State of Oregon
Department of Environmental Quality Memorandum

Date: July 29, 2016

To: **Chris Field, Program Manager, EPA Emergency Management Program**
Wally Moon, Unit Manager, EPA Emergency Management Program

From: **Bryn Thoms, R.G. Western Region Cleanup Program** BET

Through: **David Anderson, Manager, DEQ Eastern Region Cleanup Program**

Subject: **Removal Action Referral – Opalite Mine, Malheur County, Oregon**
CERCLIS #ORN001002255, ECSI #2491

The purpose of this memorandum is to request action by EPA's Removal Program at the former Opalite Mercury Mine in Malheur County, Oregon to address elevated levels of mercury and arsenic-contamination in un-secured piles and mill site remnants. In 2014, during a site visit at Opalite mine, ODEQ observed evidence of removal of mine tailings from the western tailings pile, which was likely used for road or general construction aggregate. Anecdotal evidence from locals indicate the likelihood that the un-secured tailings piles are used for borrow material for construction or other aggregate uses.

In 2012, EPA's Region 9 Removal Program removed about 10,000 tons of mercury-contaminated material from 56 homes and a school and capped about 100,000 sq. ft. of roadways and other areas in McDermitt, NV. McDermitt straddles the Oregon-Nevada border and is located about 20 miles east of Opalite Mine. Several of the homes where contaminated material was removed are located in Oregon. Much of the material was reported by EPA as having originated from Cordero mine in Nevada. However, observations made during the McDermitt Removal suggest that material could have come from Opalite mine as well as one of the other three local mercury mines (Bretz mine in Oregon and Cordero and McDermitt mines in Nevada). All four mines are part of the Opalite mercury district.

As part of the Removal in the town of McDermitt, the responsible parties for Cordero and McDermitt Mines have addressed security at those sites. In addition, at the Bretz mine, the BLM installed fences, signs, and capped the mostcontaminated material. Opalite mine remains the last of the former mercury mines in the area that is unsecured.

Background

The former Opalite mercury mine is a patented mine claim (private land) which operated from about 1926 to 1968 with the majority of production taking place prior to 1943. The mine was operated by the Bradley Mining Company in conjuction with the nearby Bretz mercury mine. The mine site is owned by Bradley Mining Company who has been identified by EPA as the responsible party for several mercury mines in California. The mine site consists of a large open pit with several adits, several shafts and adits outside the footprint of the open pit, several small exploratory excavations, several waste rock piles, two large tailings piles, and remnants of mill

buildings and structures including a furnace and assay lab. The site property is about 342 acres in size, with most of the mill area, open pit, adits, and piles located on about 40 acres.

Site assessment activities at the site began with a Preliminary Assessment conducted by ODEQ in 2001, which was followed by a CERCLA-Site Inspection (SI) conducted by EPA in 2003. Based on the results of the PA and SI (human health risks from uncontrolled access and ecological risk to a threatened species - Lahontan cutthroat trout) and inability of the responsible party to pay, ODEQ declared the site an orphan site in 2003. The declaration allowed eligibility for funding through ODEQ's orphan site account which was followed with a Site Investigation focusing on risks to human health, conducted in 2005.

Orphan site account funding has diminished in the last decade and as such much of the focus for funding has been on maintenance of orphan sites with existing treatment systems or other intensive maintenance requirements on existing remedies. This has limited ODEQ's ability to conduct new assessment or removals at orphan sites. ODEQ planned to limit access to the site by fencing the site and reducing road access before funding disappeared. ODEQ anticipates that a Removal will include some form of site security such as fencing, signage, road removal, or road blockage as a minimum. Assistance from EPA is timely and necessary to address human health risks associated with uncontrolled access to the site.

Summary

Based on the following factors:

- unsecured tailings piles from which borrow material has historically been used for local construction;
- uncontrolled human access to the site which has elevated mercury and arsenic
- uncontrolled human access to the site which has open pits, open adits, and shafts;
- ecological risk from run off of heavy metals into Lahontan cuththroat trout bearing streams;

ODEQ requests Removal support from EPA. ODEQ understands that the EPA will likely have a better understanding of the immediate risks to human health upon completion of a Removal Assesment in early August, 2016 and that the details of a future Removal Action are unknown at this time. ODEQ also understands that the Removal Program prioritizes risks to human health. However, ODEQ would appreciate any additional assistance during the Removal to address ecological risk to threatened fish species.

ODEQ also understands and anticipates agreeing to post-Removal site controls. Once the Removal Action and post-site controls are defined, DEQ will prepare a letter that addresses and agrees to post-Removal site controls such as maintenance of signage and fencing, site visits, or other similar long-term O&M requirements.

If you have any questions about this request, please contact Project Manager Bryn Thoms, Eastern Region Cleanup Program Manager David Anderson, or Emergency Response and Environmental Cleanup Program Manager Bruce Gilles. ODEQ appreciates assistance from EPA in addressing risks to human health and the environment at the former Opalite Mercury mine.