United States Environmental Protection Agency
Region VII
POLLUTION REPORT

Date: Tuesday, June 8, 2004
From: Doug Ferguson

Subject: Initiation of Action
Annapolis Lead Mine Site
Iron County, Annapolis, MO
Latitude: 37.3633000
Longitude: -90.6746000

POLREP No.:	1	**Site #:**	07XLRV01
Reporting Period:		**D.O. #:**	0045
Start Date:	2/18/2004	**Response Authority:**	CERCLA
Mob Date:	2/18/2004	**Response Type:**	Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:	MO0000958611	**Contract #**	68-S7-02-04
RCRIS ID #:			

Site Description
The Annapolis Lead Mine site is the location of a lead mine that operated in the 1920's and 1930's. During that operational period tons of mine wastes were abandoned at the surface of the site. This mine waste contains elevated levels of lead along with cadmium, thallium and arsenic. The mine waste is slowly washing off of the site through a small ditch that drains from the site. The ditch empties into Sutton Branch, which, only about a mile south, empties into Big Creek. Environmental assessments have been performed by both the Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR) in the past. The EPA performed a removal action at the site in 1997 in response to children with elevated blood-lead levels living on-site. However, the current action is the first action taken to stabilize the tailings pile and end the contamination migration from off-site.

Current Activities
Between February 2002 and May 2002, the EPA was on-site on an intermittent basis. The EPA and the EPA contractor, Superfund Technical Assessment and Response Team (START), roughed in the outer boundaries of the lead-contaminated soil with an X-Ray Fluorescent (XRF) Analyzer. An EPA surveyor was utilized to grid the site off into 50'X 50' cells. The START contractor mobilized to the site to perform lead assessment activities on each grid and modify the outer boundary of lead-contaminated soil based upon their findings. A map was generated that visually depicts the area contaminated by lead. The map is broken into three separate ranges: 0 - 400, 401 - 999, 1000 - infinity.

The Emergency and Rapid Response Service (ERRS)contractor crews mobilized to the site on May 10, 2004. By the time they were mobilized to the site, a clean area had been constructed near the county road. Office trailers, storage and portable toilets were placed on the clean area. The office trailers were connected to electricity and had phone service installed.

During the weeks of May 10 and 17, 2004, the ERRS crews utilized two bull dozers and an excavator to begin constructing roads and drainage ways around the tailings pile as well as clearing trees, concrete structures and rubbish. During the week of May 24, 2004, and Memorial Day week beginning June 2nd, 2004, the ERRS crews constructed a lower settling basin. The settling basin, constructed before Memorial Day weekend, effectively placed a physical barrier between the tailings pond and Sutton Branch Creek.

During the week of June 2, 2004, a large off-road dump truck was mobilized to the site. Construction of the upper settling basin began. Construction of the upper basin is expected to be completed soon.

Work is proceeding according to a set of plans and specifications completed for the EPA by the START contractor.

The START contractor is also currently on-site performing removal oversight. One of the other functions

of the START contractor is to document site conditions.

An National Pollutant Discharge Elimination System (NPDES) permit has been obtained from the MDNR.

Planned Removal Actions

The primary purpose for this removal action is to stabilize the tailings pile that has been washing away for upwards of 60 years. With the construction of the lower settling basin, sediments migrating from the tailings pile can be managed before they impact Sutton Branch or Big Creek. The settling basins are temporary and will be maintained during the course of this action and cleaned and closed before demobilization. Tailings will be constructed as specified by the plans and specifications. Drainage will be engineered as specified by the plans and specifications. The tailings will be capped.

Next Steps

The upper settling basin will be completed soon. Drainage from the site will be diverted into the wastewater train made up by the upper and lower settling basins and the drainage channel that runs through the site. Tailings will be shaped as prescribed by the plans and specifications. A borrow area will be established on-site. Once the tailings are shaped to plans and specifications a cap will be installed over them. Grass will be sewn over the cap to establish a vegetative cover.

Key Issues

Sam A. Baker State Park is located about 15 miles downstream of the site on Big Creek. Two sediment samples were taken in Big Creek near the intersection of Highway 143 and Big Creek. The samples were analyzed for lead and other heavy metals commonly associated with mining in the area. The samples did not indicate a problem with heavy metals in the sediments of Sam A. Baker State Park.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,500,000.00	$109,184.00	$1,390,816.00	92.72%
RST/START	$110,000.00	$66,065.00	$43,935.00	39.94%
Analytical	$24,000.00	$0.00	$24,000.00	100.00%
Contingency	$261,000.00	$0.00	$261,000.00	100.00%
Intramural Costs				
USEPA - Direct (Region, HQ)	$48,000.00	$2,000.00	$46,000.00	95.83%
USEPA - InDirect	$25,411.00	$0.00	$25,411.00	100.00%
Total Site Costs	$1,968,411.00	$177,249.00	$1,791,162.00	91.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

response.epa.gov/annapolisleadmine

POLREP #1 Last Updated 1/7/2005