

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Tuesday, September 26, 2006

From: Rita Engblom

Subject: Initiation of Action

Osage Power Plant

1415 East Fountain Road, Ponca City, OK

Latitude: 36.6543100

Longitude: -97.0644310

POLREP No.:	2	Site #:	06JPRV00
Reporting Period:		D.O. #:	
Start Date:	9/25/2006	Response Authority:	CERCLA
Mob Date:	9/25/2006	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	OKD987071248	Contract #	
RCRIS ID #:			

Site Description

The Osage Power Plant (formerly Lincoln Beerbower Plant) site located at 1415 East Fountain Road in Ponca City, Kay County, Oklahoma. The 28- acre property includes an abandoned nine-story, approximately 43,000 square feet, coal-burning power generation building. Several residences and businesses exist within 1 mile of the site. The nearest residence is located adjacent to the property, approximately 2 miles south of the plant. Businesses and residential and agricultural properties border the site on the north, west, and south sides.

Access to the site is restricted by a fence on the perimeter of the north, west, and south sides of the property. Three locked gates exist in the fence to minimize access to the property. The site is bordered on the east side by the Arkansas River. A boat ramp located south of the plant building allows access to the east side of the property from the Arkansas River.

According to the September 6, 2005 asbestos assessment conducted by an asbestos consultant for EPA, there is approximately 9,790 linear feet of friable ACM on pipe; 31,505 square feet on vessels and 23,200 square feet loose on the floor. Analysis indicated ACM samples contained >1% friable asbestos fibers. Amosite (10%), chrysotile (18% to 30%) and crocidolite (8%) were the asbestos fibers detected in the samples.

Current Activities

The EPA, through an Interagency Agreement with the U.S. Army Corps of Engineers (USACE) initiated this removal action on September 25, 2006. Asbestos abatement contractors began securing the area, collecting asbestos from around the building. All openings (windows/doors) will be temporarily sealed with plastic sheeting to prevent further release of asbestos during abatement operations. Site preparations this week also included establishment of a command post, mowing, security, pest control, etc.

Planned Removal Actions

This action will abate approximately 9,790 linear feet of Regulated Asbestos Contaminated Material (RACM) on pipe ranging in size from 1" to 24" pipe and 31,505 square feet of RACM (from 1" to 6" thick) in thermal system insulation on exhaust ducts, the main burner, aerator tank, heater #1, heater #2, and various other vessels.

Additionally, this action will address approximately 23,200 square feet of RACM littered throughout the plant on the floor (some areas of this debris are as much as 5' deep). Analysis of samples indicated >1% friable asbestos fibers. Amosite (10%), chrysotile (18% to 30%) and crocidolite (8%) were the asbestos fibers detected in the samples.

All abatement activities will be conducted in accordance with an Asbestos Abatement Project Design approved by the Oklahoma Department of Labor.

Work will be performed inside a negative pressure enclosure (NPE). At least 6 air changes per hour shall be maintained in the NPE. The NPE shall be maintained from the start of removal until clearance air sampling requirements are met. Air movement shall be directed away from workers and toward a HEPA filtration machine.

By using fine mist equipment, the RACM will be kept wet enough to prevent fiber release until it can be placed in appropriate containers for disposal. Wetted RACM shall be removed in manageable sections by hand removal methods and placed in containers before moving to a new location. Surrounding areas shall be maintained in an adequately wet condition until visible RACM is properly containerized.

An enclosed chute system (gently sloping) may be used for moving bagged RACM from the upper floors to the roll off containers. All material placed in the chute will be wrapped and/or sealed in a single layer of 6-mil poly or 6-mil disposal bag. The roll off container will be lined with a single layer of 6-mil poly on walls, floor, and ceiling in and double flapped on entrance. All other disposal containers (6-mil labeled disposal bags or drums) will be sealed when full. Waste disposal containers shall be decontaminated on exterior surfaces by wet cleaning and HEPA vacuuming before being placed in clean bags or drums for transport to waste load out trailer. Finally, a lock-down encapsulant will be applied to all areas abated after successful visual inspection by ODOL inspectors.

Daily inside air monitoring will be conducted in the vicinity of each abatement crew and load-out areas. Outside Area Monitoring will be conducted at each exit area. Also, daily air monitoring of the negative air machine exhaust and outside of the clean room will be conducted. Personal Monitoring will be conducted to include twenty-five percent of the work force or a minimum of two abatement workers. Exposure to airborne fiber concentrations by workers shall be limited to a maximum value of 0.01 fibers per cubic centimeter of air.

A minimum of twelve (12) area samples will be collected for clearance inside the containment and analyzed by Phase Contrast Microscopy (PCM). PCM is used to measure the fiber concentration of air samples per unit volume of air. Clearance air cassettes using PCM analysis must document that the airborne fiber concentration is less than 0.01 fibers per centimeter of air. When necessary the PCM analysis may be followed by Transmission Electron Microscopy (TEM) for fiber specific analysis of asbestos. TEM analysis must show asbestos fiber level less than 0.01 fibers per cubic centimeter for those fibers greater than five (5) micrometers, or less than 70 structures per square millimeter. If the air cassettes do not meet either the PCM or TEM clearance values, the area will be re-cleaned by wet wiping and HEPA vacuuming until clearance air monitoring levels are met.

Key Issues

None.

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