US ERA ARCHIVE DOCUMENT

STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

Public Service Company s Person Generating Station

Albuquerque, New Mexico (Signed)

Facility/Unit Type: Natural depression or pit, called Natural Pit Area (NPA)
Contaminants: Arsenic, Chromium, Lead, Mercury, Naphthalene, Toluene

Media: Soil

Remedy: Excavation of all contaminated soil within the unit with confirmatory sampling

FACILITY DESCRIPTION

The Person Generating Station is owned by the Public Service Company (PSC) of New Mexico. The 22-acre site is located in the Albuquerque Basin within the Rio Grande Valley. From 1951 to 1986 the Person Generating Station was used as a gas and oil fired production facility operated by PSC. The site still contains an operational electrical switching station and power operations facility.

In August of 1988, PSC was issued a joint postclosure hazardous waste permit by the New Mexico Environmental Department (NMED) and EPA. The NMED portion of the permit contained conditions requiring PSC to perform investigations on an underground tank. EPA s portion of the permit required the investigation of a natural pit, about 60x 85 feet, which received wastes containing organics (toluene and naphthalene) and heavy metals (lead, arsenic, and chromium).

Groundwater is approximately 100 feet below the surface in an unconfined aquifer and is used as a source of drinking water. The surrounding property is zoned for heavy manufacturing and the nearest housing development is approximately 0.75 miles southwest of the facility boundary. The facility boundaries are enclosed by an eight-foot high chain link fence. There are also warning signs placed around the contaminated area.

PSC conducted two soil investigations on the natural pit from January 1989 until May 1990. Phase I investigation consisted of four soil borings to a depth of five feet. Each sampling interval was

sampled for heavy metals, heavy organics, and solvents. Six of the 80 sampling intervals exceeded background concentrations for the heavy metals and organics analyzed. However, no soil intervals were contaminated below a depth of two feet. Only one sampling interval found levels of chromium that exceeded EPA s soil standard for chromium. No interval level exceeded EPA s soil standard for organics. Also, there were no solvents detected in the soil.

The Phase II investigation consisted of three soil borings to a depth of 10 feet. Each of the soil intervals was sampled for heavy metals. Six of the 36 sampling intervals exceeded background levels for heavy metals. Again, no soil intervals were contaminated below a depth of two feet and none of the samples analyzed exceeded EPA s soil standard for metals. The contaminated soil was also tested to determine whether the soil would qualify as hazardous material; the results were negative. Groundwater sampling was not required since soil contamination extended only two feet below the surface.

The results of these investigations indicated that the natural pit contained elevated levels of arsenic, chromium, lead, toluene, and naphthalene. These levels were, however, below EPA s cleanup standards. In a letter dated February 26, 1991, EPA tentatively determined that PSC could choose to place administrative controls on the natural pit instead of remediating the unit. However, PSC decided to remediate the unit and plans to proceed with EPA s approved remediation work plan to clean close the natural pit.

CONTAMINATION DETECTED AND CLEANUP GOALS

Med ia	Estimated Volume	Contaminant	Maximum Concentration (ppm)	MCL Action Level (ppm)	MCL Cleanup Goal	Point of Compliance
Soil	To be determined	Arsenic Chromium Lead Oil and grease	219 6832 202 68692	Not given 900 Not given Not given	<11ppm <11ppm <11ppm 100 ppm	Not given

EXPOSURE PATHWAYS

Soil is the potential exposure pathway of concern.

SELECTED REMEDY

The proposed remedy is to excavate contaminated soils from the natural pit. Soils contaminated with oily residue will be excavated based on a visual inspection. All visually oily areas will be removed horizontally and vertically, including an additional vertical foot of visually uncontaminated soil. Once soil is removed, PSC will sample the remaining soil for total petroleum hydrocarbons (TPH). If the remaining soil is below 100 ppm THP, the soil will not be removed.

A 2,600 square foot area identified as having metal contamination will be grided at five foot intervals. At each grid line intersection, a stake will be placed to mark the subsequent soil sampling. Soil samples will be from the 0-1 foot depth. Samples will be analyzed for total chromium. The presence of chromium contamination above 11 ppm determines whether the adjacent five foot by five foot sections will be excavated. If a grided soil section has four surrounding samples which do not show chromium above 11 ppm, that section will be considered clean and will not be excavated. Excavated soil will be removed to a depth of two feet. Once excavation is complete, a sample from the center of each excavated grid will be collected and analyzed for chromium to determine whether additional excavation is necessary. All excavated soil will be bulk loaded and transported to an offsite industrial permitted landfill.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

A public meeting was held by PSC on August 18, 1994, in Albuquerque, New Mexico. Eight individuals attended the meeting including representatives from the EPA, PSC, Environmental Services, Inc., and Albuquerque citizens. Six questions were asked, four of which were in reference to why PSC decided to remediate when such action is not being enforced. PSC responded by stating that: (1) they wanted to remove administrative controls; (2) the cost of future remediation would be more expensive if not remediated now; and (3) remediation would increase the value of the property. The two remaining questions dealt with whether the cleanup costs of the natural pit would be passed down to PSC customers. PSC responded that no cleanup costs would be passed down.

NEXT STEPS

EPA will issue a public notice of the permit modification and will hold a public hearing if there is significant interest. After the public comment period is closed, EPA will make a final decision on the permit modification. If the final decision remains the same as the tentative decision, PSC will implement the soil excavation plans. After the soil

is excavated, PSC will send a report verifying that all contaminated soil has been removed. EPA will review the report, and if found to be acceptable, will allow PSC to remove the administration controls on the natural pit.

KEYWORDS:

Groundwater, Soil; Arsenic, Chromium, Naphthalene Lead, Toluene, Oil/grease; Excavation, Offsite disposal, Administrative controls.

CONTACT:

Richard Mayer U.S. EPA, Region VI 1445 Ross Avenue Dallas, TX 75202 (214) 665-7442