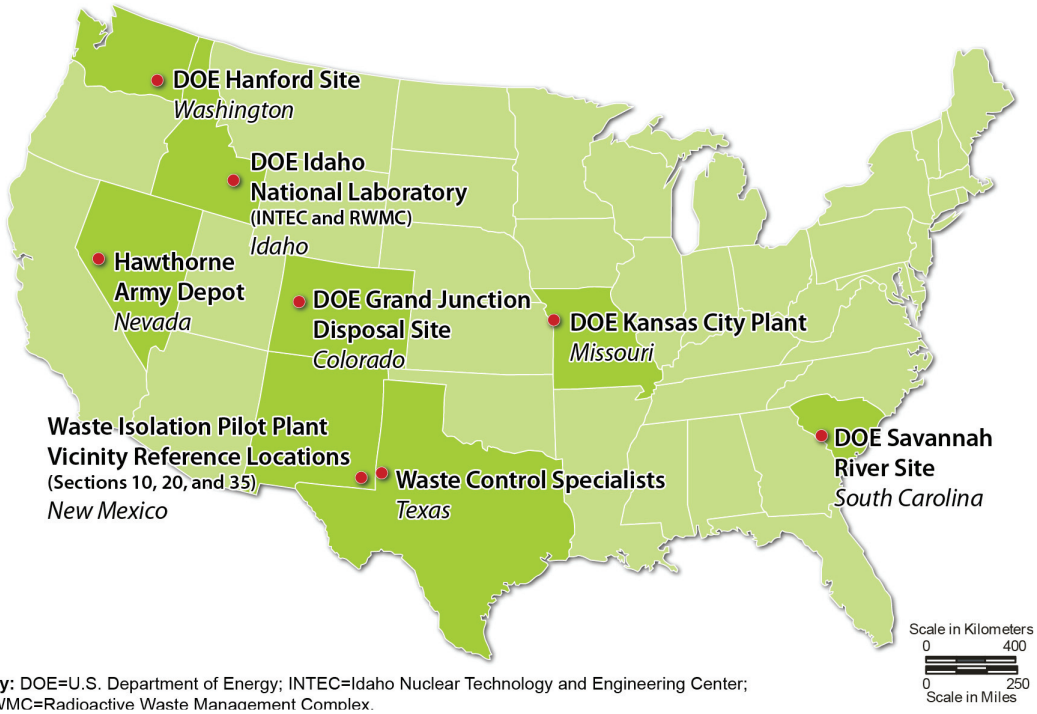
# Long-Term Management and Storage of Elemental Mercury Supplemental Environmental Impact Statement (Mercury Storage SEIS)

***DOE's goal is to provide safe, secure, long-term elemental mercury storage.***

## Mercury Storage EIS/SEIS Overview

Together, the January 2011 EIS and the *Draft Mercury Storage SEIS* consider the range of reasonable alternatives for the safe, secure storage of elemental mercury generated in the United States. More specifically, it addresses the short- and long-term potential health and environmental effects of establishing and operating a facility(ies) to provide the necessary capability for this storage at any of the candidate sites shown below.




**Key:** DOE=U.S. Department of Energy; INTEC=Idaho Nuclear Technology and Engineering Center; RWMC=Radioactive Waste Management Complex.

### Decisions To Be Made

In making long-term mercury management decisions, DOE will consider the results of the January 2011 EIS, this Draft SEIS, public comments, and other relevant factors. DOE intends to make the following decisions:

- Where to locate the mercury storage facility(ies)
- Whether to use existing buildings, new buildings, or a combination of existing and new buildings for mercury storage

### Affected Environment And Impacts

The January 2011 EIS and Draft SEIS present the results of DOE's analyses of potential impacts at each of the candidate sites and a No Action Alternative for comparison.

The affected environment includes land use and visual resources; geology, soils, and geologic hazards; water resources; meteorology, air quality, and noise; ecological resources; cultural and paleontological resources; site infrastructure; waste management; occupational and public health and safety; socioeconomics; and environmental justice.

**To Submit Comments or Request More Information**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## Major Conclusions

Impacts on human health and the environment at each site would range from none to minor. Analyses in the January 2011 EIS and the Draft SEIS support the following conclusions:

- **Land use and visual resources:** Negligible to minor impacts at all candidate sites.
- **Geology, soils, and geologic hazards:** Construction of a new storage facility would expose surface soil for up to 6 months. Although unlikely to occur over the 40-year analysis period, geologic hazards such as earthquakes could potentially have an adverse effect on a mercury storage facility(ies). Therefore, design for construction would consider seismic risk to minimize potential impacts. The WIPP Vicinity reference location in Section 10 has an increased risk for land subsidence due to underground potash mining in the area.
- **Surface-water or groundwater resources:** Under all alternatives, impacts to water resources are not expected to occur. Best management practices would be employed to prevent spills and releases.
- **Air quality:** Minor, short-term (6 month) impacts would occur under alternatives involving construction of a new storage facility(ies), including a small increase in air pollutant emissions near the construction site during working hours.
- **Air emissions:** Impacts associated with operations would be negligible. The Handling Area would be equipped with a vacuum air exhaust and mercury vapor filter that would maintain outside air emissions at negligible levels. Vehicle emissions from transporting mercury to the storage facility would be in proportion to the number of miles required to transport the mercury to the storage facility(ies), but would still be negligible under all alternatives.
- **Noise:** Levels would not increase substantially above background levels at any candidate site.
- **Ecological resources:** Impacts would be negligible at candidate sites whether a new facility(ies) is built or existing buildings are used.
- **Cultural and paleontological resources:** No impacts involving the use of existing buildings are expected. New facility construction would result in negligible impacts on cultural resources.
- **Infrastructure:** Existing facility infrastructure is adequate at all candidate sites except the DOE Grand Junction Disposal Site in Colorado and the WIPP Vicinity reference locations in New Mexico. Electrical service would need to be upgraded or connected and water and sanitary service provided.
- **Waste management infrastructure:** Impacts from construction and operation of a facility(ies) would be negligible at all sites.
- **Human health impacts during normal operations:** Negligible for workers and the public under all alternatives.
- **Human health impacts from facility accidents:** Negligible to low risk at all candidate sites evaluated.
- **Transportation impacts:** No fatalities due to transportation of mercury would be expected. Negligible to low risk to human health. Negligible to low risk to ecological resources, except for a moderate risk to sediment and soil-dwelling biota (e.g., worms) for truck accident with a fire and rain. Potential for this scenario to occur is no more than approximately once every 185,000 years.
- **Socioeconomic impacts:** Negligible to minor under all alternatives; minimal increase in traffic. Approximately 5 to 8 full-time employees would be required for facility operations.
- **Environmental justice:** No disproportionately high and adverse impacts on minority or low-income populations at any of the candidate sites.
- **Cumulative impacts:** Construction and operations of a mercury storage facility would have a negligible contribution to cumulative impacts on all resource areas.