

Docket Number 06-SPPE-2
First Round Data Requests
El Centro Unit 3 Repower Project
September 2006

DATA REQUEST #31
WASTE MANAGEMENT

BACKGROUND

Staff's analysis includes issues associated with managing wastes generated from constructing and operating the proposed El Centro Unit 3 Repower project. Staff evaluates the proposed waste management plans and mitigation measures designed to reduce the risks and environmental impacts associated with handling, storing, and disposing of project-related hazardous and non-hazardous wastes.

In order to ensure that the El Centro Unit 3 Repower project will not pose a risk to the public or environment, staff needs to determine whether the site was used as a disposal site and whether hazardous waste has been disposed of at this location and the size and nature of any hazardous materials. According to the Phase 1 ESA (Appendix K, page E2), there were small releases of fuel oil from the two 22,000-gallon fuel aboveground storage tanks, and the mercury-containing manometers (devices used to measure pressure) located on the existing Unit 3 boiler have occasionally overflowed and spilled onto the ground.

DATA REQUEST

31. Please discuss any current releases of mercury from the Boiler #3 manometer including the size of the release and whether the releases are being monitored. Please discuss what type, if any, remediation is required for mercury spills at the site.

DATA RESPONSE

A Phase I ESA prepared for the subject facility by URS in March 2006 identified a recognized environmental condition of potential concern in reference to a mercury manometer that was thought to have been installed outside of the existing Steam Turbine Building on the western side of the building (see Attachment WASTE-2, Figure 1, Mercury Sample Locations). The Phase I ESA provided recommendations for further evaluation of the recognized condition of concern identified with respect to the subject mercury manometer. Subsequent communications with a long-term employee at the IID facility, who had recollection of the manometer locations, indicated that no manometers were installed on the outside of the building in this general area and that the manometers were typically installed in the interior of the Steam Turbine Building.

In order to address any potential issues concerning this matter, in May 2006, URS conducted a limited sampling of the exposed soils in a planter area approximately 7 feet away and near the western side of the Steam Turbine

Docket Number 06-SPPE-2
 First Round Data Requests
 El Centro Unit 3 Repower Project
 September 2006

Building (Attachment WASTE-2, Figure 1, Mercury Sample Locations). The planter area was the only accessible area with exposed soil and closest to the subject building where potential historic releases from a mercury manometer, if indeed installed on the outside of the building, could be evaluated. Other relevant areas adjacent to the building were covered with concrete and inaccessible.

A hand-auger boring (HA-06) was advanced to a total depth of approximately 3 feet below ground surface in this area (Attachment WASTE-2, Figure 1, Mercury Sample Locations). Refusal on hard debris was encountered at 3 feet below ground surface. Soil samples were collected from HA-06 at depths of 0.5 and 2.5 feet below ground surface. The samples were subsequently transferred to a state and EPA-accredited laboratory for mercury analysis using the EPP Method 7471A.

Mercury was detected at concentrations of 5.14 and 0.0013 milligrams per kilogram, or parts per million (ppm), in the samples that were collected at 0.5 and 2.5 feet below ground, respectively.

The reported mercury values were compared against the current EPA Preliminary Residential and Industrial Remediation Goals (PRGs) and with the California Human Health Screening Levels (CHHSLs). The table below compares the two samples with the remediation goals and screening levels.

**TABLE 1
 COMPARISON OF SAMPLE RESULTS WITH EPA PRGs AND CHHSLs**

HA-06		EPA Preliminary Remediation Goals ¹		California Human Health Screening Levels ²	
Sample Depth	Sample Result	Residential	Industrial	Residential	Industrial
0.5 feet bgs	5.14 ppm	23 ppm	310 ppm	18 ppm	180 ppm
2.5 feet bgs	0.0013 ppm				

Notes:

bgs = below ground surface

ppm = parts per million

1. 2004 EPA PRGs for Mercury: 23 ppm for residential and 310 ppm for industrial scenarios

2. 2005 California Human Health Screening Levels (CHHSLs): 18 ppm for residential and 180 ppm for commercial/industrial land use

Based on this limited screening, it appears that the detected mercury concentrations are well below their respective regulatory threshold limits as set by the EPA and are not likely to pose a significant health risk to the site workers.

**ATTACHMENT WASTE-2
FIGURE 1
MERCURY SAMPLE LOCATIONS**