



June 5, 2013

Mr. David Levenstein, EIS Document Manager
U.S. Department of Energy
Office of Environmental Compliance, EM-11
P.O. Box 2612 Germantown, MD 20874-2612

Via email: David.Levenstein@em.doe.gov

Re: Comments for the Supplemental Mercury Storage EIS, *Federal Register* (77 FR 33204)

Dear Mr. Levenstein,

We respectfully submit these comments for the Department of Energy's Long-Term Management and Storage of Elemental Mercury Draft Supplemental Environmental Impact Statement (SEIS). Please address these comments and answer these questions in your upcoming final SEIS.

Nuclear Watch New Mexico seeks to promote safety and environmental protection at nuclear facilities; mission diversification away from nuclear weapons programs; greater accountability and cleanup in the nation-wide nuclear weapons complex; and consistent U.S. leadership toward a world free of nuclear weapons.

Thank you for the draft SEIS meeting in Albuquerque.

The Mercury Export Ban Act required that DOE begin operation of the mercury storage facility by January 1, 2013. Given that that did not happen we strongly urge the Department of Energy to go back to the drawing board to develop a new set of potential storage and disposal sites that are located in closer proximity to the major inventories of elemental mercury.

This SEIS is not adequately justified

DOE does not adequately justify why this SEIS was prepared just a year after the issuance of the Final Long-Term Management and Storage of Elemental Mercury EIS. In these times of tight budgets, why was \$100,000 spent on this SEIS just to end up with the same preferred alternative?

DOE's Notice of Intent (NOI) of June 5, 2012 provided no solid basis for reconsideration:

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“Since publication of the Final Mercury Storage EIS, DOE has reconsidered the range of reasonable alternatives evaluated in that EIS. Accordingly, DOE now proposes to evaluate two additional locations for a long-term mercury storage facility, both near the Waste Isolation Pilot Plant (WIPP), which DOE operates for disposal of defense transuranic waste.” (33204, Federal Register/Vol. 77, No. 108/Tuesday, June 5, 2012/Notices)

There is no justification why the WIPP vicinity is suddenly considered as a reasonable alternative.

From the Notice of Availability:

To this end, DOE issued the Final Environmental Impact Statement for the Long-Term Management and Storage of Elemental Mercury (Mercury Storage EIS, DOE/EIS-0423, January 2011) to analyze reasonable alternatives, in accordance with the National Environmental Policy Act (NEPA), for locating and developing such a facility. Subsequently, DOE identified three additional, reasonable alternative locations in the vicinity of its Waste Isolation Pilot Plant (WIPP) in Carlsbad, NM. (23548 Federal Register/Vol. 78, No. 76/Friday, April 19, 2013/Notices)

Still, no reason is given why the WIPP vicinity is now judged to be a reasonable alternative. DOE has provided no substantive basis for its reconsideration of the range of alternatives to be included in the Mercury Final EIS (FEIS). There are no documents on the Mercury Storage EIS website to justify the selection of the New Mexico locations as candidate sites. Would not locations closer to the actual inventories of mercury be more reasonable as candidate sites?

Please explain why no other DOE sites were re-considered. Please give a site-by-site breakdown why other sites will not work. Please explain why the WIPP sites are the best sites in the DOE complex and are exclusively worthy of re-consideration in this time of budget constraints. The characteristics given are not unique to WIPP, but are also characteristic of many other DOE sites that nevertheless are not being considered as alternative locations.

There Is Still Not An Expressions of Interest From WIPP

On March 30, 2009 DOE published a Request for Expressions of Interest in the *Federal Business Opportunities* and *Federal Register*. In addition, DOE site offices were requested to determine if they had a facility that could be used for mercury storage. DOE received responses from ten sites and determined that seven of the ten locations appeared to be within the range of reasonable alternatives for mercury storage. In the case of the WIPP site itself, though it was included in the DOE request (see FEIS at A-24), it did not respond at all and still has not requested mercury storage, according to the WIPP Site Manager and Deputy Site Manager in a June 20, 2012 conference call with NukeWatch and other citizen groups.

The second site in the WIPP vicinity is not a DOE site and no announced representative from it responded to the Request for Expressions of Interest. Nor has DOE provided any information

about who proposed that second site, unlike the information provided about the 10 locations identified in 2009.

The Bureau of Land Management (BLM), which manages the second site just north of the WIPP site boundary (Section 10, Township 22 South, Range 31 East), manages millions of acres of land. Neither the BLM, nor DOE, have provided any basis for believing that the site is adequate for mercury storage and is superior to thousands of other BLM sites nation-wide that might be considered reasonable alternatives for the long-term management and storage of elemental mercury.

This prompts two questions:

- Did the BLM respond to DOE's Request for Expressions of Interest?
- Given DOE's lack of basis of justification for that one particular BLM site, how can the public effectively analyze why that site was chosen and its relative merits compared to other sites?

The 2008 Mercury Export Ban Act states:

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.

In the draft SEIS, the Department states, “DOE has interpreted Section 5 of the Act to authorize DOE to designate existing and/or new storage facilities at property either owned or leased by DOE.”

This prompts the following questions and points:

- Is BLM going to lease or sell part of the site to DOE to store mercury?
- The details of this arrangement must be explained in this EIS.
- Financial assurance must be part of this arrangement.
- As precedent, are there other examples of DOE purchasing or leasing BLM lands? If so, please include in the final SEIS.
- Please explain how DOE derives its authority to reinterpret this Act to include any facility that it may or may not lease or purchase? How does DOE know that it was not Congress' intent to limit mercury storage to what is currently known to be the DOE complex?
- Please cite any applicable DOE regulations.
- Is DOE required to explain to Congress any reinterpretation of an act?

DOE should inform Congress that it has not, and will not, comply with the deadlines established for having one or more facilities for mercury storage

DOE should suggest to Congress that it reconsider giving DOE the task of long-term management and storage of elemental mercury. If new mercury storage facilities are to be established, Congress will need to set new deadlines. Congress should also consider whether another agency could better identify and manage such facilities. DOE should remind Congress that it has many other responsibilities to which it must direct its financial and other resources.

This SEIS Does Not Comply with the WIPP Land Withdrawal Act

The WIPP Land Withdrawal Act (LWA) will have to be amended to allow mercury storage at WIPP. At the June 28 scoping meeting, David Levenstein agreed that the LWA would have to be amended by Congress for mercury storage to occur at WIPP. DOE cannot assume that the LWA can be amended. In addition to amending the LWA to allow mercury storage, many other provisions, policies, and practices would have to be changed, which would take years and be financially costly.

From draft SEIS § 1.6.1 Summary of Major Public Scoping Comments and DOE's Responses
Candidate Sites in the WIPP Vicinity:

“...Other commentors pointed out that there are legal restrictions under the WIPP Land Withdrawal Act limiting WIPP to the disposal of TRU waste from defense activities...”

Response: ...DOE acknowledges that new legislation may be required for DOE to construct and operate a facility for long-term management and storage of mercury at any of the WIPP Vicinity reference locations...

Where in the response does it mention the LWA? Explain the possible new or amended legislation. Who will sponsor it? Will it pass?

This SEIS does not comply with the National Environmental Policy Act (NEPA)

NEPA requires DOE to consider “all reasonable alternatives,” which is the heart of any EIS. To be legally adequate, an EIS must “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” But we do not believe that the New Mexico sites are reasonable alternatives in isolation.

- If the New Mexico sites are reasonable alternatives, then yet more out-of-state DOE sites must be considered as reasonable alternatives..
- In order to minimize transportation and lower costs, it would also be reasonable to examine two sites – one in the Eastern US and one in the West.

The use of multiple facilities must re-analyzed as an alternative

Since we currently do not know whether it is better to store huge amounts of mercury at one site, or store smaller amounts at many sites, the range of alternatives in the SEIS should include mercury storage at many sites versus only one site.

Alternatives to storage must be re-analyzed

Are there any new technical processes? Bethlehem Apparatus has developed a process that allows the retirement of elemental mercury from future use by stabilizing it into a form that can be safely land filled. This process (patent pending) converts elemental mercury

into a high purity mercury sulfide with the same physical and chemical characteristics of naturally occurring Cinnabar. Once the sulfide is formed it is blended with polymers. The product is a red pellet of approximately 7 mm X 7 mm that is suitable for land disposal. (This product is already acceptable for Canadian landfills, but will need certification from the EPA for disposal in U.S. landfills.)

<http://www.bethlehemapparatus.com/mercury-retirement.html>

This prompts the following questions and comments:

- This and any other feasible technological advances for the treatment of elemental mercury should be considered and analyzed.
- The possible benefits of storing these pellets in containers in an aboveground facility should be analyzed. Wouldn't this be a safer method than storing elemental mercury?
- The SEIS should describe any other feasible approaches to mercury immobilization that could lead towards a more stable and less toxic form of mercury.
- Please describe the optimal storage conditions for these immobilized forms of mercury.

Analyze all potential cumulative environmental effects of past, present, and reasonably foreseeable future actions

- Describe any additional DOE actions potentially impacting mercury storage. The two WIPP vicinity sites considered for the SEIS are inside WIPP's 50-mile Region of Influence.
- Since mercury is volatile, will storage buildings or bunkers be air-conditioned or otherwise temperature controlled to prevent accidental atmospheric release?
 - Please describe and possible effects from loss of cooling.

Status of compliance with all applicable federal, state and local statutes and regulations

Please include all international agreements, and required federal and state environmental permits, consultations, and notifications.

- Please describe the time gap between when facility startup and when it will be RCRA permitted by the State of New Mexico, as described in the scoping presentation.
- Should not facilities that are already RCRA permitted be treated as the preferred alternatives?

The potential of sinkholes must be examined

Some think the removal of oil and water from deep below the earth's surface for the past 80 years is causing the ground to collapse today. Annual non-potable water use over the life of the facility is estimated to be 2 million gallons per year. The non-potable water supply at the Waste Control Specialists (WCS) site is obtained from a well in the Santa Rosa Formation, which is located under the facility. Please analyze the possibility and potential effects of sinkholes, which are a clear potential environmental hazard not analyzed in the SEIS.

Place reference documents online

DOE should have made cited reference documents immediately available on the Internet after the release of the draft SEIS. This should still be promptly done. Further, in this day and age, it should be promptly done for all of DOE's NEPA processes.

Please describe DOE's technical criteria for site selection

There is none given in the SEIS. How can intelligent decisions be made without it?

What happens after 40 years?

There is no removal or treatment plan for whatever goes into a storage facility. There are no promises made about what happens at the end of the stated 40-year storage period or any information about what happens after then.

- How long could the mercury be stored at DOE's selected site - 50 years, 100 years, 1000 years or 10,000+ years?
- How can the safe storage of mercury be assured over the very long term given possible future social or economic collapse, which could disrupt the management of the stored mercury? We are now creating sites of high concentration of toxic materials that will be management problems/requirements effectively forever. How can we be assured that the site will not be vandalized and the mercury released under worst-case scenarios? What is the long-term federal commitment to management and storage of mercury?
- Closure plans for the storage facility must be defined.
- What are the impacts of retrieving the stored mercury?
- Will this mercury possibly be reused?
- What happens after WIPP closes in 2035?

Explain the financial details

The Mercury Export Ban Act requires DOE to assess fees based upon the pro rata costs of long-term management and storage.

- Please explain these costs.
- Compare the alternatives and analyze which sites would be cheaper.
- Please explain the funding mechanism.
- Private users will be encouraged to ship to the facility but will have to pay for storage. Who pays for storage of DOE mercury and what is the funding mechanism? What are taxpayers liable for?
- What are projected fees that the federal government will pay to WIPP if it is selected for long-term storage of mercury?
- Please describe any lease or purchase arrangements.

Include American Indian Tribal perspectives

It is not readily apparent to us how tribal perspectives were incorporated into this process. The real test is to actually heed the advice that Native Americans might have on the issues at hand.

These comments and questions respectfully submitted,

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