

**United States Environmental Protection Agency
Region VI
POLLUTION REPORT**

Date: Thursday, June 7, 2007

From: Rita Engblom

Subject: Final POLREP

Osage Power Plant

1415 East Fountain Road, Ponca City, OK

Latitude: 36.6543100

Longitude: -97.0644310

POLREP No.:	5	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:	6/7/2007	Incident Category:	Removal Action
CERCLIS ID #:	OKD987071248	Contract #	
RCRIS ID #:			

Site Description

The Osage Power Plant (formerly Lincoln Beerbower Plant) site is 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.

There is approximately 9,790 linear feet of regulated asbestos containing material (RACM) on pipe ranging in size from 1" pipe 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, there is 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.

Current Activities

For all site activities performed prior to 29 March 2007, please refer to POLREPs 1-4.

All removal of asbestos containing material (ACM) inside the building at Osage Power Plant was completed the week of 11 March 2007. No further air sampling was performed by ACE (US Army Corps of Engineers) contractors after The Oklahoma Department of Labor (ODOL) approved the closing of the building. The action levels for asbestos in air within the building, decon area, negative pressure machine outlet and waste load out area were not exceeded during site activities at the Osage Power Plant.

The final totals for the removal of ACM within the building included 8,065 linear feet of ACM on pipe and 7,705 square feet of ACM on surfaces (vessels, equipment, etc.). Additionally, 23,793 square feet of ground debris including ACM has been collected and bagged. To date, approximately 1,540 yd³ of ACM has been bagged and shipped for disposal. All of the piping, debris, and insulation have been shipped to Allied Waste Stillwater Sanitary Landfill for disposal.

ACE contractors identified 12-24 manometers in the basement which potentially contained mercury. Additionally ACE contractors were suspicious that the Osage Power Plant was not controlled using a typical pneumatic system, but one using mercury. EPA mobilized to the site with a Lumex RA-915 Mercury Vapor Analyzer. EPA monitored for mercury vapors within the plant. EPA did confirm that numerous piping within the building did contain mercury. EPA also identified multiple areas within the

control room and basement of the facility that contained visible free mercury. After this investigation, EPA determined that ACE contractors would recover free mercury that was visible in the building and any mercury that was contained, but easily accessible. ACE contractors identified approximately 10 switches within the control room and basement that contained mercury. Several manometers were also removed from the basement. USACE contractors also removed visibly free mercury from the basement and control room. A total of approximately 15 pounds of mercury were transferred to Mercury Waste Solutions in Union Grove, Wisconsin. The owner of the facility has been notified about the mercury concerns within the building.

Also in the basement, ACE contractors identified multiple 55 gallon drums, oil/grease waste, unknown overpacked solids, and fours bags of disodium phosphate. The waste was profiled by a subcontractor and transferred to Waste Express in Kansas City, Missouri for disposal.

ACE contractors addressed safety concerns pertaining to the physical hazards within the building after abatement activities had been completed. The majority of the physical hazards dealt with substantial holes within the walkways of the building which presented fall hazards. These holes were covered with plywood and marked with tape/fluorescent paint.

During a recon along a 75 foot perimeter around the facility, ACE contractors identified an area on the north side of the facility containing debris. ACE contractors reported that the debris was visibly similar to the RACM debris found within the building. EPA mobilized to the site with The Oklahoma Department of Environmental Quality (ODEQ) and sampled this area for bulk ACM and ACM within the soil up to 18 inches in depth. Lab results confirmed that ACM was present within a 50ft by 30 ft area. ACE contractors performed a removal of this area using a backhoe. Test holes in this area were dug at a depth of up to 10 feet. Visibly suspicious ACM was found throughout the 10 ft. It was determined by EPA that ACE contractors should remove visible ACM at a depth of two feet. Orange caution tape along with asbestos caution tape was placed at this depth. ACE contractors then capped the area with 1 foot of clean clay and 1 foot of clean top soil. During the excavation, due to the amount of visible ACM found at the edge of the 50ft by 30 ft area, the removal/dig was extended to a 75ft by 40ft area. The cap was extended to a 90ft by 50ft area. This area was then hydro mulched to initiate vegetation to protect from erosion. A total of 276yds³ of soil/ACM was transferred to Allied Waste Stillwater Sanitary Landfill for disposal.

On 15 April 2007, all field and demobilization activities had been completed at the Osage Power Plant. A final site walk was conducted by the Oklahoma DEQ, ACE and EPA contractors on May 31, 2007.

Next Steps

The ACE will continue to monitor the progress of vegetation growth in the removal/dig area north of the power plant.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Asbestos Containing Material	1816 yds ³	see final report	Allied Waste Stillwater Sanitary Landfill
mercury	15 lbs	2325002, 2329510	Mercury Waste Solutions
Oily Water	1100 gallons	N/A	Waste Express, Kansas City, MO