

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
COLORADO STATE OFFICE  
2850 YOUNGFIELD STREET  
LAKEWOOD, COLORADO 80215-7093

May 11, 1999

In Reply Refer To:  
3809 (CO-933) P

EMS Transmission 05/11/99  
Instruction Memorandum No. CO-99-024  
Expires: 09/30/2000

To: San Juan Resource Area

From: State Director, Colorado

Subject: Removal Action - Lark No. 3 Adit - Acidic Mine Drainage

Please proceed with the removal action as given in the attached Removal Action Memorandum.

If you have any questions, please contact Stephanie Odell at 970-385-1353.

Signed by  
Ann J. Morgan  
State Director

Authenticated by  
Don Snow  
EMS Operator

Attachments

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**REMOVAL ACTION MEMORANDUM**

To: Interested Parties

From: State Director, Colorado

Subject: Time-Critical Removal Action at the Lark No. 3 adit

## **I PURPOSE**

This Removal Action Memorandum documents, explains, and approves the decision to undertake a time-critical removal action at the Lark No. 3 adit located on public lands administered by the Bureau of Land Management (BLM), San Juan Resource Area. The cleanup is a "time-critical removal action" as defined below. The Lark No. 3 adit is located 7 miles north of Silverton, Colorado on the right-hand side of Prospect Gulch Road approximately 1 mile from the intersection with Cement Creek Road. The Universal Transverse Mercator coordinates are 4196900 N, 264200 E, Zone 13.

## **II AUTHORITY**

The authority for this removal action at the Lark No. 3 adit is given by two statutes, as follows:

The Secretary of the Interior is required by the Federal Land Policy and Management Act (FLPMA) of 1976 Section 302(b) to "take any action necessary to prevent unnecessary or undue degradation of the [public] lands."

Executive Order 12580 delegates to the heads of executive departments certain duties and powers vested in the President by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Certain authorities have been re-delegated to the Director of the BLM and subsequently to the BLM State Directors. Refer to Secretarial Order No. 3201 and BLM Washington Office Instruction Memorandum No. 97-14, Change 1. In particular, these documents delegate to the State Director the authority to undertake CERCLA removal actions deemed necessary to protect the public health or welfare or the environment.

The Department of the Interior policy is to "aggressively pursue potentially responsible parties to correct their contamination of Departmental lands and

facilities or to recover the costs of cleanup" (518 Departmental Manual 2.4 D.). CERCLA provides administrative authorities for cost recovery whereas FLPMA does not provide administrative remedies, see Section 303(a).

In light of the authorities described above, BLM initiated a search for responsible parties on the Lark No. 3 adit. No viable responsible party has been identified to date, therefore, the BLM Colorado State Office is authorized to initiate removal action under CERCLA.

For the upper Animas River watershed, the BLM Colorado State Office intends to limit the use of CERCLA authorities to removal actions and cost recovery. In order to support the voluntary cleanup efforts underway in the watershed, BLM Colorado State Office is not at this time pursuing the Superfund process, remedial actions, and listing on the National Priority List.

The Lark No. 3 adit is not a federally "owned and/or operated" facility for the purposes of 42 U.S.C. 9620, but the public lands on which the adit lies are under the administration of the BLM, San Juan Resource Area. Although the BLM specifically denies any liability in this situation, it will be the "lead agency" for all response actions at nonNational Priorities List sites occurring on BLM administered public lands.

### **III BACKGROUND**

The United States Environmental Protection Agency (USEPA) notified the public of possible hazardous releases in the Upper Animas Mining District by entry in the CERCLA Information System (CERCLIS). The site identification is EPA ID#: CO0001411347. The BLM considers the Lark No.3 adit as an operable unit within the Upper Animas Mining District site. The Upper Animas Mining District is not on the National Priority List and USEPA has suspended the listing process to stimulate voluntary cleanup.

The Upper Animas Mining District CERCLIS site includes public lands under the jurisdiction and control of the BLM and the USDA-Forest Service (San Juan National Forest), private lands patented through the General Mining Law of May 10, 1872, as amended, and other private lands. The Lark No.3 adit is located on a parcel of public land administered by the BLM.

In the early 1990s, the Colorado Department of Public Health and Environment sampled the water quality of the upper Animas River watershed and found that some water pollutants exceed aquatic life standards. Subsequently, the Colorado Water Quality Control Commission adopted numeric and narrative standards for certain segments of the watershed. These standards were adopted with a delayed effective date to provide a period for the Animas River Stakeholder Group to proceed with voluntary watershed characterization, feasibility of cleanup, and remediation. The BLM is a member of the Animas River Stakeholder Group.

Throughout the Upper Animas Mining District, the release(s) or threat(s) of release of hazardous substances are evidenced by the presence of, and seepage from mine waste rock and mill tailings; absent vegetation; abnormal stream water color and chemistry, and pronounced discoloration of stream water color during storm events; lack of normal stream fauna; and discharge from numerous abandoned or inactive mine adits.

The Lark No. 3 adit discharges acidic, heavy-metal laden waters and the associated mine wastes contain metal concentrations toxic to wildlife and humans. The adit discharge has an acidity of pH 3.2, and metal contaminants include arsenic 0.00077 parts per million (ppm), cadmium .0207 ppm, copper 0.425-12.02 ppm, iron 0.763-71.8 ppm, lead 0.32 ppm, and zinc 3.28-55.11 ppm. The administrative record for the Lark No. 3 adit contains additional data on water quality of the polluted discharge. These concentrations far exceed Colorado basic stream standards for metals, class I aquatic life standards and exceed reportable quantities under CERCLA. The mine wastes also exceed BLM's risk management criteria for wildlife and humans; however, this removal action memorandum only concerns the adit discharge.

The BLM completed an initial evaluation of the Lark No. 3 adit and the results are reported in Removal Preliminary Assessment for the Lark No. 3 Adit signed August 15, 1998. This preliminary assessment is in the administrative record, and includes an evaluation of the appropriateness of a removal action based on criteria given at 40 CFR 300.415(b)(2). See Section IV below for a summary of the environmental threats. The preliminary assessment concludes that a removal action is appropriate, and therefore, a CERCLA Site Inspection

is not considered necessary at this time. The preliminary assessment, in particular, and the administrative record in general, should be consulted for further, detailed information on physical location, site characteristics, the release or threat of release of hazardous substances, maps and pictures, and other documentation.

Local citizens and citizen groups, state and local government, congressional and state legislature representatives, and other federal agencies have been, or will be, informed of the removal action by the BLM. The project manager, on-scene coordinator, or other BLM staff have met with members of the public, Animas River Stakeholders Group, San Juan County Board of Commissioners, Colorado Division of Public Health and Environment, and USEPA regarding the removal action, and these contacts will be maintained.

Additional removal actions are being planned by the BLM at other locations within the Upper Animas Mining District. These removals are not addressed by this memorandum.

#### **IV THREATS TO PUBLIC HEALTH OR WELFARE AND THE ENVIRONMENT**

From my review of this situation and the water quality data, I have determined that there is a threat to public health or welfare, or to the environment, as set forth in the National Contingency Plan at 40 CFR 300.415(b)(2). Briefly, this threat is the discharge of acidic, heavy-metal laden water to Prospect Gulch tributary to Cement Creek and the Animas River. The acidic, heavy-metal laden discharge is harmful to aquatic life.

The BLM has inventoried over 300 abandoned mines that are on public lands in the Upper Animas Mining District. These abandoned mines have been prioritized for cleanup based on their damage to the environment, and the Lark No 3 adit is one of the priority sites.

In compliance with the BLM mandates given in part II above, I am issuing this Removal Action Memorandum.

#### **V PROPOSED ACTION**

This proposed time-critical removal action diverts the adit discharge away from the adjacent waste dump thus preventing the discharge from accumulating additional metals as it seeps through the mine wastes. This diversion also controls the discharge for possible future treatment. The work plan involves (1) removing alluvium that has slumped in front of the adit portal, (2) inserting pipe into the adit to collect drainage, and (3) piping drainage past mine wastes to an adjacent gulch. Details of the planned removal activities are given in the work plan which is available in the administrative record.

Alternatives to the proposed action are limited. Generally, the first step in any remediation work at an abandoned mine site is hydrological control of surface and groundwater and acid mine drainage in and around a site. The proposed action is such a hydrological control step. The proposed action will help to dry up the mine wastes on site for possible future remediation and will control the adit discharge for possible future treatment. The no action alternative is unacceptable because the adit discharge would continue as a source of pollutants to the Animas River. This removal action may not constitute a final response action. Additional treatment of the adit discharge and mine wastes may be required.

The proposed action is time-critical as there is a planning period of less than six-months before on-site activities

must be initiated.

Any BLM removal action within the Upper Animas Mining District will comply with all of the substantive provisions of federal and state applicable or relevant and appropriate requirements (ARARs) to the extent practical considering the exigencies of the situation, and in consultation with the USEPA and the State of Colorado. By copy of this memorandum, USEPA and the State will have an opportunity to provide requirements. The work plan for this removal action was prepared by the Colorado Division of Minerals and Geology and it incorporates their requirements.

Representatives of San Juan County will be given a tour and presentation of the work plan for their review and comment. Cultural clearances will be obtained prior to the work.

Clearances for threatened and endangered species also will be obtained prior to the work.

No federal, state, or local permit shall be required for any removal or remedial action pursuant to 42 U.S.C. 9621 (e)(1). For the purposes of the BLM response actions in the Upper Animas Mining District, "on-site" is defined as BLM-administered public lands, or other suitable areas, in close proximity to the contamination, generally in the Upper Animas Mining District CERCLIS site, that the BLM deems necessary for implementation of this and other related response actions.

If statutory requirements and regulations are met, and contracts prepared in a timely manner, it is anticipated that the proposed removal action at the Lark No. 3 adit will commence in the summer of 1999.

The removal costs to the BLM specifically due to this removal action, including but not limited to planning, construction activities, and oversight are estimated at approximately \$10,000. Funding is provided by a special Department of the Interior Abandoned Mined Lands pilot project to the San Juan Resource Area for the upper Animas River watershed.

## **VI EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Should action be delayed, ongoing or potential injury will continue to BLM-administered public resources and public health or welfare and to the environment; should action be not taken, this ongoing or potential injury will continue indefinitely. Additionally, delay of the removal activity at the Lark No. 3 adit may erode the relationship established with the Animas River Stakeholders Group, and discourage them from further efforts to address other pollution sources in the upper Animas River watershed.

## **VII OUTSTANDING POLICY ISSUES**

This proposed removal action will be a positive step in moving toward improved ecosystem health in the upper Animas River watershed. It is in the best interest of the BLM, the local population, and the impacted ecosystem for this action to go forward at the Lark No. 3 adit.

A potentially responsible party search is underway for the Lark No. 3 adit. BLM needs to continue pursuing the possible participation of any responsible parties in the removal action.

## **VIII ADMINISTRATIVE RECORD AND COMMUNITY RELATIONS**

Pursuant to 40 CFR 300.415(m), Cal Joyner, San Juan Resource Area Manager, has designated Stephanie Odell as spokesperson and on-scene coordinator. I reaffirm these designations. The administrative record for this time-critical removal action will be available during regular business hours at the San Juan Resource Area Office in Durango, Colorado; the Animas River Stakeholder Group, 8181 CR203, Durango, Colorado 81310; and the County Clerk, San Juan County, Colorado.

## **IX DECISION**

This decision document represents the selected removal action for the Lark No. 3 adit Operable Unit, Upper Animas Mining District CERCLIS Site, developed in accordance with CERCLA as amended and not inconsistent with the National

Contingency Plan. This decision is based on the administrative record for the site.

By copy of this memorandum, I am formally notifying USEPA Region VIII and the State of Colorado of my finding of the appropriateness of a removal action at the Lark No. 3 adit.

Ann J. Morgan

Date

State Director