

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

**Date:** Monday, April 13, 2009

**From:** Terrence Byrd

**Subject:** Excavation of diversion channel.

Ore Knob Mine Site

Ore Knob, NC

Latitude: 36.4086670

Longitude: -81.3238890

<b>POLREP No.:</b>	12	<b>Site #:</b>	A4ND
<b>Reporting Period:</b>	3/28/09-4/10/09	<b>D.O. #:</b>	
<b>Start Date:</b>	10/20/2008	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	10/20/2008	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	NCN000409895	<b>Contract #</b>	
<b>RCRIS ID #:</b>			

#### **Site Description**

The Site contains areas affected by mining, including three principal areas that were directly affected by mining along with other areas, primarily downstream, where hazardous substances have come to be located. The three principal areas include the 1950s Mine and Mill Area, the 19th Century Operations Area and a Main Tailings Impoundment. The Action memo recommends response actions to address threats from the main tailings impoundment.

The 1950's Mine and Mill Area comprises 15 acres and is located northwest of the intersection of Ore Knob Road and Little Peak Creek Road, just north of Highway 88. This area contains derelict ore bins, concrete mill foundations, a transformer building, other ruins, a small sawmill currently in operation, two acres with about 10,000 cubic yards of tailings - now mostly covered with stumps, and a two acre former pond where process water was stored. Little Peak Creek starts just upstream of the former pond, flows through the former pond, and discharges into Peak Creek 2.5 miles downstream.

The 19th Century Operations Area and the Main Tailings Impoundment are located across Little Peak Creek Road, at the end of Ore Knob Mine Road. The 19th Century Operations Area includes a series of barren and nearly barren stretches of land (totaling about 5 acres) near the top of Ore Knob that contain waste rock dumps from at least 11 mine shafts as well as locations where ore was roasted to drive off sulfur and smelted to recover copper.

#### **Current Activities**

During this reporting period, activities conducted at the Site included: monitoring of ground water quality at the designated monitoring locations, excavation of subsoil from the eastern hillside, de-watering of ponds #1 and #3, placement of excavated material and filling of ponds #1 and #3, excavation of loose rock, drilling of boreholes and explosives placement for blasting of rock, blasting of rock in the area of the diversion channel from section 10+00 to 11+00, removal and stockpiling of materials from the location of the proposed diversion channel and screening and stockpiling materials with a power screen unit.

Blasting events were conducted on 3/30/2009, 3/31/2009, 4/2/2009, and 4/9/2009. Blasting of rock was conducted from sections 10+00 through 12+00.

#### **Planned Removal Actions**

Planned removal actions include: excavation of subsoil from the eastern hillside, de-watering of ponds #1 and #3, placement of excavated material and filling of ponds #1 and #3, excavation of loose rock, drilling of boreholes and explosives placement for blasting of rock, blasting of rock in the area of the diversion channel from section 11+00 to 12+00, removal and stockpiling of materials from the location of the proposed diversion channel and screening and stockpiling materials with a power screen unit.

