered, recycled, or reclaimed for use, or directly reused, after such export.

Evaluation.

“(E) REPORT.—Not later than 5 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall evaluate any exports of mercury compounds on the list published under subparagraph (B) for disposal that occurred after such date of enactment and shall submit to Congress a report that—

“(i) describes volumes and sources of mercury compounds on the list published under subparagraph (B) exported for disposal;

“(ii) identifies receiving countries of such exports;

“(iii) describes methods of disposal used after such export;

“(iv) identifies issues, if any, presented by the export of mercury compounds on the list published under subparagraph (B);

“(v) includes an evaluation of management options in the United States for mercury compounds on the list published under subparagraph (B), if any, that are commercially available and comparable in cost and efficacy to methods being utilized in such receiving countries; and

Recommendation.

“(vi) makes a recommendation regarding whether Congress should further limit or prohibit the export of mercury compounds on the list published under subparagraph (B) for disposal.

“(F) EFFECT ON OTHER LAW.—Nothing in this paragraph shall be construed to affect the authority of the Administrator under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.).”

(c) TEMPORARY GENERATOR ACCUMULATION.—Section 5 of the Mercury Export Ban Act of 2008 (42 U.S.C. 6939f) is amended—

(1) in subsection (a)(2), by striking “2013” and inserting “2019”;

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by redesignating subparagraphs (A), (B), and (C), as clauses (i), (ii), and (iii), respectively and indenting appropriately;

(ii) in the first sentence, by striking “After consultation” and inserting the following:

“(A) ASSESSMENT AND COLLECTION.—After consultation”;

(iii) in the second sentence, by striking “The amount of such fees” and inserting the following:

“(B) AMOUNT.—The amount of the fees described in subparagraph (A)”;

(iv) in subparagraph (B) (as so designated)—

(I) in clause (i) (as so redesignated), by striking “publically available not later than October 1, 2012” and inserting “publicly available not later than October 1, 2018”;

(II) in clause (ii) (as so redesignated), by striking “and”;

(III) in clause (iii) (as so redesignated), by striking the period at the end and inserting “, subject to clause (iv); and”;

(IV) by adding at the end the following:

“(iv) for generators temporarily accumulating elemental mercury in a facility subject to subparagraphs (B) and (D)(iv) of subsection (g)(2) if the facility designated in subsection (a) is not operational by January 1, 2019, shall be adjusted to subtract the cost of the temporary accumulation during the period in which the facility designated under subsection (a) is not operational.”; and

(v) by adding at the end the following:

“(C) CONVEYANCE OF TITLE AND PERMITTING.—If the facility designated in subsection (a) is not operational by January 1, 2020, the Secretary—

Deadline.

“(i) shall immediately accept the conveyance of title to all elemental mercury that has accumulated in facilities in accordance with subsection (g)(2)(D), before January 1, 2020, and deliver the accumulated mercury to the facility designated under subsection (a) on the date on which the facility becomes operational;

“(ii) shall pay any applicable Federal permitting costs, including the costs for permits issued under section 3005(c) of the Solid Waste Disposal Act (42 U.S.C. 6925(c)); and

“(iii) shall store, or pay the cost of storage of, until the time at which a facility designated in subsection (a) is operational, accumulated mercury to which the Secretary has title under this subparagraph in a facility that has been issued a permit under section 3005(c) of the Solid Waste Disposal Act (42 U.S.C. 6925(c)).”; and

(B) in paragraph (2), in the first sentence, by striking “paragraph (1)(C)” and inserting “paragraph (1)(B)(iii)”; and (3) in subsection (g)(2)—

(A) in the undesignated material at the end, by striking “This subparagraph” and inserting the following:

“(C) Subparagraph (B)”;

(B) in subparagraph (C) (as designated by subparagraph (A)), by inserting “of that subparagraph” before the period at the end; and

(C) by adding at the end the following:

Time period.  
Certification.

“(D) A generator producing elemental mercury incidentally from the beneficiation or processing of ore or related pollution control activities may accumulate the mercury produced onsite that is destined for a facility designated by the Secretary under subsection (a) for more than 90 days without a permit issued under section 3005(c) of the Solid Waste Disposal Act (42 U.S.C. 6925(c)), and shall not be subject to the storage prohibition of section 3004(j) of that Act (42 U.S.C. 6924(j)), if—

“(i) the Secretary is unable to accept the mercury at a facility designated by the Secretary under subsection (a) for reasons beyond the control of the generator;

“(ii) the generator certifies in writing to the Secretary that the generator will ship the mercury to a designated facility when the Secretary is able to accept the mercury;

“(iii) the generator certifies in writing to the Secretary that the generator is storing only mercury the generator has produced or recovered onsite and will not sell, or otherwise place into commerce, the mercury; and

Compliance.

“(iv) the generator has obtained an identification number under section 262.12 of title 40, Code of Federal Regulations, and complies with the requirements described in paragraphs (1) through (4) of section 262.34(a) of title 40, Code of Federal Regulations (as in effect on the date of enactment of this subparagraph).

Deadline.  
Consultation.  
Guidance.  
Procedures.

“(E) MANAGEMENT STANDARDS FOR TEMPORARY STORAGE.—Not later than January 1, 2017, the Secretary, after consultation with the Administrator of the Environmental Protection Agency and State agencies in affected States, shall develop and make available guidance that establishes procedures and standards for the management and short-term storage of elemental mercury at a generator covered under subparagraph (D), including requirements to ensure appropriate use of flasks or other suitable containers. Such procedures and standards shall be protective of health and the environment and shall ensure that the elemental mercury is stored in a safe, secure, and effective manner. A generator may accumulate mercury in accordance with subparagraph (D) immediately upon enactment of this subparagraph, and notwithstanding that guidance called for by this paragraph has not been developed or made available.”

(d) INTERIM STATUS.—Section 5(d)(1) of the Mercury Export Ban Act of 2008 (42 U.S.C. 6939f(d)(1)) is amended—

(1) in the fourth sentence, by striking “in existence on or before January 1, 2013,”; and

(2) in the last sentence, by striking “January 1, 2015” and inserting “January 1, 2020”.



**SEC. 11. CONFIDENTIAL INFORMATION.**

Section 14 of the Toxic Substances Control Act (15 U.S.C. 2613) is amended to read as follows:

**“SEC. 14. CONFIDENTIAL INFORMATION.**

“(a) **IN GENERAL.**—Except as provided in this section, the Administrator shall not disclose information that is exempt from disclosure pursuant to subsection (a) of section 552 of title 5, United States Code, by reason of subsection (b)(4) of that section—

“(1) that is reported to, or otherwise obtained by, the Administrator under this Act; and

“(2) for which the requirements of subsection (c) are met. In any proceeding under section 552(a) of title 5, United States Code, to obtain information the disclosure of which has been denied because of the provisions of this subsection, the Administrator may not rely on section 552(b)(3) of such title to sustain the Administrator’s action.

“(b) **INFORMATION NOT PROTECTED FROM DISCLOSURE.**—

“(1) **MIXED CONFIDENTIAL AND NONCONFIDENTIAL INFORMATION.**—Information that is protected from disclosure under this section, and which is mixed with information that is not protected from disclosure under this section, does not lose its protection from disclosure notwithstanding that it is mixed with information that is not protected from disclosure.

“(2) **INFORMATION FROM HEALTH AND SAFETY STUDIES.**—Subsection (a) does not prohibit the disclosure of—

“(A) any health and safety study which is submitted under this Act with respect to—

“(i) any chemical substance or mixture which, on the date on which such study is to be disclosed has been offered for commercial distribution; or

“(ii) any chemical substance or mixture for which testing is required under section 4 or for which notification is required under section 5; and

“(B) any information reported to, or otherwise obtained by, the Administrator from a health and safety study which relates to a chemical substance or mixture described in clause (i) or (ii) of subparagraph (A).

This paragraph does not authorize the disclosure of any information, including formulas (including molecular structures) of a chemical substance or mixture, that discloses processes used in the manufacturing or processing of a chemical substance or mixture or, in the case of a mixture, the portion of the mixture comprised by any of the chemical substances in the mixture.

“(3) **OTHER INFORMATION NOT PROTECTED FROM DISCLOSURE.**—Subsection (a) does not prohibit the disclosure of—

“(A) any general information describing the manufacturing volumes, expressed as specific aggregated volumes or, if the Administrator determines that disclosure of specific aggregated volumes would reveal confidential information, expressed in ranges; or

“(B) a general description of a process used in the manufacture or processing and industrial, commercial, or consumer functions and uses of a chemical substance, mixture, or article containing a chemical substance or mixture, including information specific to an industry or industry

Determination.

sector that customarily would be shared with the general public or within an industry or industry sector.

Regulation.  
Applicability.

“(4) BANS AND PHASE-OUTS.—

“(A) IN GENERAL.—If the Administrator promulgates a rule pursuant to section 6(a) that establishes a ban or phase-out of a chemical substance or mixture, the protection from disclosure of any information under this section with respect to the chemical substance or mixture shall be presumed to no longer apply, subject to subsection (g)(1)(E) and subparagraphs (B) and (C) of this paragraph.

Applicability.

“(B) LIMITATIONS.—

“(i) CRITICAL USE.—In the case of a chemical substance or mixture for which a specific condition of use is subject to an exemption pursuant to section 6(g), if the Administrator establishes a ban or phase-out described in subparagraph (A) with respect to the chemical substance or mixture, the presumption against protection under such subparagraph shall only apply to information that relates solely to any conditions of use of the chemical substance or mixture to which the exemption does not apply.

“(ii) EXPORT.—In the case of a chemical substance or mixture for which there is manufacture, processing, or distribution in commerce that meets the conditions of section 12(a)(1), if the Administrator establishes a ban or phase-out described in subparagraph (A) with respect to the chemical substance or mixture, the presumption against protection under such subparagraph shall only apply to information that relates solely to any other manufacture, processing, or distribution in commerce of the chemical substance or mixture for the conditions of use subject to the ban or phase-out, unless the Administrator makes the determination in section 12(a)(2).

Applicability.

“(iii) SPECIFIC CONDITIONS OF USE.—In the case of a chemical substance or mixture for which the Administrator establishes a ban or phase-out described in subparagraph (A) with respect to a specific condition of use of the chemical substance or mixture, the presumption against protection under such subparagraph shall only apply to information that relates solely to the condition of use of the chemical substance or mixture for which the ban or phase-out is established.

Deadline.  
Records.  
Review.

“(C) REQUEST FOR NONDISCLOSURE.—

“(i) IN GENERAL.—A manufacturer or processor of a chemical substance or mixture subject to a ban or phase-out described in this paragraph may submit to the Administrator, within 30 days of receiving a notification under subsection (g)(2)(A), a request, including documentation supporting such request, that some or all of the information to which the notice applies should not be disclosed or that its disclosure should be delayed, and the Administrator shall review the request under subsection (g)(1)(E).

“(ii) EFFECT OF NO REQUEST OR DENIAL.—If no request for nondisclosure or delay is submitted to the Administrator under this subparagraph, or the

Administrator denies such a request under subsection (g)(1)(A), the information shall not be protected from disclosure under this section.

“(5) CERTAIN REQUESTS.—If a request is made to the Administrator under section 552(a) of title 5, United States Code, for information reported to or otherwise obtained by the Administrator under this Act that is not protected from disclosure under this subsection, the Administrator may not deny the request on the basis of section 552(b)(4) of title 5, United States Code.

“(c) REQUIREMENTS FOR CONFIDENTIALITY CLAIMS.—

“(1) ASSERTION OF CLAIMS.—

“(A) IN GENERAL.—A person seeking to protect from disclosure any information that person submits under this Act (including information described in paragraph (2)) shall assert to the Administrator a claim for protection from disclosure concurrent with submission of the information, in accordance with such rules regarding a claim for protection from disclosure as the Administrator has promulgated or may promulgate pursuant to this title.

“(B) INCLUSION.—An assertion of a claim under subparagraph (A) shall include a statement that the person has—

“(i) taken reasonable measures to protect the confidentiality of the information;

“(ii) determined that the information is not required to be disclosed or otherwise made available to the public under any other Federal law;

“(iii) a reasonable basis to conclude that disclosure of the information is likely to cause substantial harm to the competitive position of the person; and

“(iv) a reasonable basis to believe that the information is not readily discoverable through reverse engineering.

“(C) ADDITIONAL REQUIREMENTS FOR CLAIMS REGARDING CHEMICAL IDENTITY INFORMATION.—In the case of a claim under subparagraph (A) for protection from disclosure of a specific chemical identity, the claim shall include a structurally descriptive generic name for the chemical substance that the Administrator may disclose to the public, subject to the condition that such generic name shall—

“(i) be consistent with guidance developed by the Administrator under paragraph (4)(A); and

“(ii) describe the chemical structure of the chemical substance as specifically as practicable while protecting those features of the chemical structure—

“(I) that are claimed as confidential; and

“(II) the disclosure of which would be likely to cause substantial harm to the competitive position of the person.

“(2) INFORMATION GENERALLY NOT SUBJECT TO SUBSTANTIATION REQUIREMENTS.—Subject to subsection (f), the following information shall not be subject to substantiation requirements under paragraph (3):

“(A) Specific information describing the processes used in manufacture or processing of a chemical substance, mixture, or article.

“(B) Marketing and sales information.

“(C) Information identifying a supplier or customer.

“(D) In the case of a mixture, details of the full composition of the mixture and the respective percentages of constituents.

“(E) Specific information regarding the use, function, or application of a chemical substance or mixture in a process, mixture, or article.

“(F) Specific production or import volumes of the manufacturer or processor.

“(G) Prior to the date on which a chemical substance is first offered for commercial distribution, the specific chemical identity of the chemical substance, including the chemical name, molecular formula, Chemical Abstracts Service number, and other information that would identify the specific chemical substance, if the specific chemical identity was claimed as confidential at the time it was submitted in a notice under section 5.

“(3) SUBSTANTIATION REQUIREMENTS.—Except as provided in paragraph (2), a person asserting a claim to protect information from disclosure under this section shall substantiate the claim, in accordance with such rules as the Administrator has promulgated or may promulgate pursuant to this section.

“(4) GUIDANCE.—The Administrator shall develop guidance regarding—

“(A) the determination of structurally descriptive generic names, in the case of claims for the protection from disclosure of specific chemical identity; and

“(B) the content and form of the statements of need and agreements required under paragraphs (4), (5), and (6) of subsection (d).

“(5) CERTIFICATION.—An authorized official of a person described in paragraph (1)(A) shall certify that the statement required to assert a claim submitted pursuant to paragraph (1)(B), and any information required to substantiate a claim submitted pursuant to paragraph (3), are true and correct.

Contracts.

“(d) EXCEPTIONS TO PROTECTION FROM DISCLOSURE.—Information described in subsection (a)—

“(1) shall be disclosed to an officer or employee of the United States—

“(A) in connection with the official duties of that person under any Federal law for the protection of health or the environment; or

“(B) for a specific Federal law enforcement purpose;

“(2) shall be disclosed to a contractor of the United States and employees of that contractor—

“(A) if, in the opinion of the Administrator, the disclosure is necessary for the satisfactory performance by the contractor of a contract with the United States for the performance of work in connection with this Act; and

“(B) subject to such conditions as the Administrator may specify;

Determination.

“(3) shall be disclosed if the Administrator determines that disclosure is necessary to protect health or the environment

against an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use;

“(4) shall be disclosed to a State, political subdivision of a State, or tribal government, on written request, for the purpose of administration or enforcement of a law, if such entity has 1 or more applicable agreements with the Administrator that are consistent with the guidance developed under subsection (c)(4)(B) and ensure that the entity will take appropriate measures, and has adequate authority, to maintain the confidentiality of the information in accordance with procedures comparable to the procedures used by the Administrator to safeguard the information;

“(5) shall be disclosed to a health or environmental professional employed by a Federal or State agency or tribal government or a treating physician or nurse in a nonemergency situation if such person provides a written statement of need and agrees to sign a written confidentiality agreement with the Administrator, subject to the conditions that—

“(A) the statement of need and confidentiality agreement are consistent with the guidance developed under subsection (c)(4)(B);

“(B) the statement of need shall be a statement that the person has a reasonable basis to suspect that—

“(i) the information is necessary for, or will assist in—

“(I) the diagnosis or treatment of 1 or more individuals; or

“(II) responding to an environmental release or exposure; and

“(ii) 1 or more individuals being diagnosed or treated have been exposed to the chemical substance or mixture concerned, or an environmental release of or exposure to the chemical substance or mixture concerned has occurred; and

“(C) the person will not use the information for any purpose other than the health or environmental needs asserted in the statement of need, except as otherwise may be authorized by the terms of the agreement or by the person who has a claim under this section with respect to the information;

“(6) shall be disclosed in the event of an emergency to a treating or responding physician, nurse, agent of a poison control center, public health or environmental official of a State, political subdivision of a State, or tribal government, or first responder (including any individual duly authorized by a Federal agency, State, political subdivision of a State, or tribal government who is trained in urgent medical care or other emergency procedures, including a police officer, firefighter, or emergency medical technician) if such person requests the information, subject to the conditions that such person shall—

“(A) have a reasonable basis to suspect that—

“(i) a medical, public health, or environmental emergency exists;

“(ii) the information is necessary for, or will assist in, emergency or first-aid diagnosis or treatment; or

“(iii) 1 or more individuals being diagnosed or treated have likely been exposed to the chemical substance or mixture concerned, or a serious environmental release of or exposure to the chemical substance or mixture concerned has occurred; and

“(B) if requested by a person who has a claim with respect to the information under this section—

“(i) provide a written statement of need and agree to sign a confidentiality agreement, as described in paragraph (5); and

“(ii) submit to the Administrator such statement of need and confidentiality agreement as soon as practicable, but not necessarily before the information is disclosed;

Determination.

“(7) may be disclosed if the Administrator determines that disclosure is relevant in a proceeding under this Act, subject to the condition that the disclosure is made in such a manner as to preserve confidentiality to the extent practicable without impairing the proceeding;

“(8) shall be disclosed if the information is required to be made public under any other provision of Federal law; and

“(9) shall be disclosed as required pursuant to discovery, subpoena, other court order, or any other judicial process otherwise allowed under applicable Federal or State law.

“(e) DURATION OF PROTECTION FROM DISCLOSURE.—

“(1) IN GENERAL.—Subject to paragraph (2), subsection (f)(3), and section 8(b), the Administrator shall protect from disclosure information described in subsection (a)—

“(A) in the case of information described in subsection (c)(2), until such time as—

Notification.

“(i) the person that asserted the claim notifies the Administrator that the person is withdrawing the claim, in which case the information shall not be protected from disclosure under this section; or

“(ii) the Administrator becomes aware that the information does not qualify for protection from disclosure under this section, in which case the Administrator shall take any actions required under subsections (f) and (g); and

“(B) in the case of information other than information described in subsection (c)(2)—

Time period.

“(i) for a period of 10 years from the date on which the person asserts the claim with respect to the information submitted to the Administrator; or

“(ii) if applicable before the expiration of such 10-year period, until such time as—

Notification.

“(I) the person that asserted the claim notifies the Administrator that the person is withdrawing the claim, in which case the information shall not be protected from disclosure under this section; or

“(II) the Administrator becomes aware that the information does not qualify for protection from disclosure under this section, in which case the

Administrator shall take any actions required under subsections (f) and (g).

“(2) EXTENSIONS.—

“(A) IN GENERAL.—In the case of information other than information described in subsection (c)(2), not later than the date that is 60 days before the expiration of the period described in paragraph (1)(B)(i), the Administrator shall provide to the person that asserted the claim a notice of the impending expiration of the period.

Deadlines.  
Notice.

“(B) REQUEST.—

“(i) IN GENERAL.—Not later than the date that is 30 days before the expiration of the period described in paragraph (1)(B)(i), a person reasserting the relevant claim shall submit to the Administrator a request for extension substantiating, in accordance with subsection (c)(3), the need to extend the period.

“(ii) ACTION BY ADMINISTRATOR.—Not later than the date of expiration of the period described in paragraph (1)(B)(i), the Administrator shall, in accordance with subsection (g)(1)—

“(I) review the request submitted under clause (i);

Review.

“(II) make a determination regarding whether the claim for which the request was submitted continues to meet the relevant requirements of this section; and

Determination.

“(III)(aa) grant an extension of 10 years; or

“(bb) deny the request.

“(C) NO LIMIT ON NUMBER OF EXTENSIONS.—There shall be no limit on the number of extensions granted under this paragraph, if the Administrator determines that the relevant request under subparagraph (B)(i)—

Determination.

“(i) establishes the need to extend the period; and

“(ii) meets the requirements established by the Administrator.

“(f) REVIEW AND RESUBSTANTIATION.—

“(1) DISCRETION OF ADMINISTRATOR.—The Administrator may require any person that has claimed protection for information from disclosure under this section, whether before, on, or after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, to reassert and substantiate or resubstantiate the claim in accordance with this section—

“(A) after the chemical substance is designated as a high-priority substance under section 6(b);

“(B) for any chemical substance designated as an active substance under section 8(b)(5)(B)(iii); or

“(C) if the Administrator determines that disclosure of certain information currently protected from disclosure would be important to assist the Administrator in conducting risk evaluations or promulgating rules under section 6.

Determination.

“(2) REVIEW REQUIRED.—The Administrator shall review a claim for protection of information from disclosure under this section and require any person that has claimed protection for that information, whether before, on, or after the date of enactment of the Frank R. Lautenberg Chemical Safety

for the 21st Century Act, to reassert and substantiate or re-substantiate the claim in accordance with this section—

“(A) as necessary to determine whether the information qualifies for an exemption from disclosure in connection with a request for information received by the Administrator under section 552 of title 5, United States Code;

“(B) if the Administrator has a reasonable basis to believe that the information does not qualify for protection from disclosure under this section; or

“(C) for any chemical substance the Administrator determines under section 6(b)(4)(A) presents an unreasonable risk of injury to health or the environment.

Claims.  
Determination.

“(3) PERIOD OF PROTECTION.—If the Administrator requires a person to reassert and substantiate or resubstantiate a claim under this subsection, and determines that the claim continues to meet the relevant requirements of this section, the Administrator shall protect the information subject to the claim from disclosure for a period of 10 years from the date of such determination, subject to any subsequent requirement by the Administrator under this subsection.

“(g) DUTIES OF ADMINISTRATOR.—

“(1) DETERMINATION.—

Claims.  
Deadlines.

“(A) IN GENERAL.—Except for claims regarding information described in subsection (c)(2), the Administrator shall, subject to subparagraph (C), not later than 90 days after the receipt of a claim under subsection (c), and not later than 30 days after the receipt of a request for extension of a claim under subsection (e) or a request under subsection (b)(4)(C), review and approve, approve in part and deny in part, or deny the claim or request.

“(B) REASONS FOR DENIAL.—If the Administrator denies or denies in part a claim or request under subparagraph (A) the Administrator shall provide to the person that asserted the claim or submitted the request a written statement of the reasons for the denial or denial in part of the claim or request.

“(C) SUBSETS.—The Administrator shall—

“(i) except with respect to information described in subsection (c)(2)(G), review all claims or requests under this section for the protection from disclosure of the specific chemical identity of a chemical substance; and

“(ii) review a representative subset, comprising at least 25 percent, of all other claims or requests for protection from disclosure under this section.

“(D) EFFECT OF FAILURE TO ACT.—The failure of the Administrator to make a decision regarding a claim or request for protection from disclosure or extension under this section shall not have the effect of denying or eliminating a claim or request for protection from disclosure.

“(E) DETERMINATION OF REQUESTS UNDER SUBSECTION (b)(4)(C).—With respect to a request submitted under subsection (b)(4)(C), the Administrator shall, with the objective of ensuring that information relevant to the protection of health and the environment is disclosed to the extent practicable, determine whether the documentation provided by the person rebuts what shall be the presumption of



the Administrator that the public interest in the disclosure of the information outweighs the public or proprietary interest in maintaining the protection for all or a portion of the information that the person has requested not be disclosed or for which disclosure be delayed.

“(2) NOTIFICATION.—

Claims.

“(A) IN GENERAL.—Except as provided in subparagraph (B) and subsections (b), (d), and (e), if the Administrator denies or denies in part a claim or request under paragraph (1), concludes, in accordance with this section, that the information does not qualify for protection from disclosure, intends to disclose information pursuant to subsection (d), or promulgates a rule under section 6(a) establishing a ban or phase-out with respect to a chemical substance or mixture, the Administrator shall notify, in writing, the person that asserted the claim or submitted the request of the intent of the Administrator to disclose the information or not protect the information from disclosure under this section. The notice shall be furnished by certified mail (return receipt requested), by personal delivery, or by other means that allows verification of the fact and date of receipt.

“(B) DISCLOSURE OF INFORMATION.—Except as provided in subparagraph (C), the Administrator shall not disclose information under this subsection until the date that is 30 days after the date on which the person that asserted the claim or submitted the request receives notification under subparagraph (A).

Deadline.

“(C) EXCEPTIONS.—

“(i) FIFTEEN DAY NOTIFICATION.—For information the Administrator intends to disclose under subsections (d)(3), (d)(4), (d)(5), and (j), the Administrator shall not disclose the information until the date that is 15 days after the date on which the person that asserted the claim or submitted the request receives notification under subparagraph (A), except that, with respect to information to be disclosed under subsection (d)(3), if the Administrator determines that disclosure of the information is necessary to protect against an imminent and substantial harm to health or the environment, no prior notification shall be necessary.

Determination.

“(ii) NOTIFICATION AS SOON AS PRACTICABLE.—For information the Administrator intends to disclose under paragraph (6) of subsection (d), the Administrator shall notify the person that submitted the information that the information has been disclosed as soon as practicable after disclosure of the information.

“(iii) NO NOTIFICATION REQUIRED.—Notification shall not be required—

“(I) for the disclosure of information under paragraphs (1), (2), (7), or (8) of subsection (d);  
or

“(II) for the disclosure of information for which—

“(aa) the Administrator has provided to the person that asserted the claim a notice under subsection (e)(2)(A); and

“(bb) such person does not submit to the Administrator a request under subsection (e)(2)(B) on or before the deadline established in subsection (e)(2)(B)(i).

“(D) APPEALS.—

“(i) ACTION TO RESTRAIN DISCLOSURE.—If a person receives a notification under this paragraph and believes the information is protected from disclosure under this section, before the date on which the information is to be disclosed pursuant to subparagraph (B) or (C) the person may bring an action to restrain disclosure of the information in—

“(I) the United States district court of the district in which the complainant resides or has the principal place of business; or

“(II) the United States District Court for the District of Columbia.

“(ii) NO DISCLOSURE.—

“(I) IN GENERAL.—Subject to subsection (d), the Administrator shall not disclose information that is the subject of an appeal under this paragraph before the date on which the applicable court rules on an action under clause (i).

“(II) EXCEPTION.—Subclause (I) shall not apply to disclosure of information described under subsections (d)(4) and (j).

Consultation.

“(3) REQUEST AND NOTIFICATION SYSTEM.—The Administrator, in consultation with the Director of the Centers for Disease Control and Prevention, shall develop a request and notification system that, in a format and language that is readily accessible and understandable, allows for expedient and swift access to information disclosed pursuant to paragraphs (5) and (6) of subsection (d).

“(4) UNIQUE IDENTIFIER.—The Administrator shall—

“(A)(i) develop a system to assign a unique identifier to each specific chemical identity for which the Administrator approves a request for protection from disclosure, which shall not be either the specific chemical identity or a structurally descriptive generic term; and

Applicability.

“(ii) apply that identifier consistently to all information relevant to the applicable chemical substance;

Deadline.  
Publication.  
List.

“(B) annually publish and update a list of chemical substances, referred to by their unique identifiers, for which claims to protect the specific chemical identity from disclosure have been approved, including the expiration date for each such claim;

“(C) ensure that any nonconfidential information received by the Administrator with respect to a chemical substance included on the list published under subparagraph (B) while the specific chemical identity of the chemical substance is protected from disclosure under this section identifies the chemical substance using the unique identifier; and

“(D) for each claim for protection of a specific chemical identity that has been denied by the Administrator or expired, or that has been withdrawn by the person who asserted the claim, and for which the Administrator has used a unique identifier assigned under this paragraph to protect the specific chemical identity in information that the Administrator has made public, clearly link the specific chemical identity to the unique identifier in such information to the extent practicable.

“(h) CRIMINAL PENALTY FOR WRONGFUL DISCLOSURE.—

“(1) INDIVIDUALS SUBJECT TO PENALTY.—

“(A) IN GENERAL.—Subject to subparagraph (C) and paragraph (2), an individual described in subparagraph (B) shall be fined under title 18, United States Code, or imprisoned for not more than 1 year, or both.

“(B) DESCRIPTION.—An individual referred to in subparagraph (A) is an individual who—

“(i) pursuant to this section, obtained possession of, or has access to, information protected from disclosure under this section; and

“(ii) knowing that the information is protected from disclosure under this section, willfully discloses the information in any manner to any person not entitled to receive that information.

“(C) EXCEPTION.—This paragraph shall not apply to any medical professional (including an emergency medical technician or other first responder) who discloses any information obtained under paragraph (5) or (6) of subsection (d) to a patient treated by the medical professional, or to a person authorized to make medical or health care decisions on behalf of such a patient, as needed for the diagnosis or treatment of the patient.

“(2) OTHER LAWS.—Section 1905 of title 18, United States Code, shall not apply with respect to the publishing, divulging, disclosure, or making known of, or making available, information reported to or otherwise obtained by the Administrator under this Act.

“(i) APPLICABILITY.—

“(1) IN GENERAL.—Except as otherwise provided in this section, section 8, or any other applicable Federal law, the Administrator shall have no authority—

“(A) to require the substantiation or resubstantiation of a claim for the protection from disclosure of information reported to or otherwise obtained by the Administrator under this Act prior to the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act; or

“(B) to impose substantiation or resubstantiation requirements, with respect to the protection of information described in subsection (a), under this Act that are more extensive than those required under this section.

“(2) ACTIONS PRIOR TO PROMULGATION OF RULES.—Nothing in this Act prevents the Administrator from reviewing, requiring substantiation or resubstantiation of, or approving, approving in part, or denying any claim for the protection from disclosure of information before the effective date of such rules applicable to those claims as the Administrator may

promulgate after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act.

“(j) ACCESS BY CONGRESS.—Notwithstanding any limitation contained in this section or any other provision of law, all information reported to or otherwise obtained by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee.”.

**SEC. 12. PENALTIES.**

Section 16 of the Toxic Substances Control Act (15 U.S.C. 2615) is amended—

(1) in subsection (a)(1), by striking “\$25,000” and inserting “\$37,500”; and

(2) in subsection (b)—

(A) by striking “Any person” and inserting the following:

“(1) IN GENERAL.—Any person”;

(B) by striking “\$25,000” and inserting “\$50,000”; and

(C) by adding at the end the following:

“(2) IMMINENT DANGER OF DEATH OR SERIOUS BODILY INJURY.—

“(A) IN GENERAL.—Any person who knowingly and willfully violates any provision of section 15 or 409, and who knows at the time of the violation that the violation places an individual in imminent danger of death or serious bodily injury, shall be subject on conviction to a fine of not more than \$250,000, or imprisonment for not more than 15 years, or both.

“(B) ORGANIZATIONS.—Notwithstanding the penalties described in subparagraph (A), an organization that commits a knowing violation described in subparagraph (A) shall be subject on conviction to a fine of not more than \$1,000,000 for each violation.

“(C) INCORPORATION OF CORRESPONDING PROVISIONS.—Subparagraphs (B) through (F) of section 113(c)(5) of the Clean Air Act (42 U.S.C. 7413(c)(5)(B)–(F)) shall apply to the prosecution of a violation under this paragraph.”.

Applicability.

**SEC. 13. STATE-FEDERAL RELATIONSHIP.**

Section 18 of the Toxic Substances Control Act (15 U.S.C. 2617) is amended—

(1) by amending subsection (a) to read as follows:

“(a) IN GENERAL.—

“(1) ESTABLISHMENT OR ENFORCEMENT.—Except as otherwise provided in subsections (c), (d), (e), (f), and (g), and subject to paragraph (2), no State or political subdivision of a State may establish or continue to enforce any of the following:

“(A) DEVELOPMENT OF INFORMATION.—A statute or administrative action to require the development of information about a chemical substance or category of chemical substances that is reasonably likely to produce the same information required under section 4, 5, or 6 in—

“(i) a rule promulgated by the Administrator;

“(ii) a consent agreement entered into by the Administrator; or

“(iii) an order issued by the Administrator.

“(B) CHEMICAL SUBSTANCES FOUND NOT TO PRESENT AN UNREASONABLE RISK OR RESTRICTED.—A statute, criminal penalty, or administrative action to prohibit or otherwise restrict the manufacture, processing, or distribution in commerce or use of a chemical substance—

“(i) for which the determination described in section 6(i)(1) is made, consistent with the scope of the risk evaluation under section (6)(b)(4)(D); or

“(ii) for which a final rule is promulgated under section 6(a), after the effective date of the rule issued under section 6(a) for the chemical substance, consistent with the scope of the risk evaluation under section (6)(b)(4)(D).

“(C) SIGNIFICANT NEW USE.—A statute or administrative action requiring the notification of a use of a chemical substance that the Administrator has specified as a significant new use and for which the Administrator has required notification pursuant to a rule promulgated under section 5.

“(2) EFFECTIVE DATE OF PREEMPTION.—Under this subsection, Federal preemption of statutes and administrative actions applicable to specific chemical substances shall not occur until the effective date of the applicable action described in paragraph (1) taken by the Administrator.”;

(2) by amending subsection (b) to read as follows:

“(b) NEW STATUTES, CRIMINAL PENALTIES, OR ADMINISTRATIVE ACTIONS CREATING PROHIBITIONS OR OTHER RESTRICTIONS.—

“(1) IN GENERAL.—Except as provided in subsections (c), (d), (e), (f), and (g), beginning on the date on which the Administrator defines the scope of a risk evaluation for a chemical substance under section 6(b)(4)(D) and ending on the date on which the deadline established pursuant to section 6(b)(4)(G) for completion of the risk evaluation expires, or on the date on which the Administrator publishes the risk evaluation under section 6(b)(4)(C), whichever is earlier, no State or political subdivision of a State may establish a statute, criminal penalty, or administrative action prohibiting or otherwise restricting the manufacture, processing, distribution in commerce, or use of such chemical substance that is a high-priority substance designated under section 6(b)(1)(B)(i).

Time period.

“(2) EFFECT OF SUBSECTION.—This subsection does not restrict the authority of a State or political subdivision of a State to continue to enforce any statute enacted, criminal penalty assessed, or administrative action taken, prior to the date on which the Administrator defines and publishes the scope of a risk evaluation under section 6(b)(4)(D).”; and

(3) by adding at the end the following:

“(c) SCOPE OF PREEMPTION.—Federal preemption under subsections (a) and (b) of statutes, criminal penalties, and administrative actions applicable to specific chemical substances shall apply only to—

Applicability.

“(1) with respect to subsection (a)(1)(A), the chemical substances or category of chemical substances subject to a rule, order, or consent agreement under section 4, 5, or 6;

“(2) with respect to subsection (b), the hazards, exposures, risks, and uses or conditions of use of such chemical substances

included in the scope of the risk evaluation pursuant to section 6(b)(4)(D);

“(3) with respect to subsection (a)(1)(B), the hazards, exposures, risks, and uses or conditions of use of such chemical substances included in any final action the Administrator takes pursuant to section 6(a) or 6(i)(1); or

“(4) with respect to subsection (a)(1)(C), the uses of such chemical substances that the Administrator has specified as significant new uses and for which the Administrator has required notification pursuant to a rule promulgated under section 5.

“(d) EXCEPTIONS.—

“(1) NO PREEMPTION OF STATUTES AND ADMINISTRATIVE ACTIONS.—

“(A) IN GENERAL.—Nothing in this Act, nor any amendment made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, nor any rule, standard of performance, risk evaluation, or scientific assessment implemented pursuant to this Act, shall affect the right of a State or a political subdivision of a State to adopt or enforce any rule, standard of performance, risk evaluation, scientific assessment, or any other protection for public health or the environment that—

“(i) is adopted or authorized under the authority of any other Federal law or adopted to satisfy or obtain authorization or approval under any other Federal law;

“(ii) implements a reporting, monitoring, or other information obligation for the chemical substance not otherwise required by the Administrator under this Act or required under any other Federal law;

“(iii) is adopted pursuant to authority under a law of the State or political subdivision of the State related to water quality, air quality, or waste treatment or disposal, except to the extent that the action—

“(I) imposes a restriction on the manufacture, processing, distribution in commerce, or use of a chemical substance; and

“(II)(aa) addresses the same hazards and exposures, with respect to the same conditions of use as are included in the scope of the risk evaluation published pursuant to section 6(b)(4)(D), but is inconsistent with the action of the Administrator; or

“(bb) would cause a violation of the applicable action by the Administrator under section 5 or 6; or

“(iv) subject to subparagraph (B), is identical to a requirement prescribed by the Administrator.

“(B) IDENTICAL REQUIREMENTS.—

“(i) IN GENERAL.—The penalties and other sanctions applicable under a law of a State or political subdivision of a State in the event of noncompliance with the identical requirement shall be no more stringent than the penalties and other sanctions available to the Administrator under section 16 of this Act.

“(ii) PENALTIES.—In the case of an identical requirement—

“(I) a State or political subdivision of a State may not assess a penalty for a specific violation for which the Administrator has assessed an adequate penalty under section 16; and

“(II) if a State or political subdivision of a State has assessed a penalty for a specific violation, the Administrator may not assess a penalty for that violation in an amount that would cause the total of the penalties assessed for the violation by the State or political subdivision of a State and the Administrator combined to exceed the maximum amount that may be assessed for that violation by the Administrator under section 16.

“(2) APPLICABILITY TO CERTAIN RULES OR ORDERS.—

“(A) PRIOR RULES AND ORDERS.—Nothing in this section shall be construed as modifying the preemptive effect under this section, as in effect on the day before the effective date of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, of any rule or order promulgated or issued under this Act prior to that effective date.

“(B) CERTAIN CHEMICAL SUBSTANCES AND MIXTURES.—With respect to a chemical substance or mixture for which any rule or order was promulgated or issued under section 6 prior to the effective date of the Frank R. Lautenberg Chemical Safety for the 21st Century Act with respect to manufacturing, processing, distribution in commerce, use, or disposal of the chemical substance or mixture, nothing in this section shall be construed as modifying the preemptive effect of this section as in effect prior to the enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act of any rule or order that is promulgated or issued with respect to such chemical substance or mixture under section 6 after that effective date, unless the latter rule or order is with respect to a chemical substance or mixture containing a chemical substance and follows a designation of that chemical substance as a high-priority substance under section 6(b)(1)(B)(i), the identification of that chemical substance under section 6(b)(2)(A), or the selection of that chemical substance for risk evaluation under section 6(b)(4)(E)(iv)(II).

“(e) PRESERVATION OF CERTAIN LAWS.—

“(1) IN GENERAL.—Nothing in this Act, subject to subsection (g) of this section, shall—

“(A) be construed to preempt or otherwise affect the authority of a State or political subdivision of a State to continue to enforce any action taken or requirement imposed or requirement enacted relating to a specific chemical substance before April 22, 2016, under the authority of a law of the State or political subdivision of the State that prohibits or otherwise restricts manufacturing, processing, distribution in commerce, use, or disposal of a chemical substance; or

“(B) be construed to preempt or otherwise affect any action taken pursuant to a State law that was in effect on August 31, 2003.

“(2) EFFECT OF SUBSECTION.—This subsection does not affect, modify, or alter the relationship between Federal law

and laws of a State or political subdivision of a State pursuant to any other Federal law.

“(f) WAIVERS.—

Determination.

“(1) DISCRETIONARY EXEMPTIONS.—Upon application of a State or political subdivision of a State, the Administrator may, by rule, exempt from subsection (a), under such conditions as may be prescribed in the rule, a statute, criminal penalty, or administrative action of that State or political subdivision of the State that relates to the effects of exposure to a chemical substance under the conditions of use if the Administrator determines that—

“(A) compelling conditions warrant granting the waiver to protect health or the environment;

“(B) compliance with the proposed requirement of the State or political subdivision of the State would not unduly burden interstate commerce in the manufacture, processing, distribution in commerce, or use of a chemical substance;

“(C) compliance with the proposed requirement of the State or political subdivision of the State would not cause a violation of any applicable Federal law, rule, or order; and

“(D) in the judgment of the Administrator, the proposed requirement of the State or political subdivision of the State is designed to address a risk of a chemical substance, under the conditions of use, that was identified—

“(i) consistent with the best available science;

“(ii) using supporting studies conducted in accordance with sound and objective scientific practices; and

“(iii) based on the weight of the scientific evidence.

Determination.

“(2) REQUIRED EXEMPTIONS.—Upon application of a State or political subdivision of a State, the Administrator shall exempt from subsection (b) a statute or administrative action of a State or political subdivision of a State that relates to the effects of exposure to a chemical substance under the conditions of use if the Administrator determines that—

“(A)(i) compliance with the proposed requirement of the State or political subdivision of the State would not unduly burden interstate commerce in the manufacture, processing, distribution in commerce, or use of a chemical substance;

“(ii) compliance with the proposed requirement of the State or political subdivision of the State would not cause a violation of any applicable Federal law, rule, or order; and

“(iii) the State or political subdivision of the State has a concern about the chemical substance or use of the chemical substance based in peer-reviewed science; or

Deadline.

“(B) no later than the date that is 18 months after the date on which the Administrator has initiated the prioritization process for a chemical substance under the rule promulgated pursuant to section 6(b)(1)(A), or the date on which the Administrator publishes the scope of the risk evaluation for a chemical substance under section 6(b)(4)(D), whichever is sooner, the State or political subdivision of the State has enacted a statute or proposed or finalized an administrative action intended to prohibit



or otherwise restrict the manufacture, processing, distribution in commerce, or use of the chemical substance.

“(3) DETERMINATION OF A WAIVER REQUEST.—The duty of the Administrator to grant or deny a waiver application shall be nondelegable and shall be exercised—

“(A) not later than 180 days after the date on which an application under paragraph (1) is submitted; and

“(B) not later than 110 days after the date on which an application under paragraph (2) is submitted.

“(4) FAILURE TO MAKE A DETERMINATION.—If the Administrator fails to make a determination under paragraph (3)(B) during the 110-day period beginning on the date on which an application under paragraph (2) is submitted, the statute or administrative action of the State or political subdivision of the State that was the subject of the application shall not be considered to be an existing statute or administrative action for purposes of subsection (b) by reason of the failure of the Administrator to make a determination.

“(5) NOTICE AND COMMENT.—Except in the case of an application approved under paragraph (9), the application of a State or political subdivision of a State under this subsection shall be subject to public notice and comment.

“(6) FINAL AGENCY ACTION.—The decision of the Administrator on the application of a State or political subdivision of a State shall be—

“(A) considered to be a final agency action; and

“(B) subject to judicial review.

“(7) DURATION OF WAIVERS.—A waiver granted under paragraph (2) or approved under paragraph (9) shall remain in effect until such time as the Administrator publishes the risk evaluation under section 6(b).

“(8) JUDICIAL REVIEW OF WAIVERS.—Not later than 60 days after the date on which the Administrator makes a determination on an application of a State or political subdivision of a State under paragraph (1) or (2), any person may file a petition for judicial review in the United States Court of Appeals for the District of Columbia Circuit, which shall have exclusive jurisdiction over the determination.

“(9) APPROVAL.—

“(A) AUTOMATIC APPROVAL.—If the Administrator fails to meet the deadline established under paragraph (3)(B), the application of a State or political subdivision of a State under paragraph (2) shall be automatically approved, effective on the date that is 10 days after the deadline.

“(B) REQUIREMENTS.—Notwithstanding paragraph (6), approval of a waiver application under subparagraph (A) for failure to meet the deadline under paragraph (3)(B) shall not be considered final agency action or be subject to judicial review or public notice and comment.

“(g) SAVINGS.—

“(1) NO PREEMPTION OF COMMON LAW OR STATUTORY CAUSES OF ACTION FOR CIVIL RELIEF OR CRIMINAL CONDUCT.—

“(A) IN GENERAL.—Nothing in this Act, nor any amendment made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, nor any standard, rule, requirement, standard of performance, risk evaluation, or scientific assessment implemented pursuant to this Act, shall be

construed to preempt, displace, or supplant any State or Federal common law rights or any State or Federal statute creating a remedy for civil relief, including those for civil damage, or a penalty for a criminal conduct.

“(B) CLARIFICATION OF NO PREEMPTION.—Notwithstanding any other provision of this Act, nothing in this Act, nor any amendments made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, shall preempt or preclude any cause of action for personal injury, wrongful death, property damage, or other injury based on negligence, strict liability, products liability, failure to warn, or any other legal theory of liability under any State law, maritime law, or Federal common law or statutory theory.

“(2) NO EFFECT ON PRIVATE REMEDIES.—

“(A) IN GENERAL.—Nothing in this Act, nor any amendments made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, nor any rules, regulations, requirements, risk evaluations, scientific assessments, or orders issued pursuant to this Act shall be interpreted as, in either the plaintiff’s or defendant’s favor, dispositive in any civil action.

“(B) AUTHORITY OF COURTS.—This Act does not affect the authority of any court to make a determination in an adjudicatory proceeding under applicable State or Federal law with respect to the admission into evidence or any other use of this Act or rules, regulations, requirements, standards of performance, risk evaluations, scientific assessments, or orders issued pursuant to this Act.”.

#### SEC. 14. JUDICIAL REVIEW.

Section 19(a) of the Toxic Substances Control Act (15 U.S.C. 2618(a)) is amended—

Deadline.

(1) in paragraph (1), by adding at the end the following:

“(C)(i) Not later than 60 days after the publication of a designation under section 6(b)(1)(B)(ii), any person may commence a civil action to challenge the designation.

“(ii) The United States Court of Appeals for the District of Columbia Circuit shall have exclusive jurisdiction over a civil action filed under this subparagraph.”; and

(2) by striking paragraph (3).

#### SEC. 15. CITIZENS’ CIVIL ACTIONS.

Section 20(b) of the Toxic Substances Control Act (15 U.S.C. 2619(b)) is amended—

Time period.

(1) in paragraph (1)(B), by striking “or” at the end; and

(2) in paragraph (2), by striking the period at the end and inserting the following: “, except that no prior notification shall be required in the case of a civil action brought to compel a decision by the Administrator pursuant to section 18(f)(3)(B); or

“(3) in the case of a civil action brought to compel a decision by the Administrator pursuant to section 18(f)(3)(B), after the date that is 60 days after the deadline specified in section 18(f)(3)(B).”.

**SEC. 16. STUDIES.**

Section 25 of the Toxic Substances Control Act (15 U.S.C. 2624) is repealed.

Repeal.

**SEC. 17. ADMINISTRATION OF THE ACT.**

Section 26 of the Toxic Substances Control Act (15 U.S.C. 2625) is amended—

(1) in subsection (b)(1)—

(A) by striking “of a reasonable fee”;

(B) by striking “data under section 4 or 5 to defray the cost of administering this Act” and inserting “information under section 4 or a notice or other information to be reviewed by the Administrator under section 5, or who manufactures or processes a chemical substance that is the subject of a risk evaluation under section 6(b), of a fee that is sufficient and not more than reasonably necessary to defray the cost related to such chemical substance of administering sections 4, 5, and 6, and collecting, processing, reviewing, and providing access to and protecting from disclosure as appropriate under section 14 information on chemical substances under this title, including contractor costs incurred by the Administrator”;

(C) by striking “Such rules shall not provide for any fee in excess of \$2,500 or, in the case of a small business concern, any fee in excess of \$100.”; and

(D) by striking “submit the data and the cost to the Administrator of reviewing such data” and inserting “pay such fee and the cost to the Administrator of carrying out the activities described in this paragraph”;

(2) in subsection (b)—

(A) in paragraph (2), by striking “paragraph (1)” and inserting “paragraph (4)”;

(B) by adding at the end the following:

“(3) FUND.—

“(A) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the TSCA Service Fee Fund (in this paragraph referred to as the ‘Fund’), consisting of such amounts as are deposited in the Fund under this paragraph.

“(B) COLLECTION AND DEPOSIT OF FEES.—Subject to the conditions of subparagraph (C), the Administrator shall collect the fees described in this subsection and deposit those fees in the Fund.

“(C) USE OF FUNDS BY ADMINISTRATOR.—Fees authorized under this section shall be collected and available for obligation only to the extent and in the amount provided in advance in appropriations Acts, and shall be available without fiscal year limitation for use in defraying the costs of the activities described in paragraph (1).

“(D) ACCOUNTING AND AUDITING.—

“(i) ACCOUNTING.—The Administrator shall biennially prepare and submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that includes an accounting of the fees paid to the Administrator under this paragraph and amounts disbursed from the Fund for the period covered by the report,

Deadline.  
Reports.

as reflected by financial statements provided in accordance with sections 3515 and 3521 of title 31, United States Code.

“(ii) AUDITING.—

“(I) IN GENERAL.—For the purpose of section 3515(c) of title 31, United States Code, the Fund shall be considered a component of a covered executive agency.

Analysis.

“(II) COMPONENTS OF AUDIT.—The annual audit required in accordance with sections 3515 and 3521 of title 31, United States Code, of the financial statements of activities carried out using amounts from the Fund shall include an analysis of—

“(aa) the fees collected and amounts disbursed under this subsection;

“(bb) the reasonableness of the fees in place as of the date of the audit to meet current and projected costs of administering the provisions of this title for which the fees may be used; and

“(cc) the number of requests for a risk evaluation made by manufacturers under section 6(b)(4)(C)(ii).

Reports.

“(III) FEDERAL RESPONSIBILITY.—The Inspector General of the Environmental Protection Agency shall conduct the annual audit described in subclause (II) and submit to the Administrator a report that describes the findings and any recommendations of the Inspector General resulting from the audit.

“(4) AMOUNT AND ADJUSTMENT OF FEES; REFUNDS.—In setting fees under this section, the Administrator shall—

Consultation.

“(A) prescribe lower fees for small business concerns, after consultation with the Administrator of the Small Business Administration;

“(B) set the fees established under paragraph (1) at levels such that the fees will, in aggregate, provide a sustainable source of funds to annually defray—

“(i) the lower of—

“(I) 25 percent of the costs to the Administrator of carrying out sections 4, 5, and 6, and of collecting, processing, reviewing, and providing access to and protecting from disclosure as appropriate under section 14 information on chemical substances under this title, other than the costs to conduct and complete risk evaluations under section 6(b); or

“(II) \$25,000,000 (subject to adjustment pursuant to subparagraph (F)); and

“(ii) the costs of risk evaluations specified in subparagraph (D);

“(C) reflect an appropriate balance in the assessment of fees between manufacturers and processors, and allow the payment of fees by consortia of manufacturers or processors;

“(D) notwithstanding subparagraph (B)—

“(i) except as provided in clause (ii), for chemical substances for which the Administrator has granted a request from a manufacturer pursuant to section 6(b)(4)(C)(ii), establish the fee at a level sufficient to defray the full

costs to the Administrator of conducting the risk evaluation under section 6(b);

“(ii) for chemical substances for which the Administrator has granted a request from a manufacturer pursuant to section 6(b)(4)(C)(ii), and which are included in the 2014 update of the TSCA Work Plan for Chemical Assessments, establish the fee at a level sufficient to defray 50 percent of the costs to the Administrator of conducting the risk evaluation under section 6(b); and

“(iii) apply fees collected pursuant to clauses (i) and (ii) only to defray the costs described in those clauses;

“(E) prior to the establishment or amendment of any fees under paragraph (1), consult and meet with parties potentially subject to the fees or their representatives, subject to the condition that no obligation under the Federal Advisory Committee Act (5 U.S.C. App.) or subchapter II of chapter 5 of title 5, United States Code, is applicable with respect to such meetings;

“(F) beginning with the fiscal year that is 3 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and every 3 years thereafter, after consultation with parties potentially subject to the fees and their representatives pursuant to subparagraph (E), increase or decrease the fees established under paragraph (1) as necessary to adjust for inflation and to ensure that funds deposited in the Fund are sufficient to defray—

“(i) approximately but not more than 25 percent of the costs to the Administrator of carrying out sections 4, 5, and 6, and of collecting, processing, reviewing, and providing access to and protecting from disclosure as appropriate under section 14 information on chemical substances under this title, other than the costs to conduct and complete risk evaluations requested under section 6(b)(4)(C)(ii); and

“(ii) the costs of risk evaluations specified in subparagraph (D); and

“(G) if a notice submitted under section 5 is not reviewed or such a notice is withdrawn, refund the fee or a portion of the fee if no substantial work was performed on the notice.

“(5) MINIMUM AMOUNT OF APPROPRIATIONS.—Fees may not be assessed for a fiscal year under this section unless the amount of appropriations for the Chemical Risk Review and Reduction program project of the Environmental Protection Agency for the fiscal year (excluding the amount of any fees appropriated for the fiscal year) are equal to or greater than the amount of appropriations for that program project for fiscal year 2014.

“(6) TERMINATION.—The authority provided by this subsection shall terminate at the conclusion of the fiscal year that is 10 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act unless otherwise reauthorized or modified by Congress.”; and

(3) by adding at the end the following:

“(h) SCIENTIFIC STANDARDS.—In carrying out sections 4, 5, and 6, to the extent that the Administrator makes a decision based on science, the Administrator shall use scientific information, technical procedures, measures, methods, protocols, methodologies, or models, employed in a manner consistent with the best available science, and shall consider as applicable—

Applicability.

Consultation.

Effective date.  
Deadline.  
Consultation.

Notice.

Applicability.

“(1) the extent to which the scientific information, technical procedures, measures, methods, protocols, methodologies, or models employed to generate the information are reasonable for and consistent with the intended use of the information;

“(2) the extent to which the information is relevant for the Administrator’s use in making a decision about a chemical substance or mixture;

“(3) the degree of clarity and completeness with which the data, assumptions, methods, quality assurance, and analyses employed to generate the information are documented;

“(4) the extent to which the variability and uncertainty in the information, or in the procedures, measures, methods, protocols, methodologies, or models, are evaluated and characterized; and

“(5) the extent of independent verification or peer review of the information or of the procedures, measures, methods, protocols, methodologies, or models.

“(i) WEIGHT OF SCIENTIFIC EVIDENCE.—The Administrator shall make decisions under sections 4, 5, and 6 based on the weight of the scientific evidence.

Public  
information.

“(j) AVAILABILITY OF INFORMATION.—Subject to section 14, the Administrator shall make available to the public—

“(1) all notices, determinations, findings, rules, consent agreements, and orders of the Administrator under this title;

“(2) any information required to be provided to the Administrator under section 4;

“(3) a nontechnical summary of each risk evaluation conducted under section 6(b);

List.

“(4) a list of the studies considered by the Administrator in carrying out each such risk evaluation, along with the results of those studies; and

“(5) each designation of a chemical substance under section 6(b), along with an identification of the information, analysis, and basis used to make the designations.

“(k) REASONABLY AVAILABLE INFORMATION.—In carrying out sections 4, 5, and 6, the Administrator shall take into consideration information relating to a chemical substance or mixture, including hazard and exposure information, under the conditions of use, that is reasonably available to the Administrator.

Deadlines.

“(l) POLICIES, PROCEDURES, AND GUIDANCE.—

“(1) DEVELOPMENT.—Not later than 2 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall develop any policies, procedures, and guidance the Administrator determines are necessary to carry out the amendments to this Act made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act.

“(2) REVIEW.—Not later than 5 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and not less frequently than once every 5 years thereafter, the Administrator shall—

“(A) review the adequacy of the policies, procedures, and guidance developed under paragraph (1), including with respect to animal, nonanimal, and epidemiological test methods and procedures for assessing and determining risk under this title; and

“(B) revise such policies, procedures, and guidance as the Administrator determines necessary to reflect new scientific developments or understandings.

“(3) TESTING OF CHEMICAL SUBSTANCES AND MIXTURES.—  
The policies, procedures, and guidance developed under paragraph (1) applicable to testing chemical substances and mixtures shall—

Applicability.

“(A) address how and when the exposure level or exposure potential of a chemical substance or mixture would factor into decisions to require new testing, subject to the condition that the Administrator shall not interpret the lack of exposure information as a lack of exposure or exposure potential; and

“(B) describe the manner in which the Administrator will determine that additional information is necessary to carry out this title, including information relating to potentially exposed or susceptible populations.

“(4) CHEMICAL SUBSTANCES WITH COMPLETED RISK ASSESSMENTS.—With respect to a chemical substance listed in the 2014 update to the TSCA Work Plan for Chemical Assessments for which the Administrator has published a completed risk assessment prior to the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator may publish proposed and final rules under section 6(a) that are consistent with the scope of the completed risk assessment for the chemical substance and consistent with other applicable requirements of section 6.

“(5) GUIDANCE.—Not later than 1 year after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall develop guidance to assist interested persons in developing and submitting draft risk evaluations which shall be considered by the Administrator. The guidance shall, at a minimum, address the quality of the information submitted and the process to be followed in developing draft risk evaluations for consideration by the Administrator.

Deadline.

“(m) REPORT TO CONGRESS.—

“(1) INITIAL REPORT.—Not later than 6 months after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall submit to the Committees on Energy and Commerce and Appropriations of the House of Representatives and the Committees on Environment and Public Works and Appropriations of the Senate a report containing an estimation of—

Estimate.

“(A) the capacity of the Environmental Protection Agency to conduct and publish risk evaluations under section 6(b)(4)(C)(i), and the resources necessary to conduct the minimum number of risk evaluations required under section 6(b)(2);

“(B) the capacity of the Environmental Protection Agency to conduct and publish risk evaluations under section 6(b)(4)(C)(ii), the likely demand for such risk evaluations, and the anticipated schedule for accommodating that demand;

“(C) the capacity of the Environmental Protection Agency to promulgate rules under section 6(a) as required

based on risk evaluations conducted and published under section 6(b); and

“(D) the actual and anticipated efforts of the Environmental Protection Agency to increase the Agency’s capacity to conduct and publish risk evaluations under section 6(b).

“(2) SUBSEQUENT REPORTS.—The Administrator shall update and resubmit the report described in paragraph (1) not less frequently than once every 5 years.

“(n) ANNUAL PLAN.—

“(1) IN GENERAL.—The Administrator shall inform the public regarding the schedule and the resources necessary for the completion of each risk evaluation as soon as practicable after initiating the risk evaluation.

“(2) PUBLICATION OF PLAN.—At the beginning of each calendar year, the Administrator shall publish an annual plan that—

“(A) identifies the chemical substances for which risk evaluations are expected to be initiated or completed that year and the resources necessary for their completion;

“(B) describes the status of each risk evaluation that has been initiated but not yet completed; and

“(C) if the schedule for completion of a risk evaluation has changed, includes an updated schedule for that risk evaluation.

“(o) CONSULTATION WITH SCIENCE ADVISORY COMMITTEE ON CHEMICALS.—

Deadline.

“(1) ESTABLISHMENT.—Not later than 1 year after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Administrator shall establish an advisory committee, to be known as the Science Advisory Committee on Chemicals (referred to in this subsection as the ‘Committee’).

“(2) PURPOSE.—The purpose of the Committee shall be to provide independent advice and expert consultation, at the request of the Administrator, with respect to the scientific and technical aspects of issues relating to the implementation of this title.

“(3) COMPOSITION.—The Committee shall be composed of representatives of such science, government, labor, public health, public interest, animal protection, industry, and other groups as the Administrator determines to be advisable, including representatives that have specific scientific expertise in the relationship of chemical exposures to women, children, and other potentially exposed or susceptible subpopulations.

“(4) SCHEDULE.—The Administrator shall convene the Committee in accordance with such schedule as the Administrator determines to be appropriate, but not less frequently than once every 2 years.

“(p) PRIOR ACTIONS.—

“(1) RULES, ORDERS, AND EXEMPTIONS.—Nothing in the Frank R. Lautenberg Chemical Safety for the 21st Century Act eliminates, modifies, or withdraws any rule promulgated, order issued, or exemption established pursuant to this Act before the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act.

“(2) PRIOR-INITIATED EVALUATIONS.—Nothing in this Act prevents the Administrator from initiating a risk evaluation



regarding a chemical substance, or from continuing or completing such risk evaluation, prior to the effective date of the policies, procedures, and guidance required to be developed by the Administrator pursuant to the amendments made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act.

“(3) ACTIONS COMPLETED PRIOR TO COMPLETION OF POLICIES, PROCEDURES, AND GUIDANCE.—Nothing in this Act requires the Administrator to revise or withdraw a completed risk evaluation, determination, or rule under this Act solely because the action was completed prior to the development of a policy, procedure, or guidance pursuant to the amendments made by the Frank R. Lautenberg Chemical Safety for the 21st Century Act.”.

#### SEC. 18. STATE PROGRAMS.

Section 28 of the Toxic Substances Control Act (15 U.S.C. 2627) is amended by striking subsections (c) and (d).

#### SEC. 19. CONFORMING AMENDMENTS.

(a) TABLE OF CONTENTS.—The table of contents in section 1 of the Toxic Substances Control Act is amended—

(1) by striking the item relating to section 6 and inserting the following:

“Sec. 6. Prioritization, risk evaluation, and regulation of chemical substances and mixtures.”;

(2) by striking the item relating to section 10 and inserting the following:

“Sec. 10. Research, development, collection, dissemination, and utilization of information.”;

(3) by striking the item relating to section 14 and inserting the following:

“Sec. 14. Confidential information.”; and

(4) by striking the item relating to section 25.

(b) SECTION 2.—Section 2(b)(1) of the Toxic Substances Control Act (15 U.S.C. 2601(b)(1)) is amended by striking “data” both places it appears and inserting “information”.

(c) SECTION 3.—Section 3 of the Toxic Substances Control Act (15 U.S.C. 2602) is amended—

(1) in paragraph (8) (as redesignated by section 3 of this Act), by striking “data” and inserting “information”; and

(2) in paragraph (15) (as redesignated by section 3 of this Act)—

(A) by striking “standards” and inserting “protocols and methodologies”;

(B) by striking “test data” both places it appears and inserting “information”; and

(C) by striking “data” each place it appears and inserting “information”.

(d) SECTION 4.—Section 4 of the Toxic Substances Control Act (15 U.S.C. 2603) is amended—

(1) in subsection (b)—

(A) in paragraph (1)—

- (i) in the paragraph heading, by adding “, ORDER, OR CONSENT AGREEMENT” at the end; and
- (ii) by striking “rule” each place it appears and inserting “rule, order, or consent agreement”;
- (B) in paragraph (2)(B), by striking “rules” and inserting “rules, orders, and consent agreements”;
- (C) in paragraph (3)(A), by striking “rule” and inserting “rule or order”; and
- (D) in paragraph (4)—
  - (i) by striking “rule under subsection (a)” each place it appears and inserting “rule, order, or consent agreement under subsection (a)”;
  - (ii) by striking “repeals the rule” each place it appears and inserting “repeals the rule or order or modifies the consent agreement to terminate the requirement”; and
  - (iii) by striking “repeals the application of the rule” and inserting “repeals or modifies the application of the rule, order, or consent agreement”;
- (2) in subsection (c)—
  - (A) in paragraph (1), by striking “rule” and inserting “rule or order”;
  - (B) in paragraph (2)—
    - (i) in subparagraph (A), by striking “a rule under subsection (a) or for which data is being developed pursuant to such a rule” and inserting “a rule, order, or consent agreement under subsection (a) or for which information is being developed pursuant to such a rule, order, or consent agreement”;
    - (ii) in subparagraph (B), by striking “such rule or which is being developed pursuant to such rule” and inserting “such rule, order, or consent agreement or which is being developed pursuant to such rule, order, or consent agreement”; and
    - (iii) in the matter following subparagraph (B), by striking “the rule” and inserting “the rule or order”;
  - (C) in paragraph (3)(B)(i), by striking “rule promulgated” and inserting “rule, order, or consent agreement”; and
  - (D) in paragraph (4)—
    - (i) by striking “rule promulgated” each place it appears and inserting “rule, order, or consent agreement”;
    - (ii) by striking “such rule” each place it appears and inserting “such rule, order, or consent agreement”; and
    - (iii) in subparagraph (B), by striking “the rule” and inserting “the rule or order”;
- (3) in subsection (d), by striking “rule” and inserting “rule, order, or consent agreement”; and
- (4) in subsection (g), by striking “rule” and inserting “rule, order, or consent agreement”.
- (e) SECTION 5.—Section 5 of the Toxic Substances Control Act (15 U.S.C. 2604) is amended—
  - (1) in subsection (b)—
    - (A) in paragraph (1)(A)—

- (i) by striking “rule promulgated” and inserting “rule, order, or consent agreement”; and
  - (ii) by striking “such rule” and inserting “such rule, order, or consent agreement”;
  - (B) in paragraph (1)(B), by striking “rule promulgated” and inserting “rule or order”; and
  - (C) in paragraph (2)(A)(ii), by striking “rule promulgated” and inserting “rule, order, or consent agreement”; and
  - (2) in subsection (d)(2)(C), by striking “rule” and inserting “rule, order, or consent agreement”.
- (f) SECTION 7.—Section 7(a) of the Toxic Substances Control Act (15 U.S.C. 2606(a)) is amended—
- (1) in paragraph (1), in the matter following subparagraph (C), by striking “a rule under section 4, 5, 6, or title IV or an order under section 5 or title IV” and inserting “a determination under section 5 or 6, a rule under section 4, 5, or 6 or title IV, an order under section 4, 5, or 6 or title IV, or a consent agreement under section 4”; and
  - (2) in paragraph (2), by striking “subsection 6(d)(2)(A)(i)” and inserting “section 6(d)(3)(A)(i)”.
- (g) SECTION 8.—Section 8(a) of the Toxic Substances Control Act (15 U.S.C. 2607(a)) is amended—
- (1) in paragraph (2)(E), by striking “data” and inserting “information”; and
  - (2) in paragraph (3)(A)(ii)(I), by striking “or an order in effect under section 5(e)” and inserting “, an order in effect under section 4 or 5(e), or a consent agreement under section 4”.
- (h) SECTION 9.—Section 9 of the Toxic Substances Control Act (15 U.S.C. 2608) is amended—
- (1) in subsection (a), by striking “section 6” each place it appears and inserting “section 6(a)”; and
  - (2) in subsection (d), by striking “Health, Education, and Welfare” and inserting “Health and Human Services”.
- (i) SECTION 10.—Section 10 of the Toxic Substances Control Act (15 U.S.C. 2609) is amended—
- (1) in the section heading, by striking “**DATA**” and inserting “**INFORMATION**”;
  - (2) by striking “Health, Education, and Welfare” each place it appears and inserting “Health and Human Services”;
  - (3) in subsection (b)—
    - (A) in the subsection heading, by striking “**DATA**” and inserting “**INFORMATION**”;
    - (B) by striking “data” and inserting “information” in paragraph (1);
    - (C) by striking “data” and inserting “information” in paragraph (2)(A); and
    - (D) by striking “a data” and inserting “an information” in paragraph (2)(B); and
  - (4) in subsection (g), by striking “data” and inserting “information”.
- (j) SECTION 11.—Section 11(b)(2) of the Toxic Substances Control Act (15 U.S.C. 2610(b)(2)) is amended—
- (1) by striking “data” each place it appears and inserting “information”; and

(2) in subparagraph (E), by striking “rule promulgated” and inserting “rule promulgated, order issued, or consent agreement entered into”.

(k) SECTION 12.—Section 12(b)(1) of the Toxic Substances Control Act (15 U.S.C. 2611(b)(1)) is amended by striking “data” both places it appears and inserting “information”.

(l) SECTION 15.—Section 15(1) of the Toxic Substances Control Act (15 U.S.C. 2614(1)) is amended by striking “(A) any rule” and all that follows through “or (D)” and inserting “any requirement of this title or any rule promulgated, order issued, or consent agreement entered into under this title, or”.

(m) SECTION 19.—Section 19 of the Toxic Substances Control Act (15 U.S.C. 2618) is amended—

(1) in subsection (a)—

(A) in paragraph (1)(A)—

(i) by striking “Not later than 60 days after the date of the promulgation of a rule under section 4(a), 5(a)(2), 5(b)(4), 6(a), 6(e), or 8, or under title II or IV” and inserting “Except as otherwise provided in this title, not later than 60 days after the date on which a rule is promulgated under this title, title II, or title IV, or the date on which an order is issued under section 4, 5(e), 5(f), or 6(i)(1),”;

(ii) by striking “such rule” and inserting “such rule or order”; and

(iii) by striking “such a rule” and inserting “such a rule or order”;

(B) in paragraph (1)(B)—

(i) by striking “Courts” and inserting “Except as otherwise provided in this title, courts”; and

(ii) by striking “subparagraph (A) or (B) of section 6(b)(1)” and inserting “this title, other than an order under section 4, 5(e), 5(f), or 6(i)(1),”;

(C) in paragraph (2)—

(i) by striking “rulemaking record” and inserting “record”; and

(ii) by striking “based the rule” and inserting “based the rule or order”;

(2) in subsection (b)—

(A) by striking “review a rule” and inserting “review a rule, or an order under section 4, 5(e), 5(f), or 6(i)(1),”;

(B) by striking “such rule” and inserting “such rule or order”;

(C) by striking “the rule” and inserting “the rule or order”;

(D) by striking “new rule” each place it appears and inserting “new rule or order”; and

(E) by striking “modified rule” and inserting “modified rule or order”; and

(3) in subsection (c)—

(A) in paragraph (1)—

(i) in subparagraph (A)—

(I) by striking “a rule” and inserting “a rule or order”; and

(II) by striking “such rule” and inserting “such rule or order”;

(ii) in subparagraph (B)—

(I) in the matter preceding clause (i), by striking “a rule” and inserting “a rule or order”;

(II) by amending clause (i) to read as follows:  
“(i) in the case of review of—

“(I) a rule under section 4(a), 5(b)(4), 6(a) (including review of the associated determination under section 6(b)(4)(A)), or 6(e), the standard for review prescribed by paragraph (2)(E) of such section 706 shall not apply and the court shall hold unlawful and set aside such rule if the court finds that the rule is not supported by substantial evidence in the rulemaking record taken as a whole; and

“(II) an order under section 4, 5(e), 5(f), or 6(i)(1), the standard for review prescribed by paragraph (2)(E) of such section 706 shall not apply and the court shall hold unlawful and set aside such order if the court finds that the order is not supported by substantial evidence in the record taken as a whole; and”;

(III) by striking clauses (ii) and (iii) and the matter after clause (iii) and inserting the following:

“(ii) the court may not review the contents and adequacy of any statement of basis and purpose required by section 553(c) of title 5, United States Code, to be incorporated in the rule or order, except as part of the record, taken as a whole.”; and

(iii) by striking subparagraph (C); and

(B) in paragraph (2), by striking “any rule” and inserting “any rule or order”.

(n) SECTION 20.—Section 20(a)(1) of the Toxic Substances Control Act (15 U.S.C. 2619(a)(1)) is amended by striking “order issued under section 5” and inserting “order issued under section 4 or 5”.

(o) SECTION 21.—Section 21 of the Toxic Substances Control Act (15 U.S.C. 2620) is amended—

(1) in subsection (a), by striking “order under section 5(e) or (6)(b)(2)” and inserting “order under section 4 or 5(e) or (f)”; and

(2) in subsection (b)—

(A) in paragraph (1), by striking “order under section 5(e), 6(b)(1)(A), or 6(b)(1)(B)” and inserting “order under section 4 or 5(e) or (f)”; and

(B) in paragraph (4)(B)—

(i) in the matter preceding clause (i), by striking “order under section 5(e) or 6(b)(2)” and inserting “order under section 4 or 5(e) or (f)”; and

(ii) in clause (i), by striking “order under section 5(e)” and inserting “order under section 4 or 5(e)”; and

(iii) in clause (ii), by striking “section 6 or 8 or an order under section 6(b)(2), there is a reasonable basis to conclude that the issuance of such a rule or order is necessary to protect health or the environment against an unreasonable risk of injury to health or the environment” and inserting “section 6(a) or 8 or an order under section 5(f), the chemical substance or mixture to be subject to such rule or order presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk

factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation, under the conditions of use”.

(p) SECTION 24.—Section 24(b)(2)(B) of the Toxic Substances Control Act (15 U.S.C. 2623(b)(2)(B)) is amended—

- (1) by inserting “and” at the end of clause (i);
- (2) by striking clause (ii); and
- (3) by redesignating clause (iii) as clause (ii).

(q) SECTION 26.—Section 26 of the Toxic Substances Control Act (15 U.S.C. 2625) is amended—

- (1) in subsection (e), by striking “Health, Education, and Welfare” each place it appears and inserting “Health and Human Services”; and
- (2) in subsection (g)(1), by striking “data” and inserting “information”.

(r) SECTION 27.—Section 27(a) of the Toxic Substances Control Act (15 U.S.C. 2626(a)) is amended—

- (1) by striking “Health, Education, and Welfare” and inserting “Health and Human Services”;
- (2) by striking “test data” both places it appears and inserting “information”;
- (3) by striking “rules promulgated” and inserting “rules, orders, or consent agreements”; and
- (4) by striking “standards” and inserting “protocols and methodologies”.

(s) SECTION 30.—Section 30(2) of the Toxic Substances Control Act (15 U.S.C. 2629(2)) is amended by striking “rule” and inserting “rule, order, or consent agreement”.

15 USC 2601  
note.

**SEC. 20. NO RETROACTIVITY.**

Nothing in sections 1 through 19, or the amendments made by sections 1 through 19, shall be interpreted to apply retroactively to any State, Federal, or maritime legal action filed before the date of enactment of this Act.

42 USC 280g–17  
note.

**SEC. 21. TREVOR’S LAW.**

(a) PURPOSES.—The purposes of this section are—

- (1) to provide the appropriate Federal agencies with the authority to help conduct investigations into potential cancer clusters;
- (2) to ensure that Federal agencies have the authority to undertake actions to help address cancer clusters and factors that may contribute to the creation of potential cancer clusters; and
- (3) to enable Federal agencies to coordinate with other Federal, State, and local agencies, institutes of higher education, and the public in investigating and addressing cancer clusters.

(b) DESIGNATION AND INVESTIGATION OF POTENTIAL CANCER CLUSTERS.—Part P of title III of the Public Health Service Act (42 U.S.C. 280g et seq.) is amended by adding at the end the following:

42 USC 280g–17.

**“SEC. 399V–6. DESIGNATION AND INVESTIGATION OF POTENTIAL CANCER CLUSTERS.**

“(a) DEFINITIONS.—In this section:

- “(1) CANCER CLUSTER.—The term ‘cancer cluster’ means the incidence of a particular cancer within a population group,

a geographical area, and a period of time that is greater than expected for such group, area, and period.

“(2) PARTICULAR CANCER.—The term ‘particular cancer’ means one specific type of cancer or a type of cancers scientifically proven to have the same cause.

“(3) POPULATION GROUP.—The term ‘population group’ means a group, for purposes of calculating cancer rates, defined by factors such as race, ethnicity, age, or gender.

“(b) CRITERIA FOR DESIGNATION OF POTENTIAL CANCER CLUSTERS.—

“(1) DEVELOPMENT OF CRITERIA.—The Secretary shall develop criteria for the designation of potential cancer clusters.

“(2) REQUIREMENTS.—The criteria developed under paragraph (1) shall consider, as appropriate—

“(A) a standard for cancer cluster identification and reporting protocols used to determine when cancer incidence is greater than would be typically observed;

“(B) scientific screening standards that ensure that a cluster of a particular cancer involves the same type of cancer, or types of cancers;

“(C) the population in which the cluster of a particular cancer occurs by factors such as race, ethnicity, age, and gender, for purposes of calculating cancer rates;

“(D) the boundaries of a geographic area in which a cluster of a particular cancer occurs so as not to create or obscure a potential cluster by selection of a specific area; and

“(E) the time period over which the number of cases of a particular cancer, or the calculation of an expected number of cases, occurs.

“(c) GUIDELINES FOR INVESTIGATION OF POTENTIAL CANCER CLUSTERS.—The Secretary, in consultation with the Council of State and Territorial Epidemiologists and representatives of State and local health departments, shall develop, publish, and periodically update guidelines for investigating potential cancer clusters. The guidelines shall—

“(1) recommend that investigations of cancer clusters—

“(A) use the criteria developed under subsection (b);

“(B) use the best available science; and

“(C) rely on a weight of the scientific evidence;

“(2) provide standardized methods of reviewing and categorizing data, including from health surveillance systems and reports of potential cancer clusters; and

“(3) provide guidance for using appropriate epidemiological and other approaches for investigations.

“(d) INVESTIGATION OF CANCER CLUSTERS.—

“(1) SECRETARY DISCRETION.—The Secretary—

“(A) in consultation with representatives of the relevant State and local health departments, shall consider whether it is appropriate to conduct an investigation of a potential cancer cluster; and

“(B) in conducting investigations shall have the discretion to prioritize certain potential cancer clusters, based on the availability of resources.

“(2) COORDINATION.—In investigating potential cancer clusters, the Secretary shall coordinate with agencies within the

Consultation.  
Publication.

Recommendation.

Consultation.

Department of Health and Human Services and other Federal agencies, such as the Environmental Protection Agency.

“(3) BIOMONITORING.—In investigating potential cancer clusters, the Secretary shall rely on all appropriate biomonitoring information collected under other Federal programs, such as the National Health and Nutrition Examination Survey. The Secretary may provide technical assistance for relevant biomonitoring studies of other Federal agencies.

“(e) DUTIES.—The Secretary shall—

“(1) ensure that appropriate staff of agencies within the Department of Health and Human Services are prepared to provide timely assistance, to the extent practicable, upon receiving a request to investigate a potential cancer cluster from a State or local health authority;

“(2) maintain staff expertise in epidemiology, toxicology, data analysis, environmental health and cancer surveillance, exposure assessment, pediatric health, pollution control, community outreach, health education, laboratory sampling and analysis, spatial mapping, and informatics;

“(3) consult with community members as investigations into potential cancer clusters are conducted, as the Secretary determines appropriate;

“(4) collect, store, and disseminate reports on investigations of potential cancer clusters, the possible causes of such clusters, and the actions taken to address such clusters; and

“(5) provide technical assistance for investigating cancer clusters to State and local health departments through existing programs, such as the Epi-Aids program of the Centers for Disease Control and Prevention and the Assessments of Chemical Exposures Program of the Agency for Toxic Substances and Disease Registry.”.

Rural Healthcare  
Connectivity Act  
of 2016.

## TITLE II—RURAL HEALTHCARE CONNECTIVITY

47 USC 609 note. **SEC. 201. SHORT TITLE.**

This title may be cited as the “Rural Healthcare Connectivity Act of 2016”.

**SEC. 202. TELECOMMUNICATIONS SERVICES FOR SKILLED NURSING FACILITIES.**

(a) IN GENERAL.—Section 254(h)(7)(B) of the Communications Act of 1934 (47 U.S.C. 254(h)(7)(B)) is amended—

- (1) in clause (vi), by striking “and” at the end;
- (2) by redesignating clause (vii) as clause (viii);
- (3) by inserting after clause (vi) the following:

“(vii) skilled nursing facilities (as defined in section 1819(a) of the Social Security Act (42 U.S.C. 1395i–3(a))); and”;

- (4) in clause (viii), as redesignated, by striking “clauses (i) through (vi)” and inserting “clauses (i) through (vii)”.

47 USC 254 note.

(b) SAVINGS CLAUSE.—Nothing in subsection (a) shall be construed to affect the aggregate annual cap on Federal universal service support for health care providers under section 54.675 of title 47, Code of Federal Regulations, or any successor regulation.



(c) EFFECTIVE DATE.—The amendments made by subsection (a) shall apply beginning on the date that is 180 days after the date of the enactment of this Act. 47 USC 254 note.

Approved June 22, 2016.

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LEGISLATIVE HISTORY—H.R. 2576:

HOUSE REPORTS: No. 114–176 (Comm. on Energy and Commerce).

CONGRESSIONAL RECORD:

Vol. 161 (2015): June 23, considered and passed House.  
Dec. 17, considered and passed Senate, amended.

Vol. 162 (2016): May 24, House concurred in Senate amendment with an amendment.

June 7, Senate concurred in House amendment.

DAILY COMPILATION OF PRESIDENTIAL DOCUMENTS (2016):

June 22, Presidential remarks.



**APPENDIX B**  
**Comparative Analysis of Potential Human Health Impacts**

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## ACRONYMS AND ABBREVIATIONS

2011 Mercury Storage EIS	<i>Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement</i>
2013 Mercury Storage SEIS	<i>Final Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement</i>
ACGIH	American Conference of Governmental Industrial Hygienists
AEGL	Acute Exposure Guideline Level
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FL	frequency level
FMCSA	Federal Motor Carrier Safety Administration
HWAD	Hawthorne Army Depot
INL	Idaho National Laboratory
Interim Guidance	U.S. Department of Energy Interim Guidance on Packaging, Transportation, Receipt, Management, and Long-Term Storage of Elemental Mercury
mg/kg	milligram per kilogram
MT	metric ton
NEPA	<i>National Environmental Policy Act</i>
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
PAC	Protective Action Criteria
PGA	peak ground acceleration
RCRA	<i>Resource Conservation and Recovery Act</i>
SEIS	supplemental environmental impact statement
SL	severity level
SRS	Savannah River Site
TLV	threshold limit values
TWA	time-weighted average
WCS	Waste Control Specialists LLC
WIPP	Waste Isolation Pilot Plant
Perma-Fix DSSI	Perma-Fix Diversified Scientific Services, Inc
Y-12	Y-12 National Security Complex

## B Comparative Analysis of Potential Human Health Impacts

### B.1 INTRODUCTION

As described in Chapter 1 of this *Mercury Storage Supplemental Environmental Impact Statement* (Mercury Storage SEIS-II), DOE prepared the *Long-Term Management and Storage of Elemental Mercury Final Environmental Impact Statement* (2011 Mercury Storage EIS) (DOE 2011) and the *Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement* (2013 Mercury Storage SEIS) (DOE 2013) to evaluate the following action alternatives:

- New construction at the Grand Junction Disposal Site in Colorado;
- New construction at the Hanford Site in Washington;
- Existing storage buildings at the Hawthorne Army Depot (HWAD) in the Central Magazine Area in Nevada;
- New construction at the Idaho National Laboratory's (INL's) Idaho Nuclear Technology and Engineering Center;
- Existing storage buildings at INL's Radioactive Waste Management Complex;
- Existing building at the General Services Administration's Bannister Federal Complex's Kansas City Plant in Missouri;
- New construction at the Savannah River Site (SRS) in South Carolina;
- New construction at the Waste Control Specialists LLC (WCS) site near Andrews, Texas (including interim storage in the existing Container Storage Building); and
- Three locations for new construction at the Waste Isolation Pilot Plant (WIPP)<sup>1</sup> in New Mexico.

As discussed in Chapter 2, DOE prepared this SEIS-II to evaluate the following eight alternative sites as potential locations for the long-term management and storage of elemental mercury:

- HWAD;
- WCS site near Andrews, Texas;
- Bethlehem Apparatus Company in Bethlehem, Pennsylvania;
- Perma-Fix Diversified Scientific Services, Inc. (Perma-Fix DSSI) in Kingston, Tennessee;
- Veolia in Gum Springs, Arkansas; and
- Clean Harbors (facilities in Pecatonica, Illinois; Greenbrier, Tennessee; and Tooele, Utah).

Two of these sites, HWAD and WCS, were previously analyzed in the 2011 Mercury Storage EIS. The proposed alternative at HWAD has not changed since 2011. WCS was previously analyzed as a site with new construction and with interim storage in the existing Container Storage Building. This SEIS-II analyzes only storage in the existing Container Storage Building at WCS. For further description of these alternatives, see Chapter 2, Sections 2.2 and 2.3, of this SEIS-II.

The general framework used in 2011 and 2013 for assessing the risks to human health from potential exposure to mercury from implementing the Proposed Action described in Chapter 2 has not changed and is described in Appendix D of the 2011 Mercury Storage EIS and 2013 Mercury

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<sup>1</sup> The 2103 Mercury Storage EIS considered three WIPP alternatives. All other alternatives were considered in the 2011 Mercury Storage EIS.

Storage SEIS. Information and data supporting the risk assessment such as definition of human receptors, mercury toxicity and protection standards, and onsite and offsite accident and release scenarios do not depend on the location or specific characteristics of each alternative site. This information from Appendix D of the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS is incorporated herein by reference and in many cases restated here for the convenience of the reader and augmented where appropriate with data specific to the alternative sites evaluated.<sup>2</sup> The purpose of this appendix is twofold:

- Describe changes from the 2011 Mercury Storage EIS and the 2013 Mercury Storage SEIS human health analyses (e.g., those that arise from site-specific features or require updating based on new data), and
- Describe how the 2011 and 2013 analyses are adopted and applied to the alternative sites evaluated in this SEIS-II.

The majority of this appendix is a summary of information provided in Appendix D of the 2011 Mercury Storage EIS to aid in understanding the background associated with the human health analyses. The primary changes from the previous NEPA analyses that are reflected in this SEIS-II include the following:

- Six new alternative sites that have not been previously evaluated in a DOE EIS or SEIS.
- Reduction in the quantity of mercury to be shipped and stored (see Section B.2).
- Updates to the definition of severity levels (SL-I and SL-II) for mercury inhalation risks as described in the 2013 Mercury Storage SEIS.

## **B.2 QUANTITY OF MERCURY TO BE SHIPPED AND STORED**

As discussed in Section 2.1.2 of this SEIS-II, the analysis in the 2011 Mercury Storage EIS and the 2013 Mercury Storage SEIS assumed a total accumulation during a 40-year period of 10,000 metric tons (MT) (11,000 tons) of elemental mercury. The current projected accumulation of mercury during a 40-year period of analysis is 7,000 MT (see Chapter 2, Table 2-2). This represents a 30-percent reduction in the analyzed quantity of mercury to be shipped and stored.

## **B.3 RISK ASSESSMENT SCOPE AND FRAMEWORK**

The framework and the methods for the human health risk assessment are described in Appendix D of the 2011 Mercury Storage EIS. In the 2013 Mercury Storage SEIS, the human health risk assessment was updated based on a revision of the Protection Action Criteria for mercury (DOE 2012). This changed the definition of the severity levels (i.e., magnitude of impacts) for assessing acute-inhalation exposures to the public under certain accident scenarios (DOE 2013, Appendices

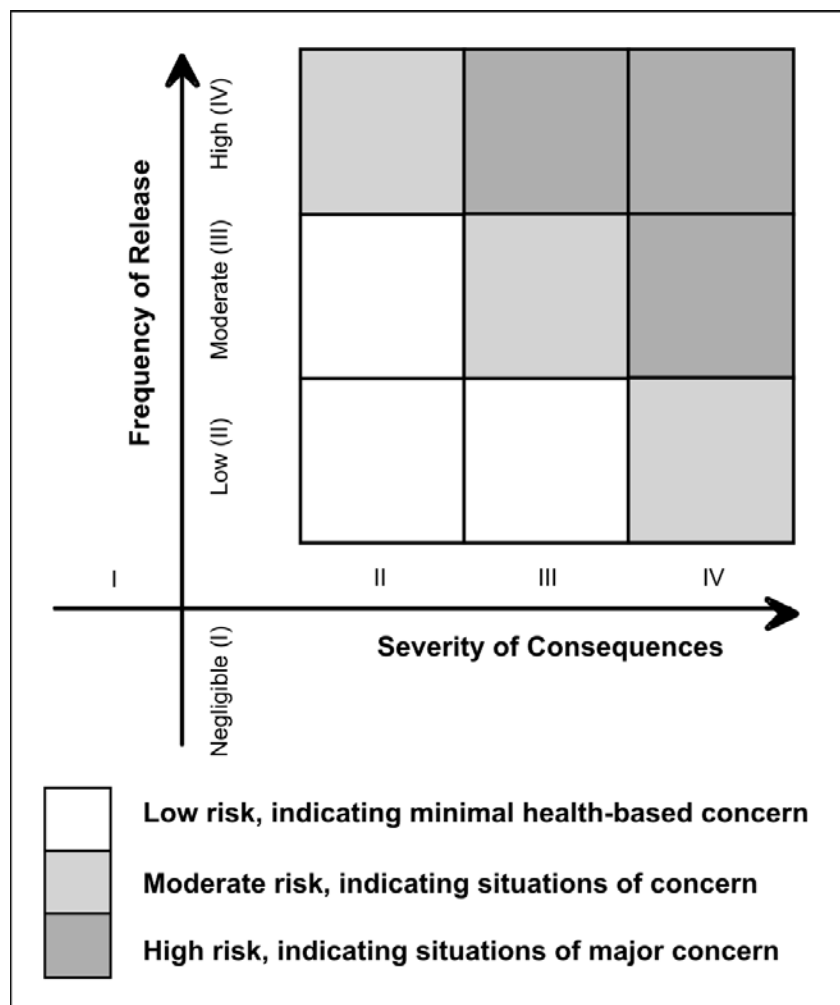
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<sup>2</sup> The 2011 Mercury Storage EIS and 2013 SEIS included an assumption of 99.5% elemental mercury by volume, which was an assumption in DOE's 2009 Interim Guidance. This SEIS-II does not include this assumption; however, the analysis does assume that only RCRA hazardous waste with codes D009 and/or U151 would be in the containers, ensuring that no other hazardous materials need to be considered. Additionally, RCRA regulations require that the containers not include contaminants that would be corrosive or other incompatible materials (e.g., acid solutions, chloride salt solutions, water) that would compromise the integrity of the containers during storage, per 40 CFR 264/265.172.

B, D, and E). However, the methodology and approach to conducting the human health risk assessment remained otherwise unchanged from that described in the 2011 Mercury Storage EIS.

The framework for the risk assessment is based on estimated frequency of occurrence of an accident and the consequence (i.e., severity) of the accident. The risk is defined as a combination of frequency of occurrence and severity of consequences as illustrated in the risk ranking matrix reproduced in Figure B-1. As defined in the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS, the human health analysis assesses risk of exposure to three human receptors:

- Involved workers – those inside the storage building or working on unloading mercury trucks,
- Noninvolved workers – those nearby but still on site, and
- Members of the public/public receptors.



**Figure B-1 Risk (frequency and consequence) Ranking Matrix**

The frequency of occurrence and severity of consequences are described and discussed in Appendix D, Section D.1, of the 2011 Mercury Storage EIS and updated in the 2013 Mercury Storage SEIS.



The following sections of this appendix discuss the components of the human health risk assessment described in the sections of Appendix D in the 2011 Mercury Storage EIS with a focus on data and information that is specific to each alternative site and application of that information to the risk assessment for the alternative sites evaluated in this SEIS-II. Section B.4 summarizes the descriptions and estimated frequencies of the accident scenarios considered in the previous EISs. Section B.5 summarizes information about the toxicity of mercury exposure to humans. Section B.6 summarizes the exposure assessment and the human health consequences and risks for the alternative sites evaluated in this SEIS-II.

#### **B.4 ONSITE AND OFFSITE RELEASE EVENTS AND THEIR FREQUENCIES**

Appendix D, Section D.2, of the 2011 Mercury Storage EIS discusses potential mercury releases and their estimated frequency during normal operations, onsite operational accidents, onsite accidents caused by external events, intentional destructive acts, and offsite transportation accidents. The frequency levels (FL) for accidental events are assigned to one of four bands based on the estimated probability of the events:

- FL-IV (high) – more than or equal to once in 100 years: ( $f \geq 10^{-2}$  per year)
- FL-III (moderate) – less than once in 100 years to once in 10,000 years: ( $10^{-2}$  per year  $> f \geq 10^{-4}$  per year)
- FL-II (low) – less than once in 10,000 years to once in 1 million years: ( $10^{-4}$  per year  $> f \geq 10^{-6}$  per year)
- FL-I (negligible) – less than once in 1 million years: ( $f < 10^{-6}$  per year)

A summary of those scenarios that were carried forward for further analysis in the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS are listed in Table B-1. Those scenarios not carried forward for further analysis in the previous analyses include those with frequency levels determined to be negligible or whose effects were bounded by another scenario. This SEIS-II evaluates the same scenarios analyzed in 2011 and 2013 except as noted below.

As discussed in Chapter 2, Section 2.1.3, of this SEIS-II, rail was determined to be an unlikely transportation mode. Rail is not reevaluated in this SEIS-II and is not included in the scenarios listed in Table B-1 for offsite transportation. The previous risk assessments analyzed truck transportation scenarios assuming full-truck shipments and half-full truck shipments (i.e., effectively doubling the required transportation miles). This SEIS-II analyzes only a full-truck shipment scenario. Based on existing accumulated mercury (e.g., Y-12, commercial storage, and ore processors), approximately 2,000 MT (almost 30 percent of the expected 7,000 MT of mercury) would be available for immediate shipment, and it would be unreasonable to assume that mercury would be shipped with less than full truck shipments. The majority of the remaining mercury would be accumulated by Nevada ore processors at a rate of about 120 MT/year (see Chapter 2, Table 2-2 of this SEIS-II), or from nine to ten full-truck shipments per year. Although it is reasonable to expect that some truck shipments would be less than full capacity, it is unrealistic to assume with a mercury accumulation rate of nine to ten full-truck shipments per year that a large number of truck shipments would be made at half capacity (see Appendix D, Sections D.2.3–D.2.7, in the 2011 Mercury Storage EIS for a description of each release scenario).

The earthquake release scenario is considered a bounding external event (i.e., worst-case scenario) for several potential external events such as floods and tornadoes. Earthquake-induced ground motion is expressed in units of percent *g* (force of acceleration relative to that of Earth's gravity). The 2011 Mercury Storage EIS and the 2013 Mercury Storage SEIS used the latest probabilistic peak ground acceleration (PGA) data from the U.S. Geological Survey to assess seismic hazard among the various mercury storage candidate sites. The PGA values cited in the previous analyses are based on a 2-percent frequency of exceedance in 50 years. This equates to an annual frequency (chance) of occurrence of about 1 in 2,500 years, or  $4 \times 10^{-4}$  per year (FL-III). Because the PGA values are location specific, the most recent PGA values were used for the alternative sites evaluated in this SEIS-II (see the respective Geologic Hazard sections in Chapter 3 and Table B-2 below). The range of PGA values for alternative sites evaluated in this SEIS-II (0.05–0.62 *g*) is similar to the range of values for alternative sites evaluated in the 2011 Mercury Storage EIS (Appendix D, Table D-5) (0.12–0.57 *g*); in both instances, the site with the highest PGA is HWAD.

**Table B-1 Summary of Onsite and Offsite Accident Scenarios and Their Estimated Frequency**

Hazard	Activity	Postulated Scenario	Frequency of Release <sup>a</sup>	Comments <sup>a</sup>
Toxic	Onsite storage	Slow leak/release of liquid mercury	High (FL-IV)	Requires undetected failure of container.
Kinetic	Onsite material handling	Single flask dropped during handling, resulting in breach	Moderate (FL-III)	Consolidation of partially filled pallets could lead to a relatively large number of handling events per year. Could only occur inside building.
Kinetic	Onsite material handling	Single pallet dropped during transfer to storage racks, resulting in breach	Moderate (FL-III)	Assumes pallet dropped from 12 feet and all 49 flasks breached. Conservatively assumed that it could occur outside the building as well as inside.
Kinetic	Onsite material handling	Triple-pallet collapse	Moderate (FL-III)	Requires failure of storage rack. Conservatively assumes triple stacking is utilized in the building. Could only occur inside building.
Kinetic	Onsite material handling	Single 1-MT container drop	Moderate (FL-III)	Could occur inside or outside building. Assumes container dropped from a height of less than 5 feet.
Earthquake	All activities	Earthquake causes building damage and pallets and/or flasks to fall and spill	Moderate <sup>b</sup> (FL-III)	Requires an earthquake and failure of flasks or 1-MT containers. Two alternatives considered: building remains recognizably intact or building collapses completely.
Surface transportation	Offsite transport	Truck crash during transportation of mercury; fire breaks out	Moderate (FL-III)	Impact breaches flasks or 1-MT containers; spill and fire occur after crash.

Hazard	Activity	Postulated Scenario	Frequency of Release <sup>a</sup>	Comments <sup>a</sup>
Surface transportation	Offsite transport	Truck crashes during transportation of mercury; fire breaks out in wet weather	Low (FL-II)	Impact breaches flasks or 1-MT containers; spill and fire occur after crash.
Surface transportation	Offsite transport	Truck crashes and mercury spills (no fire)	Moderate (FL-III)	Impact breaches flasks or 1-MT containers; subsequently evaporates.
Surface transportation	Offsite transport	Truck crashes with mechanically induced fatality	Moderate (FL-III)	Impact causes fatality.
Intentional destructive act	Transport	Full gasoline tanker driven into truck; fire breaks out.	Not Assessed	Gasoline fire causes release of mercury.

FL=frequency level; MT=metric-ton.

a For justification of frequency assignments and comments, see Appendix D, Sections D.2.4 and D.2.5, of the 2011 Mercury Storage EIS.

b No effort is made to split the moderate frequency between earthquake with building collapse and earthquake without building collapse (i.e., conservatively, the frequency of occurrence of both scenarios is moderate).

Source: DOE 2011, Table D-18

**Table B-2 Peak Ground Acceleration at Alternative Mercury Storage Sites**

Mercury Storage Site Alternative	Peak Ground Acceleration (g) <sup>a,b</sup>
Hawthorne Army Depot, Nevada	0.62
Waste Control Specialists LLC, Texas	0.08
Bethlehem Apparatus Company, Pennsylvania	0.10
Perma-Fix DSSI, Tennessee	0.33
Veolia Gum Springs, Arkansas	0.10
Clean Harbors Grassy Mountain, Utah	0.16
Clean Harbors Greenbrier, Tennessee	0.14
Clean Harbors Pecatonica, Illinois	0.05

a This is the value that has a 1 in 2,500 ( $4 \times 10^{-4}$  per year) annual frequency of exceedance, expressed in units of percent (g), or the force of acceleration relative to that of Earth's gravity.

b The peak ground acceleration values for the sites analyzed in the 2011 Mercury Storage EIS ranged from 0.12 to 0.57 g (DOE 2011, Table D-5).

Source: USGS 2021

The probabilities associated with a potential offsite transportation accident are based on the estimated route miles from the current mercury location to the long-term storage site. This information is site specific and therefore is different than the values used in 2011. As identified in Section 2.4 of this SEIS-II, the transportation analysis assumes that mercury being received from ore processors would be shipped to a RCRA-permitted treatment facility prior to receipt at the DOE storage facility. This treatment is a reasonably foreseeable action connected to the storage of mercury. Any mercury that requires pre-storage treatment, could be shipped to a RCRA-

permitted treatment facility prior to shipment to a DOE storage facility. Therefore, the analysis of offsite transportation accident probabilities in this SEIS-II considers truck transportation miles from the mercury source location to a treatment facility, as necessary, prior to shipment to a DOE storage facility. One example of a known commercial entity that currently performs this treatment is Bethlehem Apparatus in Bethlehem, Pennsylvania.

Mercury designated for storage is expected to originate from five source locations (see Chapter 2, Figure 2-2). Mercury currently stored at Y-12; Union Grove, Wisconsin; and Emelle, Alabama, is assumed to be shipped directly to a storage location. Mercury generated by ore processors (assumed to come from Carlin, Nevada, or the Port of Oakland in California) could require pre-storage treatment. The estimated “truck miles per shipment” in Table B-3 from Carlin, Nevada, and the Port of Oakland include the total distance from the source location to Bethlehem, Pennsylvania, and then to each respective storage facility alternative. Because all the mercury requiring treatment would originate in the western United States, using Bethlehem, Pennsylvania, as the assumed treatment location maximizes the total truck miles, providing a more conservative analysis. The truck miles per shipment were then multiplied by the estimated number of truck shipments required to transport mercury over the 40-year accumulation period (see Chapter 2, Table 2-5) to estimate total number of truck miles to transport all mercury to a specific storage site (Table B-3).<sup>3</sup>

Data from the U.S. Department of Transportation Federal Motor Carrier Safety Administration (FMCSA) indicate that truck accident rates have changed slightly since the data used in the 2011 EIS, which used accident rate data (truck accidents per 100 million miles) obtained from the FMCSA for the 4-year period 2004–2007. For this SEIS-II, DOE reviewed similar data from FMCSA for the 4-year period 2016–2019. The updated data indicate that the accident rates for different scenarios (property damage only, injuries, and fatalities) are relatively consistent with the data used in the 2011 Mercury Storage EIS. Incident rates of accidents involving property damage decreased 7.4 percent from 2004–2007 to 2016–2019. Incident rates of accidents involving injuries increased 8.1 percent from 2004–2007 to 2016–2019. Incident rates of accidents involving fatalities decreased 21 percent from 2004–2007 to 2016–2019 (FMCSA 2021a, 2021b, 2021c). Considering that these accident rates have mostly decreased and are only used in the transportation analysis to determine the appropriate FL range, the small changes in initiating accident rates would not result in different FLs for the analysis of transportation risk.

The total truck shipment miles to the alternative sites in the 2011 Mercury Storage EIS ranged from 754,705 to 1,251,164 miles. As identified in Table B-3, the total truck shipment miles to the alternative sites evaluated in this SEIS-II range from 1,081,265 to 2,344,270 miles. These estimates are higher than mileage estimates in the 2011 EIS because they include additional miles for the potential shipment of the mercury inventory from ore processors to a treatment facility prior to storage. In the 2011 Mercury Storage EIS, the highest probability of a truck accident with a spill ( $2.5 \times 10^{-3}$ ) was associated with the longest truck route of 1,251,164 miles. The longest truck route in this SEIS-II is 87 percent longer. Increasing the mileage by 87 percent only increases the

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<sup>3</sup> For the purpose of analyses and to be conservative, the total number of truck miles assumes that 7,000 MT of elemental mercury is shipped to each facility, even though several of the facilities do not have the capacity to store this amount. Any amount less than 7,000 MT shipped to any facility would result in impacts less than estimated in this appendix.

**Table B-3 Truck Miles Per Shipment and Total Truck Miles Over the 40-Year Period from Mercury Source Locations to Each Storage Alternative**

Site Alternative	Mercury Source Location					Total Truck Miles <sup>c</sup>
	Y-12 National Security Complex	Ore Processors (assumed shipped from Carlin, Nevada) <sup>b</sup>	Other Ore Processors (via Port of Oakland) <sup>b</sup>	Commercial Storage		
				WM, Union Grove, Wisconsin	WM, Emelle, Alabama	
Hawthorne Army Depot	2,300 <sup>a</sup>	5,000	5,480	1,940	2,080	2,344,270
Waste Control Specialists	1,220	4,190	4,670	1,320	925	1,887,330
Bethlehem Apparatus Company	650	2,370	2,850	810	1,000	1,081,265
Perma-Fix DSSI	20	3,030	3,510	630	350	1,289,695
Veolia Gum Springs	585	3,590	4,070	790	405	1,571,380
CH-Grassy Mountain	1,875	4,520	5,000	1,510	1,840	2,101,570
CH-Greenbrier	190	3,190	3,670	535	335	1,369,330
CH-Pecatonica	655	3,205	3,685	85	800	1,419,880
Number of Truck Shipments <sup>d</sup>	80	393	24	8	23	528

CH=Clean Harbors, WM=Waste Management Mercury Waste, Inc. & Chemical Waste Management, Inc.

a Miles rounded to nearest five miles.

b Includes pre-storage shipment to a RCRA-permitted treatment facility prior to transport to the alternative site.

c Total truck miles/alternative site equals number of shipments per site x number of miles from source site summed across shipments from all source locations.

d Assumes full truck shipments (see Chapter 2, Table 2-5, of this SEIS-II).

probability of an accident on the longest truck route to about  $4.7 \times 10^{-3}$ , a value that remains well within the moderate frequency level (FL-III) for any accident scenario. Therefore, the increase in total truck miles to account for potential pre-storage treatment does not change the frequency level of potential accidents for any of the alternative sites when compared to the 2011 analysis.

As discussed in the 2011 Mercury Storage EIS, the only scenario that has the potential for mercury to be deposited on the ground or in waterbodies is one involving a fire, which would cause the mercury to be converted from the elemental form, which has essentially zero potential for deposition or scavenging, to a form that can deposit. A fire would cause the released mercury to rise, so that the only possibility for high levels of mercury to be deposited on the ground near the source is if it is raining while the release is taking place. Appendix D, Table D-16, in the 2011 Mercury Storage EIS presents a detailed analysis of the probability of rainfall at potential mercury storage sites done by analyzing hourly rainfall data over a 5-year period. That analysis covered a geographic range similar to the alternative sites evaluated in this SEIS-II. Because the various

potential transportation routes would pass through regions of different rainfall characteristics, an average rainfall probability of the sites of 0.032 inch was used. The probability of rainfall at sites evaluated in 2011 ranged from 0.016 inch at HWAD in Nevada, to 0.056 inch at SRS in South Carolina. Although this SEIS-II includes more sites located in higher rainfall areas, most of the mercury shipments would originate in the arid climate of Nevada, and it is reasonable to use a similar probability of rainfall in this analysis. The predicted frequencies of crashes with fires during rainfall are given in Table B-4. Similar to the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS, all fall within the low frequency range, or less than once in 10,000 years to once in one million years.

**Table B-4 Predicted Frequencies of Crashes with Fires During Rainfall**

Alternative Site	Frequency of Accidents with Fires During Rainfall (per year)
Hawthorne Army Depot	$1.2 \times 10^{-5}$
	Low (FL-II)
Waste Control Specialists	$9.7 \times 10^{-6}$
	Low (FL-II)
Bethlehem Apparatus Company	$5.6 \times 10^{-6}$
	Low (FL-II)
Perma-Fix DSSI	$6.7 \times 10^{-6}$
	Low (FL-II)
Veolia Gum Springs	$8.1 \times 10^{-6}$
	Low (FL-II)
Clean Harbors Grassy Mountain	$1.1 \times 10^{-5}$
	Low (FL-II)
Clean Harbors Greenbrier	$7.1 \times 10^{-6}$
	Low (FL-II)
Clean Harbors Pecatonica	$7.3 \times 10^{-6}$
	Low (FL-II)

## B.5 HUMAN TOXICITY ASSESSMENT FOR MERCURY

The potential toxicity of mercury to human receptors defines the consequence component of the risk assessment matrix (Figure B-1). As described and discussed in the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS, the risk assessment considers three forms of mercury: (1) elemental mercury, which is the form in which mercury would be stored and transported; (2) inorganic/divalent mercury, which is the form into which elemental mercury can be converted if it is involved in a fire; and (3) methylmercury, which can potentially be formed if elemental mercury or inorganic mercury becomes mixed with soil or sediment. In its Mercury Study Report to Congress (EPA 1997a, 1997b, 1997c), the U.S. Environmental Protection Agency (EPA) provided exhaustive descriptions of the potential effects of these forms of mercury on humans. Appendix D, Sections D.3.1–D.3.3, of the 2011 Mercury Storage EIS provides a summary of that information.

The principal route of exposure to elemental mercury is by inhalation. Once absorbed through the lungs, it is readily distributed throughout the body and may cause a range of adverse neurological effects at low exposure levels, such as tremors; emotional liability (changeable mood, irritability, excessive shyness, loss of confidence, and nervousness); insomnia; muscle weakness, twitching, and atrophy; headaches; and impairment of cognitive function. Elemental mercury may also result in adverse renal effects and pulmonary dysfunction.

In contrast to elemental mercury, ingestion with subsequent absorption through the gastrointestinal tract is an important route of exposure for inorganic mercury salts. Adverse effects of exposure to inorganic mercury include kidney disease, peripheral and motor neurotoxicity, and renal impairment.

Methylmercury is a highly toxic substance that is readily absorbed through the gastrointestinal tract. As is well known, the principal concern is ingestion of methylmercury in fish. Once in the body, it readily passes into the adult and fetal brain, where it accumulates and is subsequently converted to inorganic mercury. Consequently, the nervous system is considered to be the critical target organ system for methylmercury toxicity. The nervous system of developing organisms is considered of special concern.

The definition of SL-I through SL-IV as shown earlier in Figure B-1 for human receptors is described in detail in Appendix D, Section D.1.1, of the 2011 Mercury Storage EIS and updated in Appendix E, Section E.2, of the 2013 Mercury Storage SEIS. It is necessary to assign these levels for several cases: (a) acute-inhalation exposures to the public, (b) acute-inhalation exposures to workers, (c) chronic-inhalation exposures to the public and workers, (d) exposures to mercury deposited on the ground, and (e) consumption of methylmercury in fish. Section D.1.1.2 of the 2011 Mercury Storage EIS and Section E.2 of the 2013 Mercury Storage SEIS discuss how these SLs are assigned. The updates to these SLs in the 2013 Mercury Storage SEIS are primarily associated with the definition of the Protective Action Criteria-1 (PAC-1) value and the definition of inhalation SL-I and SL-II.

### **B.5.1 Acute-Inhalation Exposures – Involved and Noninvolved Workers and Public Receptors**

The assignment of SLs for acute inhalation (i.e., inhalation of elemental mercury or inorganic mercury) is discussed in detail in Appendix D, Sections D.1.1.2.1 and D.1.1.2.3, of the 2011 Mercury Storage EIS and updated in Appendix E, Section E.2, of the 2013 Mercury Storage SEIS. The SLs are related to EPA's acute exposure guideline levels (AEGLs), DOE's PACs and temporary emergency exposure limits, and the American Conference of Governmental Industrial Hygienists' (ACGIH's) threshold limit values (TLVs), as summarized in Table B-5.

The three levels of the AEGLs are described in the 2013 Mercury Storage SEIS in Appendix D, Section D.3.1. Table B-6 shows the EPA's interim AEGLs for elemental mercury. Note that AEGL-1 has not been defined for mercury because mercury is odorless and without irritation at concentrations that may be harmful (EPA 2010). As discussed in Appendix B, Section B.2, of the 2013 Mercury Storage SEIS, DOE determined that a "surrogate AEGL-1" to define the boundary between SL-II and SL-I should be the PAC-1 of 0.15 milligram per cubic meter for durations of exposure up to one hour and the ACGIH TLV for an eight-hour time-weighted average of 0.025 milligram per cubic meter for durations of exposure exceeding one hour. This SEIS-II also uses this approach.

**Table B-5 Definition of Consequence Severity Bands for Acute Inhalation of Elemental Mercury and Inorganic Mercury – Public Receptors<sup>a</sup>**

Acute-Inhalation Consequence Severity Level	Corresponding Airborne Concentrations of Elemental Mercury	Expected Health Effects
Inhalation SL-IV	$\geq$ AEGL-3 (see Table B-6)	Potential for lethality as concentration increases above AEGL-3
Inhalation SL-III	$<$ AEGL-3 and $\geq$ AEGL-2 (see Table B-6)	Potential for severe, sublethal, irreversible health effects
Inhalation SL-II	$<$ AEGL-2 and (a) $\geq$ PAC-1 <sup>b</sup> ( $t_d \leq 1$ hour) (b) $\geq$ ACGIH TLV 8-hour TWA ( $t_d > 1$ hour)	Potential for transient health effects, reversible on cessation of exposure
Inhalation SL-I	(a) $<$ PAC-1 ( $t_d \leq 1$ hour) (b) $<$ ACGIH TLV 8-hour TWA ( $t_d > 1$ hour)	Negligible-to-very-low consequences

$\geq$ =greater than or equal to;  $<$ =less than; ACGIH=American Conference of Governmental Industrial Hygienists; AEGL=acute exposure guideline level; mg/m<sup>3</sup>=milligrams per cubic meter; PAC=Protective Action Criterion;  $t_d$ =duration of exposure; TLV=threshold limit value; TWA=time-weighted average.

a Exposure period up to eight hours.

b PAC-1=0.15 mg/m<sup>3</sup> (DOE 2012); ACGIH-0=0.025 mg/m<sup>3</sup> (OSHA 2012).

Source: DOE 2013, Table D-5

**Table B-6 EPA Interim Values for Mercury Vapor AEGLs**

Exposure Guideline	10 minutes	30 minutes	60 minutes	4 hours	8 hours
AEGL-1 <sup>a</sup>	NR	NR	NR	NR	NR
AEGL-2	3.1 mg/m <sup>3</sup>	2.1 mg/m <sup>3</sup>	1.7 mg/m <sup>3</sup>	0.67 mg/m <sup>3</sup>	0.33 mg/m <sup>3</sup>
AEGL-3	16 mg/m <sup>3</sup>	11 mg/m <sup>3</sup>	8.9 mg/m <sup>3</sup>	2.2 mg/m <sup>3</sup>	2.2 mg/m <sup>3</sup>

ACGIH=American Conference of Governmental Industrial Hygienists; AEGL=acute exposure guideline level;

EPA=U.S. Environmental Protection Agency; mg/m<sup>3</sup>=milligrams per cubic meter; NR=not recommended.

a Table B-5 uses PAC-1 and the ACGIH TLV for 8-hour time-weighted average as a surrogate AEGL-1. The reasons for doing so are described in Appendix B, Section B.2, of the 2013 Mercury Storage SEIS. In short, EPA has yet to publish values for the AEGL-1 for elemental mercury.

Note: Reported values are in milligrams per cubic meter, not parts per million. AEGLs for durations of exposure other than those explicitly listed in this table are obtained by linear interpolation.

Source: EPA 2010

Appendix D, Section D.1.1.2.3, of the 2011 Mercury Storage EIS also explains why the severity bands in Table B-5 also apply to inorganic/divalent mercury as well as to elemental mercury. AEGLs and PACs for methylmercury were not used because the accident scenarios considered are such that they can only lead to inhalation of elemental mercury or inorganic mercury. Methylmercury can only be formed after deposition of the inorganic mercury on the ground or on water and mixing with soil or sediment.

As discussed in Appendix D, Section D.3.1, of the 2013 Mercury Storage SEIS, it is reasonable to adopt the same acute-inhalation SLs in Table B-5 for workers as for members of the public (in conditions of acute exposure, but not for chronic inhalation under normal operating conditions).



### **B.5.2 Chronic-Inhalation Exposures – Involved and Noninvolved Workers and Public Receptors**

As discussed in Appendix D, Section D.3.1, of the 2013 Mercury Storage SEIS, there is no need to define the thresholds for SL-III and SL-IV for chronic-inhalation exposures to humans inside a building because it is assumed that, during normal operations, involved workers would never be exposed to airborne concentrations of mercury vapor above the ACGIH's time-weighted average (TWA)/TLV of 0.025 mg/m<sup>3</sup> of mercury vapor (OSHA 2012). Referring to Figure B-1, this defines the threshold between SL-I and SL-II. The analysis performed for the 2013 Mercury Storage SEIS showed that involved worker exposures would always be below this threshold, assuming a combination of ventilation, inspection, monitoring, and use of personal protective equipment, as required by RCRA requirements, as well as applicable national consensus codes and standards (e.g., Occupational Safety and Health Administration [OSHA], National Fire Protection Association [NFPA]). Appendix D, Section D.4.1.2, of the 2011 Mercury Storage EIS reviews observed concentrations near the Defense Logistics Agency mercury storage warehouses (Shim et al. 2002) and confirms that these observations are consistent with the prediction that long-term exposure to elemental mercury vapor during normal operations is well below EPA's reference concentration of 3.0×10<sup>-4</sup> milligram per cubic meter. This threshold would also apply to noninvolved workers and public receptors.

### **B.5.3 Exposure to Deposited Mercury – All Human Receptors**

Appendix D, Section D.1.1.2.6, of the 2011 Mercury Storage EIS discusses a value for the level of deposited mercury that can be used to define the boundary between SL-I and SL-II based on an extensively studied real-life case: that of the remediation of East Fork Poplar Creek in Oak Ridge, Tennessee, and its floodplain. It was judged that the boundary between SL-I (negligible-to-very-low consequences) and SL-II (onset of adverse consequences due to ingestion of inorganic mercury) is a deposited concentration of inorganic mercury of 180 milligrams per kilogram. Beyond that, no guidance has been found as to the level that would cause irreversible health effects or fatalities. The analysis performed for the 2013 Mercury Storage SEIS showed that there are no scenarios in which mercury would be deposited (either by dry or wet deposition) at levels above 180 milligrams per kilogram, so there is no need to define the thresholds for SL-III and SL-IV.

### **B.5.4 Exposure to Methylmercury Accumulated in Fish – All Human Receptors**

As discussed in the 2013 Mercury Storage SEIS, the accumulation of methylmercury in fish, subsequently consumed by humans, is a concern. The EPA criterion for methylmercury in fish is 0.3 milligram of methylmercury per kilogram of fish tissue, wet weight (EPA 2009). Consumption of methylmercury in amounts less than this criterion is expected to have negligible effects on human health. Therefore, the EPA criterion is taken to be the boundary between SL-I and SL-II for health effects resulting from the average American's consumption of fish.

### **B.5.5 Summary Consequence Severity Level**

Table B-7 summarizes the potential consequence SLs for the exposure scenarios. These data are used later in Section B.6.

**Table B-7 Summary of Definitions of Consequence Severity Levels**

Severity Level	Acute-Inhalation Exposures – Involved and Noninvolved Workers and Public Receptors <sup>a</sup>		Chronic-Inhalation Exposures – Involved Workers <sup>b</sup>		Chronic-Inhalation Exposures – Noninvolved Workers and Public Receptors <sup>b</sup>		Exposure to Deposited Mercury – All Human Receptors		Exposure to Methylmercury Accumulated in Fish – All Human Receptors	
	Level Definition	Consequence	Level Definition	Consequence	Level Definition	Consequence	Level Definition	Consequence	Level Definition	Consequence
IV	≥ AEGL-3	Potential for lethality as concentration increases above AEGL-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
III	< AEGL-3 and ≥ AEGL-2	Potential for severe, sublethal, irreversible health effects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
II	< AEGL-2 and ≥ PAC-1 ( $t_d \leq 1$ hour) or ≥ ACGIH TLV 8-hour TWA ( $t_d > 1$ hour)	Potential for reversible health effects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I	< PAC-1 ( $t_d \leq 1$ hour) or < ACGIH TLV 8-hour TWA ( $t_d > 1$ hour)	Potential for negligible-to-very-low health consequences	< ACGIH's 8-hour TWA/TLV 0.025 mg/m <sup>3</sup>	Negligible	< EPA RfC 0.0003 mg/m <sup>3</sup>	Negligible	< ATSDR-approved cleanup level (180 mg/kg) for East Fork Poplar Creek	Negligible	Methylmercury limit in fish tissue (mg/kg) < 0.3	Negligible

≥=greater than or equal to; <=less than; ≤=less than or equal to; ACGIH=American Conference of Governmental Industrial Hygienists; AEGL=Acute Exposure Guideline Level; ATSDR=Agency for Toxic Substances and Disease Registry; EPA=U.S. Environmental Protection Agency; mg/kg=milligrams per kilogram; mg/m<sup>3</sup>=milligrams per cubic meter; N/A=not applicable; PAC=Protective Action Criterion; RfC=reference concentration;  $t_d$ =duration of exposure; TLV=threshold limit value; TWA=time-weighted average

a Applies to both elemental mercury vapor and inorganic mercury.

b Elemental mercury vapor inhalation.

## **B.6 EXPOSURE ASSESSMENT AND HUMAN RISK ANALYSIS**

### **B.6.1 Exposure During Normal Operating Conditions**

This pathway applies to any alternative or location in which the mercury is stored for an extended period of time. Exposures to involved workers could arise during normal operating conditions from small amounts of elemental mercury vapor escaping from storage containers or from residual contamination. Mercury vapor transported downwind could then be inhaled by noninvolved workers or members of the public. Because the mercury would escape as elemental mercury vapor, virtually no deposition of mercury would occur; therefore, mercury inhalation is the only exposure route of concern. Because the alternative sites would maintain similar normal operating conditions such as those required by the RCRA permit, as well as other operational codes and standards (e.g., OSHA, NFPA), the exposure analysis for the involved worker, noninvolved worker, and public receptor would be the same as the analyses in the 2011 Mercury Storage EIS, with exposure standards as updated in the 2013 Mercury Storage SEIS. Those analyses are summarized in the following sections and updated with site-specific information as needed.

#### **B.6.1.1 Involved Worker**

As discussed in the Appendix D, Section D.4.1.1.1, of the 2011 Mercury Storage EIS, it is assumed that involved workers, during normal operations, would never be exposed to airborne concentrations of mercury vapor above the ACGIH's 8-hour TWA/TLV of 0.025 mg/m<sup>3</sup> of mercury vapor. This would be achieved by a combination of ventilation, inspection, monitoring, and use of personal protective equipment. Inspections on receipt of mercury storage containers for storage, and routine inspections during storage, would decrease the risk of residual mercury contamination. Given the above assumptions about the operation of the facility, the concentrations to which the involved worker would be exposed would always be negligible (SL-I) during normal operations, and hence the associated human health risk would be negligible (DOE 2011). The 2011 Mercury Storage EIS describes historical data from other facilities that have stored mercury, which indicates that peak and average concentrations of mercury vapor can be kept below the ACGIH's 8-hour TWA/TLV of 0.025 mg/m<sup>3</sup> with no difficulty. Based on this information, the health risk to an involved worker from exposure to mercury vapor during normal operations at any of the alternative sites evaluated in this SEIS-II is expected to be negligible.

#### **B.6.1.2 Noninvolved Worker and Public Receptor**

As explained in Appendix D, Sections D.2.3 and D.4.1.2, of the 2011 Mercury Storage EIS, a mercury leakage sufficient to cover the bottom of a spill tray, which then remains undetected indefinitely, is taken as a surrogate scenario for the purposes of estimating impacts on noninvolved workers and the public during normal operations. With the required inspections and monitoring during receipt and storage of mercury containers, it is inconceivable that such a leak would go undetected, so this is considered a very conservative (i.e., unlikely) scenario.

This scenario has mercury evaporating in a steady state from the spill tray, which would leak from the storage building and mix in the turbulent building wake. The building wake contains a volume of air on the downwind side of a building in which turbulence generated by wind passing the building causes thorough mixing. As described in Appendix D, Section D.4.1.2, of the 2011

Mercury Storage EIS, the mixing in the building wake is inversely proportional to the area of the smallest side (i.e., width times height) of the building. In 2011, the predicted concentration in the wake of a generic standardized building (506-feet long by 336-feet wide by 20-feet high) for alternative sites with new construction would be no more than  $2.16 \times 10^{-5}$  mg/m<sup>3</sup>. To adjust this value for existing buildings of various sizes, building wake factors are calculated based on the smallest cross-sectional area of each building relative to the generic standardized building (i.e., cross-sectional areas of generic building/alternative site building). Smaller buildings would have higher wake factors and therefore higher potential mercury concentrations because of less building turbulence and less mixing.

Table B-8 shows specifications for each building associated with the alternative sites, including the building wake factors for each building. Table B-9 provides the estimated building wake concentrations for the evaluated accident scenarios (discussed in Section B.6.2). The building wake factors (unitless) range from 1.62 to 9.33 (the building wake factors for the existing buildings evaluated in 2011 ranged from 0.42 to 9.16). The highest building wake concentration under a chronic release scenario would be no more than 9.33 times higher than the generic standardized building evaluated in 2011, or approximately 0.0002 mg/m<sup>3</sup> (first row of Table B-9), slightly higher than the highest estimated concentration reported in the 2011 Mercury Storage EIS. As stated in the 2011 Mercury Storage EIS, the appropriate concentration for comparison is the EPA's AEGL concentration of 0.0003 mg/m<sup>3</sup> (Table B-7), below which long-term concentrations are considered to be negligible. The noninvolved worker might actually be in the turbulent building wake. The public receptor would be farther downwind, at which point even more dilution of the plume would have occurred. Therefore, for all sites, the predicted airborne concentrations encountered by the noninvolved worker and the public receptor would be negligible (SL-I), and the associated health risks likewise would be negligible. Measurements of mercury concentrations near the former Defense National Stockpile Center mercury storage warehouses and the Y-12 mercury storage building indicate values well below the EPA's reference concentration under normal operations (DOE 2011, Section D.4.1.2).

**Table B-8 Size of Buildings and Building Wake Factors for the Site Alternatives**

Site	Length (feet)	Width (feet)	Height (feet)	Number of Buildings	Floor Area (square feet × number of buildings)	Area of Building Smallest Side (width × height)	Building Wake Factor
Hawthorne Army Depot	200	50	14.8	9	90,000	740	9.08
	160	50	14.8	10	80,000		
	100	50	14.8	10	50,000		
Waste Control Specialists	190	166	25.0	1	31,540	4,150	1.62
Bethlehem Apparatus Company	192	160	20.0	2	30,720	3,200	2.10
	120	120	24.0		14,400	2,880	2.33
Perma-Fix DSSI	140	60	18.5	1	8,400	1,110	6.05
Veolia Gum Springs <sup>a</sup>	368	47	44.9	1	17,296	2,964	2.49
	378	67	44.9		25,326		
	210	66	44.9		13,860		
Clean Harbors Grassy Mountain	80	73	30	1	5,840	2,190	3.07
Clean Harbors Greenbrier	100	60	20	1	6,000	1,200	5.60
Clean Harbors Pecatonica	100	60	12	2	6,000	720	9.33
	274	168	18		46,032	3,024	2.22

a Veolia Gum Springs has three floor areas in one building that could be used for long-term mercury storage; an average width of 60 feet was used to calculate the area of the smallest building side.

**Table B-9 Building Wake Concentrations for Site Alternative Buildings**

Scenario	Outdoors (O)/Stability Category or Indoors (I) <sup>a</sup>	Concentration in Building Wake (new construction) <sup>b</sup>	Hawthorne Army Depot	Waste Control Specialists	Bethlehem Apparatus <sup>e</sup>	Perma-Fix DSSI	Veolia Gum Springs	Clean Harbors Grassy Mountain	Clean Harbors Greenbrier	Clean Harbors Pecatonica <sup>f</sup>
Full spill tray (slow release scenario) <sup>c</sup>	I	2.16×10 <sup>-5</sup>	1.96×10 <sup>-4</sup>	3.50×10 <sup>-5</sup>	4.54×10 <sup>-5</sup>	1.31×10 <sup>-4</sup>	5.39×10 <sup>-5</sup>	6.63×10 <sup>-5</sup>	1.21×10 <sup>-4</sup>	2.02×10 <sup>-4</sup>
					5.04×10 <sup>-5</sup>					4.80×10 <sup>-5</sup>
	O/D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	O/F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Single-flask spill	I	9.96×10 <sup>-6</sup>	9.04×10 <sup>-5</sup>	1.61×10 <sup>-5</sup>	2.09×10 <sup>-5</sup>	6.03×10 <sup>-5</sup>	2.48×10 <sup>-5</sup>	3.06×10 <sup>-5</sup>	5.58×10 <sup>-5</sup>	9.30×10 <sup>-5</sup>
					2.32×10 <sup>-5</sup>					2.21×10 <sup>-5</sup>
	O/D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	O/F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Single-pallet spill	I	1.85×10 <sup>-4</sup>	1.68×10 <sup>-3</sup>	3.00×10 <sup>-4</sup>	3.89×10 <sup>-4</sup>	1.12×10 <sup>-3</sup>	4.61×10 <sup>-4</sup>	5.68×10 <sup>-4</sup>	1.04×10 <sup>-3</sup>	1.73×10 <sup>-3</sup>
					4.32×10 <sup>-4</sup>					4.11×10 <sup>-4</sup>
	O/D	4.17×10 <sup>-3</sup>	3.79×10 <sup>-2</sup>	6.75×10 <sup>-3</sup>	8.76×10 <sup>-3</sup>	2.52×10 <sup>-2</sup>	1.04×10 <sup>-2</sup>	1.28×10 <sup>-2</sup>	2.34×10 <sup>-2</sup>	3.89×10 <sup>-2</sup>
					9.73×10 <sup>-3</sup>					9.27×10 <sup>-3</sup>
O/F	4.39×10 <sup>-3</sup>	3.99×10 <sup>-2</sup>	7.11×10 <sup>-3</sup>	9.22×10 <sup>-3</sup>	2.66×10 <sup>-2</sup>	1.10×10 <sup>-2</sup>	1.35×10 <sup>-2</sup>	2.46×10 <sup>-2</sup>	4.10×10 <sup>-2</sup>	
				1.02×10 <sup>-2</sup>					9.76×10 <sup>-3</sup>	
Triple-pallet spill	I	4.21×10 <sup>-4</sup>	3.82×10 <sup>-3</sup>	6.82×10 <sup>-4</sup>	8.84×10 <sup>-4</sup>	2.55×10 <sup>-3</sup>	1.05×10 <sup>-3</sup>	1.29×10 <sup>-3</sup>	2.36×10 <sup>-3</sup>	3.93×10 <sup>-3</sup>
					9.82×10 <sup>-4</sup>					9.36×10 <sup>-4</sup>
	O/D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	O/F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1-MT container spill	I	1.24×10 <sup>-4</sup>	1.13×10 <sup>-3</sup>	2.01×10 <sup>-4</sup>	2.60×10 <sup>-4</sup>	7.51×10 <sup>-4</sup>	3.09×10 <sup>-4</sup>	3.80×10 <sup>-4</sup>	6.94×10 <sup>-4</sup>	1.16×10 <sup>-3</sup>
					2.89×10 <sup>-4</sup>					2.76×10 <sup>-4</sup>
	O/D	8.68×10 <sup>-4</sup>	7.88×10 <sup>-3</sup>	1.41×10 <sup>-3</sup>	1.82×10 <sup>-3</sup>	5.25×10 <sup>-3</sup>	2.17×10 <sup>-3</sup>	2.66×10 <sup>-3</sup>	4.86×10 <sup>-3</sup>	8.10×10 <sup>-3</sup>
					2.03×10 <sup>-3</sup>					1.93×10 <sup>-3</sup>
O/F	7.28×10 <sup>-4</sup>	6.61×10 <sup>-3</sup>	1.18×10 <sup>-3</sup>	1.53×10 <sup>-3</sup>	4.41×10 <sup>-3</sup>	1.82×10 <sup>-3</sup>	2.23×10 <sup>-3</sup>	4.08×10 <sup>-3</sup>	6.79×10 <sup>-3</sup>	
				1.70×10 <sup>-3</sup>					1.62×10 <sup>-3</sup>	

Scenario	Outdoors (O)/Stability Category or Indoors (I) <sup>a</sup>	Concentration in Building Wake (new construction) <sup>b</sup>	Hawthorne Army Depot	Waste Control Specialists	Bethlehem Apparatus <sup>e</sup>	Perma-Fix DSSI	Veolia Gum Springs	Clean Harbors Grassy Mountain	Clean Harbors Greenbrier	Clean Harbors Pecatonica <sup>f</sup>
Earthquake spill – pool confined to building area <sup>d</sup>	I	4.34×10 <sup>-2</sup>	1.69×10 <sup>-1</sup>	1.30×10 <sup>-2</sup>	1.65×10 <sup>-2</sup> 8.58×10 <sup>-3</sup>	1.30×10 <sup>-2</sup>	3.60×10 <sup>-2</sup>	4.57×10 <sup>-3</sup>	8.58×10 <sup>-3</sup>	1.43×10 <sup>-2</sup> 2.61×10 <sup>-2</sup>
	O/D	N/A <sup>d</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	O/F	N/A <sup>d</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

kg=kilograms; kg/m<sup>3</sup>=kilograms per cubic meter; kg/s=kilograms per second; m<sup>2</sup>=square meters; m/s=meters per second; MT=metric ton; N/A=not applicable

a Wind speed for (I)=0.1 m/s, Stability Category D=4.5 m/s, and Stability Category F=1.5 m/s

b Obtained from Appendix D, Table D-24, of the 2011 Mercury Storage EIS.

c Surrogate for a chronic release during normal operations.

d These scenarios assume that the building has collapsed, hence no building wake.

e Bethlehem Apparatus has two buildings, top number is for 945 Bethlehem Dr. and bottom number is for 1055 Win Dr.

f Clean Harbors Pecatonica has two buildings; the top number is for CSB1, the bottom number is for CSB2.

Note: To convert kilograms to pounds, multiply by 2.2046; square meters to square feet, by 10.7639; meters to feet, by 3.281; cubic meters to 8 cubic feet, by 35.315.

## B.6.2 Onsite Accidents

Several onsite accidents that could pose a potential human risk to workers and public receptors were analyzed (see Table B-1). These scenarios are the same as those analyzed in the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS. Table B-10 delineates these accident scenarios as occurring indoors and/or outdoors. As indicated, all accidents could occur inside the building while three could also occur outside.

**Table B-10 Location of Accidents in Onsite Spill Analysis**

Accident Scenario	Could Occur Inside?	Could Occur Outside?
Single-flask spill	Yes	No <sup>a</sup>
Single-pallet spill	Yes	Yes
Triple-pallet spill	Yes	No <sup>b</sup>
1-MT container spill	Yes	Yes
Earthquake spill <sup>c</sup>	Yes <sup>d</sup>	Yes <sup>e</sup>

MT=metric ton

- a Mercury flasks are transported and stored in pallets in a 7×7 flask configuration. Flasks may be removed from a pallet if they are leaking or if flasks from partially filled or smaller pallets are consolidated.
- b Triple-pallet collapse could only occur when the pallets are inside on the storage racks.
- c This scenario encompasses the risk from tornadoes, high winds, and floods.
- d Earthquake leaves building relatively intact.
- e Earthquake causes building collapse.

Appendix D, Section D.4.2.1, of the 2011 Mercury Storage EIS provides a general discussion of the onsite accident scenarios and the physical properties of mercury that help mitigate potential consequences. The following sections provide a summary discussion of potential accident consequences presented in Table B-9.

### B.6.2.1 Involved Worker (Inside) – All Onsite Spill Scenarios, All Sites

The analysis for these scenarios is the same as that in Appendix D, Section D.4.2.2, of the 2011 Mercury Storage EIS. The analysis does not depend on specific characteristics of the alternative sites and assumes that workers would react immediately to an onsite accident, which would reduce potential exposure to the SL-II (low) or even SL-I (very-low-to-negligible) consequences ranges. Combining the consequences in the SL-I to SL-II range with the low (FL-II) or moderate (FL-III) frequencies in Table B-1 gives a risk in the negligible-to-low range for the worker in the building at all sites.

### B.6.2.2 Noninvolved Worker and Public Receptor (Outside) – All Spill Scenarios

Table B-9 provides the estimated concentrations in the building wakes for buildings evaluated in this SEIS-II. For the earthquake scenario with the spill confined to the building, the spill is assumed to spread over the entire floor area. The evaporation rate is then proportional to the area of the mercury pool or the building floor area. The wake factor for the earthquake scenario is first multiplied by the ratio of the building floor area to that of the generic standardized building (170,000 square feet) analyzed in 2011 to account for the proportional increase or decrease in mercury evaporation. Table B-8 presents the dimensions of the buildings evaluated in this SEIS-II.



The last column of Table B-8 shows the factor by which the concentration in the building wake would change relative to the generic standardized building for new construction analyzed in 2011. The greatest factors are just over nine for the smaller of the two buildings at Clean Harbors Pecatonica and the buildings at HWAD. Table B-9 shows the predicted concentrations in the building wake for the onsite scenarios listed in Table B-1 including the slow release from the full spill tray under normal operations. These predicted concentrations are all of negligible (SL-I) severity except for the earthquake scenario at HWAD, where the predicted value ( $0.169 \text{ mg/m}^3$ ) is SL-II, just above the PAC-1 of  $0.15 \text{ mg/m}^3$ . This can be explained by the dimensions of the HWAD buildings, which have a relatively small cross-sectional area (larger wake factor) but are relatively long thus providing a large floor area for evaporation.

For the specific case of an earthquake with building collapse, the spilled mercury is assumed to spread across the full floor area of the building and evaporate as if in open air. Consistent with the 2011 EIS and 2013 SEIS, no attempt was made to differentiate the relative conditional probabilities of the two earthquake scenarios, i.e., they were both assigned a moderate (FL-III) frequency, which is extremely conservative. The evaporation rate for this event is therefore also dependent on the floor area of the building. In the immediate vicinity of the collapsed building, the concentration of mercury vapor would be in the SL-IV range, meaning potentially lethal concentrations could be present. The range of building wake factors and storage building floor areas for the alternative sites evaluated in this SEIS-II are within the range of wake factors and floor areas evaluated in the 2011 Mercury Storage EIS. Appendix E, Table E-2, of the 2013 Mercury Storage SEIS provides the updated maximum predicted distances to consequence SL-II, SL-III, and SL-IV concentrations of mercury vapor. For all alternative sites, the distance to a SL-IV concentration was less than 100 meters. This means that potential mercury concentrations would not be as high as SL-IV at distances of 100 meters or more from the collapsed building. Predicted distances to SL-III concentrations ranged from less than 100 meters to 250 meters at HWAD. Most sites had a predicted distance near 200 meters. The predicted distance to a SL-II (low consequence) level ranged from 200 to 1,010 meters. Based on the similar physical characteristics of the existing storage buildings evaluated in this SEIS-II, it is reasonable to assume that the range of distances to SL-II, SL-III, and SL-IV concentrations would be similar. To evaluate the potential consequences to an individual or public receptor(s), the distance to the nearest site boundary or public receptor was estimated (Table B-11).

Consequences to the public would not be above SL-I for HWAD, WCS, or Clean Harbors Grassy Mountain because the nearest public receptor (public highway or residence) is more than one kilometer away (assuming the maximum predicted distance for SL-II). Other than Bethlehem Apparatus and Clean Harbors Greenbrier, no site has public receptors within 100 meters that could potentially be exposed to a SL-IV level concentrations for any length of time.

With respect to the involved and noninvolved worker and potentially exposed members of the public that were within 200 meters of the facility, the reasoning here is much the same as it was for the involved worker inside the storage building (see Section D.4.2.2 of the 2011 Mercury Storage EIS). The saturated vapor density of mercury at the assumed release temperature of  $20 \text{ }^\circ\text{C}$  is approximately  $14 \text{ mg/m}^3$ . This is only slightly above the SL-IV threshold of  $8.9 \text{ mg/m}^3$  for a 30-minute exposure and is less than the SL-IV of  $16 \text{ mg/m}^3$  for a 10-minute exposure. In practice, should there be an event while a worker is present, that worker would be able to walk out of the cloud rapidly, in much less than the half-an-hour for which he or she could potentially be exposed

to the SL-IV levels and still be able to escape. Similarly, a nearby member of the public could also evacuate the area within this same time frame. Therefore, in practice the worker or member of the public would be exposed to a toxic load much less than that accumulated in a half-hour's exposure to 14 mg/m<sup>3</sup>. If the exposed individual moves rapidly, the equivalent toxic load could conceivably be in the SL-II or even SL-I range. Therefore, combining these with the conservative moderate (FL-III) frequency of an earthquake gives a negligible-to-low risk for both workers and nearby members of the public.

Table B-12 provides a summary of the potential risk from all onsite mercury spill scenarios. Additional discussion of the risks specific to each alternative site location is in Chapter 4 of this SEIS-II.

**Table B-11 Distances to the Closest Site Boundary or Access to Public Receptor – Outdoor Earthquake Scenario**

Site	Distance	Direction	Notes
Hawthorne Army Depot	3.7 km	Southwest	Site boundary
Waste Control Specialists	250 meters	West	Site boundary
	1,000 meters	South	Nearest public access (highway)
	5.4 km	West	Nearest residence
Bethlehem Apparatus – 945 Bethlehem Drive	35 meters	East or South	Site boundary (city street)
	60-90 meters	North or East	Nearest business
	110 meters	North	Nearest residence
Bethlehem Apparatus – 1055 Win Drive	35 meters	East or South	Site boundary (city street)
	30-35 meters	East or West	Nearest business
	125 meters	West	Nearest residence
Perma-Fix DSSI	70 meters	East	Site boundary
	250 meters	South	Nearest public access (highway)
	290 meters	South	Nearest residence
Veolia Gum Springs	100 meters	West	Fence line
	300 meters	South	Nearest public access (rural road)
	850 meters	West	Nearest residence
Clean Harbors Grassy Mountain	430 meters	East	Fence line
	10.7 km	South	Nearest public highway (Interstate-80)
	70 km	West	Nearest residence
Clean Harbors Greenbrier	40 meters	Southwest	Site boundary (street)
	140 meters	Southeast	Nearest residence
Clean Harbors Pecatonica – CSB-1	150 meters	West	Site boundary (highway)
	185 meters	Northwest	Nearest Residence (rural)
Clean Harbors Pecatonica – CSB-2	127 meters	West	Site boundary (highway)
	190 meters	Northwest	Nearest residence (rural)

**Table B-12 Summary of Risks of All Onsite Elemental Mercury Spill Scenarios – All Site Alternatives Scenario Frequency<sup>a</sup>**

Consequence <sup>b</sup>	Risk		
<b>Spills Inside Building<sup>c</sup></b>			
Involved worker	FL-III	SL-I	N–L for all inside spills
Noninvolved worker	FL-III	SL-I	N for all inside spills
Member of the public	FL-III	SL-I	N for all inside spills
<b>Spills Outside Building</b>			
Involved worker	FL-III	SL-I–SL-II	L for outside earthquake spill; N for all other outside spills
Noninvolved worker	FL-III	SL-I–SL-II	
Member of the Public			
1-MT container spill	FL-III	SL-I	N
Single-pallet spill	FL-III	SL-I	N
Earthquake with building collapse	FL-III	SL-I–SL-II	N to L

FL=frequency level; L=low; MT=metric ton; N=negligible; SL=severity level

a For definition of frequency levels, see Section B.4 and Table B-1 of this appendix

b For definitions of severity levels, see Tables B-5 and B-6 of this appendix.

c The inside spill scenarios considered are full spill tray under a pallet, single flask, single pallet, triple pallet, 1-MT container, and earthquake with intact building walls. This scenario encompasses the risk from floods, high winds, and tornadoes.

### B.6.3 Offsite Accidental Transportation Spills of Mercury

The 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS analyzed several transportation accident scenarios:

- Crash with spill of elemental mercury onto the ground without fire;
- Crash with spill of elemental mercury into water;
- Crash with fire in dry weather conditions (without rain) (to analyze the effects of dry deposition);
- Crash with fire in wet weather conditions (with rain) (to analyze the effects of wet deposition); and
- Crash with death caused by mechanical impact.

This SEIS-II evaluates similar transportation scenarios. The estimated frequency of an accident involving a truck transporting mercury is a function of the expected cumulative miles from the point of mercury generation to the particular storage facility. As described in Section B.4, because the analysis in this SEIS-II includes additional miles associated with potential pre-storage treatment, the total truck transportation miles are higher than those analyzed in the 2011 Mercury Storage EIS. However, increasing the total truck miles did not increase the probability of a truck accident with a mercury spill compared to that presented in the 2011 Mercury Storage EIS and 2013 Mercury Storage SEIS. Most of the accident scenarios have moderate (FL-III) frequencies with low frequencies (FL-II) for accident scenarios involving fire with precipitation. These frequency levels are no more than the accident frequencies for the alternative sites analyzed in the 2011 Mercury Storage EIS, Table D-13 and D-17.

The potential exposure of a human receptor to mercury from an offsite truck transportation accident is a function of the crash characteristics (with or without fire), weather conditions (dry or wet), and the probability that a human receptor would be in close enough proximity of the accident to be exposed. These factors are independent of the location or characteristics of the alternative sites. Therefore, the analysis of consequences (i.e., severity level) of offsite truck accidents conducted in 2011 and updated in 2013 is applicable to the risk assessment in this SEIS-II when combined with the site-specific accident frequencies for transportation to each site. Appendix D, Sections D.4.3–D.4.5, in the 2011 Mercury Storage EIS and updated in Appendix E, Section E.2, in the 2013 Mercury Storage SEIS provides a full description and discussion of the consequence analyses for transportation accidents. The applicability of those results combined with the estimated site-specific transportation accident frequencies for alternative sites analyzed in this SEIS-II are described and summarized in the following sections.

### **B.6.3.1 Offsite Transportation Spills of Mercury without Fire**

For transportation accidents without fire, the pathway of exposure would be inhalation of mercury spilled and evaporating from a pool on the ground. Using the example of transportation to the Grand Junction Disposal Site from the 2011 Mercury Storage EIS and updated in the 2013 Mercury Storage SEIS, the estimated maximum distance to the airborne toxic benchmarks were provided as the following ranges: SL-IV, less than 330 feet; SL-III, less than 330 feet; and SL-II, about 750 feet.<sup>4</sup> As a result, a specific individual could not be exposed to concentrations that are greater than SL-I if he or she lives more than about 750 feet from the accident. Conservatively, that specific individual could only be exposed above SL-I if the accident occurs along a 1,500-foot stretch of road, and then only if he or she lives by the roadside. This is a small fraction of any of the routes, approximately 0.0002 of a 1,500-mile trip. For the Grand Junction site, the average length of a truck trip was 1,260 miles, which is slightly shorter than the average length of trips to six of the eight alternative sites analyzed in this SEIS-II (Table B-3). The probability of an accident occurring along any 1,500-foot segment of highway would be the accident frequency times 0.0002 for a 1,500-mile trip. This value is a negligible probability. Therefore, the risk to an individual member of the public from transportation accidents resulting in spills onto the ground without fire would be negligible for all alternative sites, similar to the 2011 analysis.

### **B.6.3.2 Transportation Accident with Spill of Elemental Mercury into Water**

With respect to a transportation accident with a spill of mercury into water, the 2011 Mercury Storage EIS states:

“The overall conclusion is that a direct spillage of mercury into a body of water could be of concern if it is not cleaned up, but that there is generally adequate time for such cleanup. Hence, the consequences to humans could be managed so that they would be negligible or low. Given this assumption and the fact that the frequency of crashes with spills on any of the transportation routes is no more than moderate (and this is an upper bound on the frequency of spills directly into water),

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<sup>4</sup> The predicted distance to SL-IV is in fact different from and less than that for SL-III. However, both distances are less than 330 feet. Since the atmospheric dispersion model is not valid at distances from the source less than 330 feet, both distances are written as “less than 330 feet.”

the risk would be negligible or low for all transportation routes. However, this assessment should be tempered by noting that there is a large range of uncertainty.”

This conclusion is independent of the physical characteristics of each alternative site location and the frequency of transportation accidents is FL-III (moderate) for all site locations. Therefore, the conclusion presented in the 2011 Mercury Storage EIS is applicable to all alternative sites analyzed in this SEIS-II.

### **B.6.3.3 Transportation Accident with Fire and Spill of Elemental Mercury**

Under a truck fire scenario, mercury is postulated to be released into the atmosphere and subsequently dispersed downwind. This analysis is described and discussed in Appendix D, Section D.4.5, of the 2011 Mercury Storage EIS, and the results are updated in Appendix E, Table E-3, of the 2013 Mercury Storage SEIS. This analysis is independent of the physical characteristics of each alternative site. The frequency of potential truck accidents with fire and a mercury spill range from FL-II to FL-III. As discussed in Section B.4, these estimates are similar to those in 2011 even though the cumulative truck transportation miles are higher. Therefore, the analysis in 2011 is applicable to the transportation of mercury to the alternative sites evaluated in this SEIS-II. The predicted range of distances downwind, to which an acute airborne severity level is exceeded for truck crashes with fire, is shown in Table E-3 of the 2013 Mercury Storage SEIS. The 2011 Mercury Storage EIS reported that a specific individual could be exposed to an SL-II airborne concentration of mercury over considerable distances. However, since no truck route has more than a moderate frequency (FL-III), the overall risk would be low for all transportation scenarios and all routes to all sites. Thus, by looking at the distances to which SL-III could be exceeded, the risks appear to be negligible. However, by looking at the distances to which SL-II could be exceeded, the risks of all transportation scenarios with wooden pallet fires would be low. Per Section D.4.5 of the 2011 Mercury Storage EIS, this would be true under all weather conditions (i.e., either by dry deposition or as a result of scavenging by rainfall).

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