[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 955

RIN 1903-AA11

Elemental Mercury Management and Storage Fees

AGENCY: Office of Environmental Management, U.S. Department of Energy.

ACTION: Final rule.

SUMMARY: The Department of Energy publishes a final rule to establish a fee for long-term management and storage of elemental mercury in accordance with the Mercury Export Ban Act.

DATES: This rule is effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

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SUPPLEMENTARY INFORMATION:

I. Background

Section 5(a)(1) of the Mercury Export Ban Act, as amended (MEBA), 42 U.S.C. 6939f(a)(1), provides that the Department of Energy (DOE) shall designate a facility for the purpose of long-term management and storage of elemental mercury generated within the United States[1]. MEBA section 5(b)(1), 42 U.S.C. 6939f(b)(1), further provides that DOE 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. MEBA provides that the fee shall be made publicly available by October 1, 2018. MEBA section 5(b)(1)(B)(i), 42 U.S.C. 6939f(b)(1)(B)(i). The fee may be adjusted annually and shall be set in an amount sufficient to cover costs described in MEBA section 5(b)(2), 42 U.S.C. 6939f(b)(2), subject to certain adjustments. MEBA section 5(b)(1)(B)(ii)-(iv), 42 U.S.C. 6939f(b)(1)(B)(ii)-(iv).

In accordance with MEBA section 5(b), 42 U.S.C. 6939f(b), DOE establishes this fee after consultation with persons who are likely to deliver elemental mercury to a designated facility, and with other interested persons. DOE convened teleconferences from May 2017 through July 2019 and held a meeting on August 1-2, 2018, in Washington, DC, to discuss considerations for the basis of the fee for long-term management and storage of elemental mercury including length of time in storage, the cost of eventual treatment and disposal technology, and different operational scenarios. Participants included representatives of generators producing elemental mercury incidentally from the beneficiation or processing of ore,

[1] Elemental mercury stored at the facility will be classified as a hazardous waste under the Resource Conservation and Recovery Act and its implementing regulations. MEBA Section 3 prohibits the sale, distribution or transfer of elemental mercury stored by DOE, and MEBA Sections 5(d)(1) and 5(g)(2)(B) require that the elemental mercury be stored at facilities having permits to manage RCRA hazardous waste (with the exception of waste elemental mercury generated by certain generators, and which is destined for the long-term storage facility as allowed by 42 USC 6939f(g)(2)(D)). Based on the description of elemental mercury that is destined for and stored at the DOE long-term storage facility, the RCRA hazardous waste code U151 applies (see 40 CFR 261.33).

or related pollution control activities. DOE also consulted with members of the Environmental Technology Council, a private organization whose members include persons likely to deliver elemental mercury to the designated DOE storage facility, on January 23, 2019.

The proposed rule would have established the fee for long-term management and storage of elemental mercury at the designated DOE storage facility as $55,100 per metric ton (MT),[2] plus a receiving charge of $3,250 per shipment. In response to comments received regarding the proposed rule, DOE has adjusted the fee downward to $37,000 per MT. In accordance with MEBA section 5(b)(1)(B)(ii), 42 U.S.C. 6939f(b)(1)(B)(ii), this fee may be adjusted annually according to the factors described in Section II, Discussion of Fee Basis.

II. Discussion of Fee Basis

The fee per metric ton is the sum of (1) the net present value of elementary mercury storage for fifteen years using the 15-year real interest rate from Office of Management and Budget (OMB) Circular A-94; (2) the pro-rated cost of materials required for storage of elemental mercury; (3) the present value of the cost of transporting elemental mercury from the storage facility to a treatment facility in the sixteenth year using the 15-year real interest rate from OMB Circular A-94; and (4) the present value of the cost of treatment and disposal in the sixteenth year using the 15-year real interest rate from OMB Circular A-94. While there is no current regulatory framework to treat and dispose of elemental mercury in the U.S., DOE is assuming a scenario in which there is treatment and disposal capacity for high-concentration elemental mercury waste in the future.

In accordance with 42 U.S.C. 6939f(b)(1)(B), because the designated facility was not operational on January 1, 2019, DOE will adjust the fee adopted in this final rule and assessed

[2] One metric ton is 2,204.62 lbs.

for elemental mercury delivered to the designated facility to subtract the cost of the temporary accumulation for those generators accumulating elemental mercury in a facility pursuant to 42 U.S.C. 6939f(g)(2)(B) and (D)(iv) during the period in which the designated facility is not operational. The subtraction will occur after receipt and approval of invoices outlining acceptable costs.

In accordance with 42 U.S.C. 6939f(b)(1)(B)(ii), DOE may adjust the fee annually. As stated in the proposed rule, DOE will adjust the fee by adjusting the parameters used in calculating the fee. If this adjustment results in a significant adjustment of the fee, DOE will provide an opportunity for public participation. The parameters subject to adjustment are as follows:

- Number of years that elemental mercury will reside in storage at the DOE designated facility.
- Cost to store 1 MT of elemental mercury for the number of years that elemental mercury will reside in storage at the DOE designated facility.
- Pro-rated cost of materials required for storage of elemental mercury.
- Cost of transportation from the elemental mercury storage facility to a treatment facility.
- Cost of treatment of elemental mercury, and disposal of the treated waste form.
- Real interest rate from OMB Circular A-94.

The breakdown of the storage cost per metric ton is given by the following table:

Year	Receipt	Management	Lease	Oversight	State tax	Removal	Total
1	$570.00	$300.84	$300.84	$117.17			$1,288.85
2-15		$300.84	$300.84	$60.17	$120.34		$782.18

16					$120.34	$570.00	$690.34

The cost of storage from the table above is $12,900. The net present value of this total, using the 15-year real interest rate from OMB Circular A-94 (1.45%), is $11,500. DOE has used 6 hours of labor at $95/hour for receipt of each metric ton of elemental mercury for unloading from transportation vehicles, verifying compliance with waste acceptance criteria, logging receipt and placement in storage. Storage costs are $300.84/MT-year for management, and DOE has allocated $30,234.42 lease costs across an initial contracted inventory of 1,206 MT, resulting in $300.84/MT in lease costs. State taxes are computed at 20% beginning 1 year after incurring the management and lease expense. Oversight expenses are computed at 10% of total annual costs for monitoring of program performance and performing audit functions to assure integrity of the waste acceptance process. Finally, DOE has used 6 hours of labor at $95/hour for removal of elemental mercury from racks, logging shipment and placing on transportation vehicles awaiting shipment to a treatment facility. DOE has allocated the cost of acquiring racks and other required materials for storage across an initial contracted inventory of 1,206 MT, resulting in a per metric ton cost for materials of $200/MT. Adding the cost per metric ton of materials to the net present value of the table above results in a total cost of storage of $11,700/MT.

The present value of the cost of transportation in the sixteenth year using the 15-year real interest rate from OMB Circular A-94 (1.45%) is $800. The current year cost basis is $1,000, assuming approximately 1,800 miles traveled.

The present value of the cost of treatment and disposal of elemental mercury in the sixteenth year using the 15-year real interest rate from OMB Circular A-94 (1.45%) is $24,500.

The resulting fee per metric ton is given by the following table:

Storage cost	$11,700
Transportation cost	$800
Treatment and disposal cost	$24,500
Total	$37,000

III. Response to Comments

DOE published the proposed rule to establish the fee for the management and storage of elemental mercury on October 4, 2019. (84 FR 53066). DOE received comments from interested parties that are available at the following link *https://www.regulations.gov/docket?D=DOE-HQ-2019-0037*. DOE responds to the comments received on the proposal in this section, including changes made to reduce the proposed fee that were made in response to those comments.

Comment: DOE must withdraw the proposed rule.

Response: As discussed in the paragraphs that follow, DOE has addressed the comments received on the proposed rule that form the basis for the commenters' withdrawal request and has revised it accordingly. As a result, DOE declines to withdraw the proposed rule.

Comment: DOE failed to provide information in an accompanying administrative record that would allow sufficient public review of the proposed rule.

Response: As required by the Mercury Export Ban Act, as amended (MEBA), DOE consulted with persons likely to deliver elemental mercury to the designated facility on the fee prior to publication of the proposed rule. Beginning in 2016, DOE contacted the operators of facilities

that had made the certification provided for in 42 U.S.C. 6939f (g)(2)(B) to collect information on elemental mercury storage and who was using the storage. This led representatives of the Department to reach out to members of the mining community and to the Nevada Mining Association.

Consultation took the form of meetings and teleconferences, from May 2017 through July 2019, with representatives from Newmont Mining Corporation, Barrick Gold Corporation, Coeur Rochester, Inc., and members of the Environmental Technology Council, some of which had made the certification provided for in 42 U.S.C. 6939f (g)(2)(B) and were storing elemental mercury for clients until the DOE facility opens.[3]

As noted by commenters, DOE engaged in extensive discussions with stakeholders. During these discussions, the basis for the fee calculation (i.e., storage for an unspecified, but limited, time followed by treatment and disposal at another location) was presented. Stakeholders provided information to DOE that was evaluated as part of development of the proposed rule. DOE shared its concerns with some of the scenarios suggested by stakeholders during consultation.

In developing the proposed fee and the fee established in this final rule, with respect to storage costs, DOE used source selection sensitive information in accordance with Federal Acquisition Regulation (FAR) 2.101 and FAR 3.104 and is not approved for release to the public. DOE received information on preliminary pricing for treatment and disposal that it determined was business confidential information. DOE estimated expected pricing for treatment and disposal

[3] DOE also notes that it held an ex parte meeting with Environmental Technology Council (ETC) members on November 21, 2019. At this meeting, ETC members expressed their concerns with the rulemaking. The ex parte meeting has been included in the record for this rulemaking and is available at *https://www.energy.gov/gc/legal-resources/ex-parte-communications*.

using publicly available pricing for similar treatment and disposal in accordance with the DOE Cost Estimating Guide (DOE-G-413.3-21) and found a reasonable expected price range of $24,000/MT to $34,600/MT. Since the preliminary pricing fell within the expected cost range, DOE has adopted $30,900/MT as the cost of treatment and disposal. DOE used information provided during the consultation process as the basis for an estimate for the costs to transport elemental mercury from the storage facility to a future treatment facility. DOE used publicly available information from OMB Circular A-94 as a source for relevant interest rates.

Given the level of consultation and engagement with persons likely to deliver elemental mercury to the facility, as well as, the straightforward fee basis, DOE believes sufficient information was provided to allow the public to meaningfully comment on the proposed rule and to support the fee established in this final rule.

Comment: DOE failed to consider alternatives to the scenario presented in the proposed rule, including scenarios presented during consultation.

Response: During consultation, DOE discussed and considered scenarios suggested by the meeting participants. These discussions included the scenario that ultimately became the basis for the proposed fee.

The scenarios discussed included indefinite storage (including storage at Hawthorne Army Depot (HWAD)), and storage for a relatively short period of time until a regulatory framework for treatment and disposal in the U.S. becomes available, and subsequent treatment and disposal in the United States.

Commenters indicated that storage at HWAD is significantly less expensive than the basis for the proposed rule. On multiple occasions since MEBA was passed DOE discussed the use of

HWAD for storage of elemental mercury with the Department of Defense (DoD), including as recently as December 2018 and January 2019. During these discussions DOE and DoD noted that 10 U.S.C. 2692 generally prohibits the storage of non-defense toxic and hazardous materials. The Secretary of Defense may grant exceptions to this prohibition when essential to protect the health and safety of the public from imminent danger if the Secretary otherwise determines the exception is essential, and if the storage or disposal authorized does not compete with private enterprise. However, neither of these conditions can be met because elemental mercury is currently being stored safely at privately owned facilities that made the certification provided for in 42 U.S.C. 6939f (g)(2)(B), and DOE has evaluated reasonable alternative locations for storage of elemental mercury.

Comment: The use of a leased facility is not permitted under MEBA.

Response: The phrase "facility or facilities of [DOE]" is not defined in MEBA. DOE operates at both DOE-owned and -leased facilities, and DOE has construed the term "DOE facility" to refer to an assortment of ownership and lease relationships. MEBA Section 5(f) authorizes DOE to establish such terms, conditions, and procedures as are necessary to carry out MEBA Section 5. As noted in the *Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (EIS) at page 1-3 fn. 2, DOE has interpreted MEBA Section 5 to authorize DOE to designate existing and/or new storage facilities at property owned or leased by DOE.

Comment: DOE has included costs in the fee basis that are not recoverable under MEBA.

Response: MEBA section 5(b)(1)(B)(iii), 42 U.S.C. 6939f(b)(1)(B)(iii), provides that fees shall be set in an amount sufficient to cover costs set forth in MEBA section 5(b)(2), 42 U.S.C. 6939f(b)(2). Such costs are costs to DOE of providing management and storage, including

operation and maintenance, security, monitoring, reporting, personnel, administration, inspections, training, fire suppression, closure, and other costs required for compliance with applicable law.

In accordance with MEBA, the costs associated with land acquisition or permitting of the facility under the Solid Waste Disposal Act or other applicable law are not recoverable. The DOE lease agreement for elemental mercury storage only includes a leasehold interest in the portion of the buildings used only; therefore, the lease arrangement does not qualify as land acquisition. DOE has received a cost estimate of necessary permit modifications but has not included them in the fee basis. No building design or construction costs have been incurred and included in the basis for the fee calculation.

In summary, DOE did not include any non-recoverable costs in the basis for the proposed fee. In addition, DOE plans to fulfill its elemental mercury storage mission by hiring a contractor to operate the facility; therefore, DOE believes the inclusion of contractors' profit is a recoverable cost under MEBA.

Comment: DOE failed to consult with persons likely to deliver elemental mercury as required by MEBA. DOE should provide summaries of the meetings and teleconferences.

Response: As required by MEBA, DOE consulted with persons likely to deliver elemental mercury to the designated facility on the fee prior to publication of the proposed rule. This included meetings and teleconferences conducted between May 2017 and July 2019 with persons representing Newmont Mining Corporation, Barrick Gold Corporation, and Coeur Rochester, Inc., and members of the Environmental Technology Council, some of which had made the

certification provided for in 42 U.S.C. 6939f (g)(2)(B) and are storing elemental mercury for clients until the DOE facility opens.

During consultation, DOE discussed and considered scenarios suggested by the meeting participants. These discussions included the scenario that ultimately became the basis for the proposed fee.

The scenarios discussed included indefinite storage (including storage at Hawthorne Army Depot (HWAD)), and storage for a relatively short period of time until a regulatory framework for treatment and disposal in the U.S. becomes available, and subsequent treatment and disposal in the United States.

As noted above, DOE evaluated the use of HWAD with DoD. During consultation, DOE kept participants informed of the results of its investigations.

During a meeting in Washington, DC, on January 23, 2019, DOE presented information to members of the Environmental Technology Council (ETC), some of which had made the certification provided for in 42 U.S.C. 6939f (g)(2)(B) and are storing elemental mercury for clients until the DOE facility opens. Additionally, DOE spoke with a representative of ETC on multiple occasions to apprise ETC of the status of preparing the proposed rule and the development of the fee basis.

DOE also has maintained a dialog with appropriate personnel from the Nevada Department of Environmental Protection and the Texas Commission on Environmental Quality during the development of the proposed rule.

DOE believes the level of outreach and consultation that the agency engaged in meets the requirements of MEBA. DOE provided further opportunities for input from interested parties and the public through publication of the proposed rule and solicitation of comments.

Comment: DOE provided insufficient time for the public to comment on the proposed rule and should extend the public comment period.

Response: Given the extensive discussions with stakeholders, the straightforward fee basis, and the fact that the proposed fee was based on a scenario discussed multiple times during the consultations, DOE did not believe extension of the public comment period was necessary.

Comment: DOE failed to consider less expensive options.

Response: DOE based the proposed fee on information received from a U.S. vendor in response to a solicitation in preparing the proposed rule. In 2017, DOE compared the response to the price for elemental mercury storage by companies engaged in elemental mercury storage that had made certifications in accordance with 42 U.S.C. 6939f (g)(2)(B). Among those companies that responded, the only company that provided specific pricing information indicated $1,200/MT-year was their price for this service. This price information was confirmed by stakeholders that are users of these facilities during consultation. In 2019, DOE also reviewed the responses to a Request for Expressions of Interest received from multiple potential offerors before the solicitation was issued. This led DOE to the conclusion that a reasonable market price for storage of elemental mercury was in a range of approximately $1,000/MT-year to $2,200/MT-year. Since the average annual cost of storage in the scenario used as the basis for the fee is $780/MT, DOE considers this basis to represent a cost-efficient approach.

Several comments were received suggesting that the price for storage should be more on the order of $80/MT-year, some suggesting that this is the cost of storage at HWAD. HWAD storage of elemental mercury is not subject to the Resource Conservation and Recovery Act (RCRA), nor is it required to accept shipments from sources as varied as those expected at the DOE designated facility. DOE is unable to verify the components of the suggested HWAD costs in order to appropriately make a direct comparison to HWAD.

DOE contacted DoD regarding the possibility of using HWAD as the DOE facility for long-term management and storage of elemental mercury and found that, in accordance with 10 U.S.C. 2692, the facility was prohibited from accepting non-defense related hazardous waste. As discussed in response to an earlier comment, to waive the prohibition, two conditions must be met: (1) there must be an imminent danger to public health and safety; and (2) the storage must not compete with private enterprise. Since neither of these conditions could be met, DOE determined that use of HWAD as the DOE facility for long-term management and storage of elemental mercury was not viable.

DOE has not proposed to treat elemental mercury in the United States and dispose of the resulting mercury compound in Canada. DOE notes, however, that treatment of elemental mercury in the United States and subsequent disposal of the resulting mercury compound in Canada is an option for generators of elemental mercury.

Comment: DOE is using an escalation rate for storage costs that is too high.

Response: DOE has revised the fee basis to use discounted funds and has eliminated the escalation rate used in the proposed rule. Consistent with discussions with participants during

consultation, OMB Circular A-94 rates are used. The fee basis has been revised using the 15-year real rate from OMB Circular A-94 (1.45%).

Comment: DOE should have used discount rates rather than escalating all costs.

Response: DOE has revised the calculation of the proposed fee to use discounted funds and has eliminated the escalation rate used in the proposed rule. The resulting fee basis has been reduced from $55,100 per MT plus a receiving charge of $3,250 per shipment, to $37,000 per MT.

Comment: DOE failed to provide an explanation for the receiving charge.

Response: The receiving charge is the cost of purchasing required materials, unloading the elemental mercury from the truck, moving it to its storage location, checking compliance with the Waste Acceptance Criteria and logging the shipment.

In response to comments received on the proposed fee, DOE has revised the fee basis to allocate the receiving charge on a per MT basis. As a result, the additional per shipment charge has been deleted.

Comment: DOE failed to provide an explanation for the removal charge.

Response: The removal charge is the cost of removing elemental mercury from storage, loading it onto a truck and logging the shipment. This charge is allocated on a per MT basis.

Comment: DOE failed to provide an explanation for the transportation cost.

Response: As described in the preamble of the proposed rule, the transportation cost is the cost to transport elemental mercury accepted for storage at the DOE facility to an assumed treatment facility after the storage period.

During consultation, DOE learned that generators of elemental mercury in Nevada were paying approximately $1,000 for a shipment of up to 15 MT of elemental mercury from Nevada to Alabama for storage. DOE assumed a similar mileage of approximately 1,800 miles for shipment from the DOE designated storage facility to a future treatment facility. The mileage is based on transportation from Andrews County, TX to Hellertown, PA. DOE considered Hellertown, PA to be a reasonable hypothetical location for treatment of elemental mercury prior to eventual disposal.

The fee has been revised to reflect payment of $1,000 for transportation in year 16 using discounted funds (now, $800/MT).

Comment: DOE failed to provide an explanation for the treatment and disposal cost.

Response: DOE is assuming a treatment and disposal technology similar to that which is currently available for disposal in Canada (i.e., conversion to red mercury sulfide and disposal in a regulated landfill).

DOE has kept apprised of developments in the private sector associated with the development of treatment and disposal technologies and adjusted the fee basis accordingly. As described in the proposed rule, the pricing is based on preliminary pricing from a U.S. vendor and DOE is treating the source as business sensitive. DOE compared the preliminary pricing to treatment and disposal in Canada, making appropriate adjustments using the guidance from the DOE Cost Estimating Guide (DOE-G-413.3-21) for a Class 2 cost estimate and found that the preliminary pricing fell within the range for such an estimate. DOE noted that the technical approach under consideration includes additional encapsulation relative to the currently available disposal in Canada and that no current actions to gain regulatory approval are in progress.

This is included only as a cost basis for an assumed treatment and disposal capability in the U.S. at some future date. It does not imply a commitment on the part of the Environmental Protection Agency (EPA) to promulgate a regulatory framework for treatment and disposal.

Comment: Why did DOE not consider disposal in Canada?

Response: MEBA directs DOE to designate a facility for long-term management and storage of elemental mercury generated within the United States. DOE notes, however, that treatment of elemental mercury in the United States and subsequent disposal of the resulting mercury compound in Canada is an option for generators of elemental mercury.

Comment: The proposed fee is too high.

Response: DOE based the proposed fee on information received from a U.S. vendor in response to a solicitation in preparing the proposed rule. DOE reviewed the response and compared it to market information provided by companies engaged in elemental mercury storage that had made certifications in accordance with 42 U.S.C. 6939f (g)(2)(B). This price information was confirmed by stakeholders that are users of these facilities during consultation. In 2019, DOE also reviewed the responses to a Request for Expressions of Interest received from multiple potential offerors before the solicitation was issued. This led DOE to the conclusion that a reasonable market price for storage of elemental mercury was in a range of $1,000/MT-year to $2,200/MT-year.

The receiving charge is the cost of purchasing required materials, unloading the elemental mercury from the truck, moving it to its storage location, checking compliance with the Waste Acceptance Criteria and logging the shipment.

In response to comments received on the proposed fee, DOE has revised the fee basis to properly allocate the receiving charge on a per MT basis. As a result, the additional per shipment charge has been deleted.

The removal charge is the cost of removing elemental mercury from storage, loading it onto a truck and logging the shipment. This charge is allocated on a per MT basis.

During consultation, DOE learned that generators of elemental mercury in Nevada were paying approximately $1,000 for a shipment of up to 15 MT of elemental mercury from Nevada to Alabama for storage. DOE assumed a similar mileage of approximately 1,800 miles for shipment from the DOE designated storage facility to a future treatment facility. The mileage is based on transportation from Andrews County, TX to Hellertown, PA. DOE considered Hellertown, PA to be a reasonably hypothetical location for treatment of elemental mercury prior to eventual disposal.

The fee has been revised to reflect payment of $1,000 for transportation in year 16 using discounted funds (now, $800/MT). DOE has kept apprised of developments in the private sector associated with the development of treatment and disposal technologies and adjusted the basis accordingly. As described in the proposed rule, the pricing is based on preliminary pricing from a U.S. vendor and DOE is treating the source as business sensitive. DOE compared the preliminary pricing to treatment and disposal in Canada, making appropriate adjustments using the guidance from the DOE Cost Estimating Guide (DOE-G-413.3-21) for a Class 2 cost estimate and found that the preliminary pricing fell within the range for such an estimate. DOE noted that the technical approach under consideration includes additional encapsulation relative to the currently available disposal in Canada and that no current actions to gain regulatory approval are in progress. DOE has also revised the calculation of the proposed fee to use

discounted funds. The resulting fee basis has been reduced from $55,100 per MT plus a receiving charge of $3,250 per shipment, to $37,000 per MT. The cost breakdown is given by the following schedule:

Description	Cost
Net present value (NPV) of Total Storage Cost of 15 years of storage @ 15-year real rate (1.45%) – includes per metric ton materials cost	$11,700
Present value (PV) of Transportation cost ($1,000) in year 15 @ 15-year real rate (1.45%)	$800
PV of Treatment and Disposal cost ($30,900) in year 15 @ 15-year real rate (1.45%)	$24,500
Total Fee/MT (rounded to nearest $)	$37,000

Comment: Why is DOE using 15 years of storage as a basis for the fee?

Response: MEBA requires DOE to designate and operate a facility or facilities for the long-term management and storage of elemental mercury per 42 U.S.C. 6939f. Under the Resource Conservation and Recovery Act, EPA is responsible for promulgating regulations for storage, treatment, and disposal of elemental mercury (and other mercury wastes) in the United States. Currently no treatment standard exists or has been proposed that would allow land disposal of high-purity elemental mercury waste, waste mercury compounds, or other high-concentration mercury wastes. Although it is reasonable to assume that this situation may change in the future—as reflected by DOE's estimate of 15 years of storage—it does not imply a commitment on the part of EPA to promulgate a regulatory framework for treatment and disposal.

Following consultations with EPA, DOE selected 15 years of storage in recognition of DOE's and EPA's respective roles. DOE believes this amount of time is reasonable given the uncertainty associated with the timing of establishing a regulatory framework for the treatment and disposal of high-purity elemental mercury.

Comment: Will there be any other costs at a future time?

Response: Once the fee has been paid and the elemental mercury has been accepted, there will be no other costs imposed on generators.

Comment: Will DOE take ownership of the elemental mercury received?

Response: MEBA directs DOE to take custody of elemental mercury delivered to the facility for long-term management and storage of elemental mercury and to hold harmless, defend and provide indemnification to persons who deliver elemental mercury to the facility. Once the fee has been paid and the elemental mercury is accepted at the facility, DOE assumes responsibility for its storage and disposition.

Comment: Will there be an opportunity for public participation for future fee increases?

Response: As provided for by MEBA, DOE may adjust the fee annually. If this adjustment results in a significant alteration of the fee, DOE will provide an opportunity for public participation. The parameters that are subject to adjustment, as revised in response to public comments, are as follows:

- Number of years that elemental mercury will reside in storage at the DOE designated facility.

- Cost to store 1 MT of elemental mercury for the number of years that elemental mercury will reside in storage at the DOE designated facility.
- Pro-rated cost of materials required for storage of elemental mercury
- Cost of shipment from the elemental mercury storage facility to a treatment facility.
- Cost of treatment of elemental mercury, and disposal of the treated waste form.
- Real interest rate from OMB Circular A-94.

Comment: Why does elemental mercury delivered to the DOE facility need to be 99.5% pure?

Response: The requirement for 99.5% purity is consistent with the guidance published by DOE in 2009 and has been chosen based on the need to store the elemental mercury for an indefinite period. As noted in the *Long-Term Management and Storage of Elemental Mercury* EIS at page 2-1 fn. 3, the treatment standard for wastes containing high concentrations of mercury (greater than 260 parts per million) is recovery through roasting or retorting, which is performed at various commercial waste recovery facilities. This process yields high-purity elemental mercury (e.g., elemental mercury that is at least 99.5 percent pure by volume) that is generally acceptable for reintroduction back into commerce and is analogous to the materials to be stored in a DOE designated storage facility.

Comment: The Supplement Analysis (SA) notes that Waste Control Specialists (WCS) existing buildings will have to be redesigned, even though no new buildings will have to be built. Again, such costs cannot be included in the fee proposal.

Response: The Supplement Analysis EIS-0423-SA-01 makes no such statement.

The WCS facility is permitted to receive elemental mercury currently and no structural upgrades are anticipated. Consequently, no design or construction costs are included in the fee basis for the proposed fee.

Comment: Will the receiving charge be reduced for shipments under 15 MT?

Response: DOE has revised the fee basis to allocate the receiving charge on a per MT basis. As a result, the additional per shipment charge has been deleted.

Comment: The facility should have been designated/proposed prior to publishing the proposed fee.

Response: DOE acknowledges that the language of MEBA envisions designation of a facility prior to the establishment of the fee. DOE has designated a facility for long-term management and storage of elemental mercury since publication of the proposed rule.

Comment: DOE should consider investing funds in non-U.S. securities for a better return.

Response: MEBA requires DOE to asses and collect the fee, but it does not authorize DOE to retain fee proceeds and invest or otherwise use them. Absent a DOE authority to retain the funds, they will be deposited in the Treasury pursuant to 31 U.S.C. 3302 (Miscellaneous Receipts Act).

Comment: If costs end up lower than the fee basis, will there be a rebate?

Response: DOE will not provide rebates if the actual costs end up lower than the fee basis. Similarly, if costs end up higher than the fee basis, DOE will not invoice generators that have previously delivered elemental mercury to the DOE designated facility for such additional costs.

Comment: Will DOE petition EPA to change the RCRA standard to allow treatment and disposal in U.S.?

Response: This comment is outside the scope of the rulemaking to establish a fee for the long-term management and storage of elemental mercury.

Comment: Mercury collected from recycling should not be subject to fees.

Response: MEBA directs DOE to assess and collect a fee at the time of delivery of elemental mercury to the facility for long-term management and storage of such elemental mercury. MEBA does not include exceptions for elemental mercury collected from recycling.

Comment: Mercury collected from recycling should not be defined as hazardous waste.

Response: This comment is outside the scope of the rulemaking to establish a fee for the long-term management and storage of elemental mercury.

Comment: The proposed fee will substantially reduce recycling.

Response: MEBA directs DOE to conduct a study, in consultation with EPA, on the impact of the long-term management and storage program for elemental mercury on mercury recycling, and include proposals, if necessary, to mitigate any negative impacts. DOE continues to gather empirical information to assess these impacts.

Comment: The proposed fee will promote exportation of elemental mercury.

Response: To export elemental mercury, a person must petition the Administrator of EPA, who may grant an exemption provided that the conditions of 15 U.S.C. 2611 (c)(4)(A)(i)-(vii) are met. To date EPA has not granted any exemptions under this part of the MEBA (for more

information, see: https://www.epa.gov/mercury/questions-and-answers-mercury-export-ban-act-meba-2008).

DOE has not received any information to suggest the proposed fee will result in a significant increase in such petitions.

Comment: Landfilling of mercury is not condoned.

Response: For purposes of estimating the fee, DOE has assumed a scenario in which elemental mercury is disposed in a regulated landfill following treatment by conversion to red mercury sulfide. This method of treatment of elemental mercury and subsequent disposal of the resulting mercury compound is used safely in Canada.

Although there is no current regulatory framework that allows this practice in the U.S., in order to establish a fee basis, as required by MEBA, DOE considered it reasonable to assume that such a framework may exist in the future.

Comment: What happens after 15 years?

Response: The fee was calculated estimating 15 years of storage followed by treatment and disposal. DOE acknowledges that in the absence of a regulatory framework for such treatment and disposal, elemental mercury in storage at the DOE facility would continue to be stored beyond 15 years.

Comment: What about Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability?

Response: MEBA directs DOE to take custody of elemental mercury delivered to the facility for long-term management and storage of elemental mercury and to hold harmless, defend and provide indemnification to persons who deliver elemental mercury to the facility.

Comment: What are the acceptance criteria at the DOE facility for long-term management and storage of elemental mercury?

Response: The Waste Acceptance Criteria (DOE/EM-0007) is available at

https://www.energy.gov/sites/prod/files/2019/12/f69/Waste-Acceptance-Criteria-Final-12-12-2018.pdf

Comment: DOE failed to consider the environmental impact of the fee.

Response: The EIS evaluated seven government and commercial sites and the supplemental environmental impact statement (SEIS) evaluated additional alternatives for a facility at and in the vicinity of the Waste Isolation Pilot Plant (WIPP) for long-term management and storage of elemental mercury. The EIS and SEIS noted the relevant statutory provision regarding assessment and collection of a fee. The assessment and collection of the fee is part of the implementation of the proposed action. Elemental mercury that is not delivered to the long-term management and storage site would continue to be managed and stored by the current holder of the elemental mercury. While DOE cannot determine which specific elemental mercury would continue to be managed by the current holder at a given fee basis, such elemental mercury would have impacts similar to those analyzed under the no action alternative in the EIS and SEIS.

Comment: The Council on Environmental Quality (CEQ) regulations require cost-benefit analyses to be appended to or incorporated into an EIS because they are relevant to the choices among environmentally different alternatives.

Response: CEQ National Environmental Policy Act (NEPA) Regulations (40 CFR 1502.23) require that a cost-benefit analysis be incorporated by reference or appended only "[i]f a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action." As discussed in the Record of Decision, DOE's decision was "[b]ased on consideration of the analysis in the Final Elemental Mercury Storage EIS, SEIS, and recently prepared SA" and "on other programmatic, policy, logistic, and cost considerations."

Comment: The EIS/SEIS/SA did not discuss potential environmental impacts of treatment and disposal of elemental mercury, or of transportation of elemental mercury for treatment and disposal.

Response: DOE has not proposed to treat and dispose of elemental mercury, or to transport elemental mercury for treatment and disposal. Thus, DOE has not analyzed the potential environmental impacts of such a proposal. Nonetheless, DOE has used treatment, disposal, and related transportation costs to calculate the fee for long-term elemental mercury management and storage. Although commenters have provided feedback regarding the components of a fee calculation based on this scenario, comments have not supported basing the fee on indefinite storage of elemental mercury.

IV. Regulatory Review

A. Review Under Executive Order 12866

This final rule has been determined not to be a "significant regulatory action" under Executive Order 12866, "Regulatory Planning and Review," 58 FR 51735 (October 4, 1993), as amended by Executive Order 13258, 67 FR 9385 (February 26, 2002). Accordingly, this action

was not subject to review under that Executive Order by the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget.

B. Review Under the National Environmental Policy Act

In accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.), the Council on Environmental Quality regulations and the DOE regulations implementing NEPA, DOE prepared the following documents analyzing the potential environmental impacts of long-term management and storage of elemental mercury: *Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (DOE/EIS-0423, January 2011); *Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement* (DOE/EIS-0423-S1, September 2013); and *Supplement Analysis of the Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (DOE/EIS-423-SA-01). The environmental impact statement (and the supplemental environmental impact statement) noted the relevant statutory provision regarding assessment and collection of a fee. The assessment and collection of the fee is part of the implementation of the action.

C. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq*.) requires preparation of an initial regulatory flexibility analysis for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ‘‘Proper Consideration of Small Entities in Agency Rulemaking,’’ 67 FR 53461 (August 16,

2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process (68 FR 7990). DOE has made its procedures and policies available on the Office of General Counsel's Web site: *https://www.energy.gov/sites/prod/files/gcprod/documents/eo13272.pdf*.

DOE has reviewed this rule under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. For the reasons explained below, DOE has determined that this rule, if adopted, will not have a significant economic impact on a substantial number of small entities.

In 2019, DOE published *Supplement Analysis of the Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement* (DOE/EIS-423-SA-01) that updated the expected inventory during the next 40 years to 6,800 MT. DOE expects approximately 35 – 50 entities to pay the fee established in this final rule. DOE expects that the majority of the fees paid will be paid by less than 10 of these entities. The Nevada Mining Association (NMA) membership includes the generators of elemental mercury that are expected to deliver the majority of elemental mercury to the DOE facility. DOE contacted NMA for information to help determine how many of its membership qualify as small entities under NAICS codes 212221 (Gold ore mining, 1500 employees), 212222 (Silver ore mining, 250 employees), 212230 (Copper, nickel, lead and zinc mining, 750 employees) and 212299 (All other metal ore mining, 750 employees). The information received showed that there are 31 entities that fall below the small business standards versus 2 entities that exceeded the standard. DOE estimates that the largest impact would be to entities engaged in mining that do not qualify

as small entities under NAICS codes. This impact will vary based on ore grade and price fluctuations in the precious metals market.

Some entities that have either accepted elemental mercury for storage, in accordance with 42 U.S.C. 6939f(g)(2)(B) or have placed elemental mercury in storage in accordance with 42 U.S.C. 6939f(g)(2)(B) or (D), awaiting the start of operation at the DOE facility will be required to pay the fee for storage at the DOE site. These entities would be classified under the NAICS codes in the previous paragraph or NAICS code 562112 (Hazardous Waste Collection, $41.5M). The largest of these impacts are likely be a one-time expense shortly after the start of operations at the DOE facility. DOE determined, however, that none of these entities are likely to be small entities.

As a result of MEBA, with the exception of elemental mercury that has been placed in storage in accordance with 42 U.S.C. 6939f(g)(2)(B) or (D), generators of elemental mercury can either send elemental mercury that is being discarded to the DOE designated facility for long-term management and storage, or treat the elemental mercury to form a mercury compound and then export the mercury compound for environmentally sound disposal in accordance with 15 U.S.C. 2611(c)(7)(A)-(B) and (D). Export of mercury compounds for environmentally sound disposal in another country may also be subject to that country's obligations under the Basel Convention, if applicable, and that country's applicable domestic laws and regulations. While international sales generally are prohibited by MEBA's export ban, 42 U.S.C. 2611(c)(1), non-Federal generators may also consider domestic sales of elemental mercury.[4] Although domestic sale of elemental mercury is an option without a negative economic impact, it is likely that the

[4] MEBA provides that "no Federal agency shall convey, sell, or distribute . . . any elemental mercury under the control or jurisdiction of the Federal agency." 15 U.S.C. 2605(f). MEBA provides an exception for "a transfer between Federal agencies of elemental mercury under the control or jurisdiction of the Federal agency." *Id.* at 15 U.S.C. 2605(f)(2)(A).

supply would exceed demand and thus that option may not be viable for some non-Federal generators. As stated above, for those non-Federal generators for whom sale is not a viable option, the available options are sending the elemental mercury to the DOE designated facility or environmentally sound disposal of certain mercury compounds in accordance with 15 U.S.C. 2611(c)(7)(D). Treatment and disposal is available at a cost of approximately $26,500 (USD) per metric ton in Canada, for example, and generators can choose this option if it is more cost effective for them.

Because DOE has determined that entities currently storing elemental mercury who will be required to pay the fee established by DOE for storage in the DOE facility are not likely to be small entities, and because those entities not required to pay the fee established by DOE for storage in the DOE facility can choose another disposal option if that option is more cost effective for them, DOE has determined that this rule does not have a significant economic impact on a substantial number of small entities.

DOE's certification and supporting statement of factual basis was provided to the Chief Counsel for Advocacy of the Small Business Administration pursuant to 5 U.S.C. 605(b). The Department did not receive any comments on the certification and has responded to comments regarding the economic impacts of the rule in Section III of this final rule.

D. Review Under the Paperwork Reduction Act

This rulemaking would impose no new information or recordkeeping requirements. Accordingly, OMB clearance is not required under the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501 *et seq.*).

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

E. Review Under the Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency regulation that may result in the expenditure by States, tribal or local governments, in the aggregate, or by the private sector, of $100 million in any one year. The Act also requires Federal agencies to develop an effective process to permit timely input by elected officials of State, tribal, or local governments on a proposed significant intergovernmental mandate, and requires an agency plan for giving notice and opportunity to provide timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. DOE has determined that this rule does not contain any Federal mandates exceeding $100 million in any one year affecting States, tribal, or local governments, or the private sector, and, thus, no assessment or analysis is required under the Unfunded Mandates Reform Act of 1995.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ‘‘Civil Justice Reform’’ 61 FR 4779 (February 7, 1996), imposes on Federal agencies the general duty to adhere to the following

requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. With regard to the review required by section 3(a), section 3(b) of Executive Order 12988, specifically requires that Federal agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting the clarity and general draftsmanship under guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this rule meets the relevant standards of Executive Order 12988.

G. Review Under Executive Order 13132

Executive Order 13132, "Federalism," 64 FR 43255 (August 10, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism

implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. (65 FR 13735). DOE has examined this rule and has determined that it would not preempt State law and would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibility among the various levels of government. No further action is required by Executive Order 13132.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any proposed rule that may affect family well-being. This rule would have no impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy, Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001) requires preparation and submission to OMB of a Statement of Energy Effects for any significant energy action. A "significant energy action" is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1)(i) is a significant regulatory action under Executive Order 12866, or any successor order; and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a

detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use. DOE has determined that this rule would not have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of OIRA has also not determined that this rule is a significant energy action. Thus, the requirement to prepare a Statement of Energy Effects does not apply.

J. Review Under the Treasury and General Government Appropriations Act, 2001

The Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most dissemination of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Orders 13771

This rule is not subject to the requirements of EO 13771 (82 FR 9339, February 3, 2017) because this rule is considered to be a "transfer rule."

L. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is a "major rule" as defined by 5 U.S.C. 804(2).

V. Approval of the Secretary of Energy

The Secretary of Energy has approved publication of this final rule.

List of Subjects in 10 CFR Part 955

Elemental mercury, Hazardous waste treatment, storage, and disposal, Reporting and recordkeeping requirements.

Signed in Washington, DC on December 18, 2019.

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Paul M. Dabbar
Under Secretary for Science

For the reasons set forth in the preamble, the Department of Energy adds part 955 to title 10 of the Code of Federal Regulations to read as follows:

PART 955 – FEE FOR LONG-TERM MANAGEMENT AND STORAGE OF ELEMENTAL MERCURY UNDER THE MERCURY EXPORT BAN ACT OF 2008, AS AMENDED

Sec.

Authority: 42 U.S.C. 6939f(b).

§955.1 Purpose.

This part establishes a fee for long-term management and storage of elemental mercury in accordance with the Mercury Export Ban Act of 2008, as amended, section 5(b), (42 U.S.C. 6939f(b)).

§955.2 Scope and applicability.

This part applies to persons who deliver elemental mercury to the U.S. Department of Energy (DOE) designated facility for long-term management and storage.

§955.3 Definitions.

The following definitions are provided for purposes of this part:

DOE means the U.S. Department of Energy.

Elemental mercury means the element with the chemical symbol Hg and atomic number 80 in its liquid form. The form acceptable to DOE is at least 99.5% elemental mercury by volume. DOE will not accept elemental mercury in environmental media or consumer products (fluorescent lamps, batteries, etc.) or elemental mercury in manufactured items (manometers, thermometers, switches, etc.).

Metric ton means 1,000 kilograms (approximately 2, 204 lbs.).

§955.4 Payment of fees.

Fees are payable upon delivery of elemental mercury to the DOE facility. All fee payments are to be made payable to the U.S. Department of Energy. The payments are to be made in U.S. funds by electronic funds transfer such as ACH (Automated Clearing House) using E.D.I. (Electronic Data Interchange), check, draft, money order, or credit card.

§955.5 Schedule of fees.

(a) Persons delivering elemental mercury to the DOE facility for long-term management and storage of elemental mercury shall pay fees in accordance with paragraph (b) of this section.

(b) The fee per metric ton is the sum of:

(1) The net present value of elementary mercury storage for the number of years in storage using the appropriate interest rate from Office of Management and Budget (OMB) Circular A-94;

(2) The pro-rated cost of materials required for storage of elemental mercury;

(3) The present value of the cost of transporting elemental mercury from the storage facility to a treatment facility in the year following the last year of storage using the appropriate interest rate from OMB Circular A-94; and

(4) The present value of the cost of treatment and disposal in the year following the last year of storage using the appropriate interest rate from OMB Circular A-94.

(c) The values in paragraphs (b)(1) through (4) of this section may be updated annually. These values are posted to the DOE Long-Term Management and Storage of Elemental Mercury website (*https://www.energy.gov/em/services/waste-management/waste-and-materials-disposition-information/long-term-management-and*). DOE will publish notice in the *Federal Register* when the values are updated to inform the public of the updates.

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