Defense National STOCKPILE CENTER

Mercury Reflasking ENVIRONMENTAL ASSESSMENT

What Is Mercury?

Mercury (Hg) is a heavy, silver-white metal, sometimes called "quicksilver" that is liquid at room temperature. It is a naturally occurring metallic element derived from the mercury ores cinnabar and calomel. Because of its unusual properties, mercury has been a very useful commodity throughout history. It expands and contracts evenly with changes in temperature; alloys with other metals; and conducts electricity efficiently. Therefore, it has been used in many industrial, agricultural, medical, and defense applications.

The Defense National Stockpile Center (DNSC), a part of the Defense Logistics Agency, is responsible for providing safe, secure and environmentally sound storage for all commodities in the defense national stockpile, including mercury. There are approximately 4,400 metric tons of mercury in the stockpile. It is stored in 76-lb. capacity steel flasks at four locations including DNSC depots in New Haven, Indiana (557 metric tons) and Warren, Ohio (563 metric tons).

DNSC is considering transferring the mercury at the New Haven and Warren Depots to new containers because the existing steel flasks were manufactured in the 1940's and 50's, and some have recently begun to leak. The small amount of leaked mercury has been cleaned up and there have been no releases of liquid mercury to the environment. DNSC prepared a Mercury Reflasking Environmental Assessment (EA) to determine whether the reflasking activities would have significant environmental impacts that would require preparing an Environmental Impact Statement (EIS). Based on the EA, DNSC determined that these activities would not have significant environmental impacts. Therefore, a Finding of No Significant Impact (FONSI) has been issued.

DNSC considered three alternatives:

- No action
- Transfer the mercury to new flasks the same size as existing flasks (76-lb.)
- Transfer the mercury into new, one metric ton containers

In addition, a hybrid alternative could be selected that would involve transferring all or a portion of the mercury at either or both depots into either or both types of containers.

The EA provides analysis of the potential environmental impacts of each alternative at the New Haven and Warren Depots. Based on the analysis, impacts on the environment as well as the risk to workers and the public are expected to be low to negligible from normal activities and accidents.

Mercury is stored in metal containers called flasks.

FOR MORE INFORMATION, CONTACT DNSC AT:

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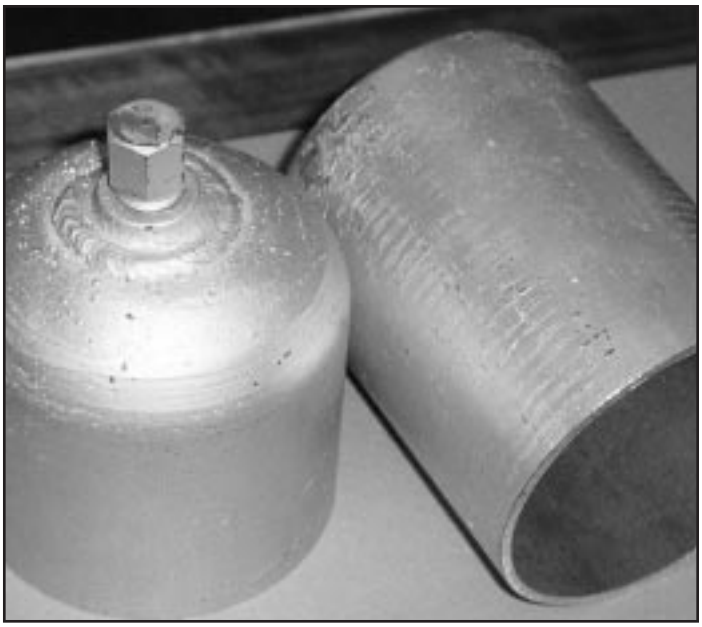

A typical flask is shaped like a cylinder, 5 inches in diameter by 12-15 inches high.

Each flask is about the size of a 3 liter soda bottle.

Mercury in the national stockpile has been safely stored for over 5 years in storage flasks about the size of three-liter soda bottles. The flasks are stored on wooden pallets with metal trays underneath to contain any possible leakage and inspected regularly. Depots routinely store many different types of materials, including lead, nickel, silver, tin, industrial diamonds, zinc, aluminum oxide, cobalt and bauxite. All storage depots have controlled access and other security measures in place.

The New Haven Depot consists of approximately 268 acres of land with 12 permanent and 2 temporary employees. The entrance to the depot is located on the north side of Dawkins Road (State Route 14), approximately 3 miles east of New Haven, Indiana. At the New Haven Depot approximately 557 metric tons of mercury are stored in 16,151 steel flasks.

The Warren Depot consists of approximately 160 acres of land with 13 permanent duty employees. The entrance to the depot is located on the west side of Niles-Warren River Road, approximately 950 ft north of DeForest Road. At the Warren Depot approximately 563 metric tons of mercury are stored in 16,355 steel flasks.

Mercury at both depots is stored in accordance with DNSC requirements and inspected weekly as required by DNSC Mercury Storage Area Inspection Procedures. Through ongoing inspection and monitoring, DNSC identified pallets at the New Haven and Warren facilities that were contaminated with mercury. Because no individual flasks were identified at the time as causing the contamination, it was assumed to be residual contamination, possibly occurring before the mercury was shipped to the New Haven and Warren Depots in the 1960's.

As a precaution, in 1998, all the flasks at the New Haven Depot were placed in plastic bags and put in new pallets to protect against further leakage. However, in 1999, one confirmed and five suspected leaking flasks were found at New Haven. At the Warren Depot, two confirmed and three suspected leaking flasks were identified and placed in plastic bags. Leaking mercury from these incidents was promptly cleaned up with no mercury released to the environment.

The proposed reflasking process would involve purchasing new containers from a commercial vendor, emptying the old flasks and filling the new ones. Old flasks and pallets would be sent to offsite licensed commercial facilities for recycling, treatment or disposal.

What Is An ENVIRONMENTAL ASSESSMENT?

An Environmental Assessment (EA) is required for Federal actions that may cause significant environmental impacts. An EA describes the proposed action, its alternatives, the natural and human environment, and potential impacts. An EA helps an agency determine if a Finding of No Significant Impact (FONSI) can be made, or if an Environmental Impact Statement (EIS) must be prepared before taking action.