



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

75 Hawthorne Street
San Francisco, CA 94105

MEMORANDUM

SUBJECT: Request for a 12-Month Exemption
Action Memorandum for the Iron King Mine-Humboldt Smelter
Superfund Site, Dewey-Humboldt, Yavapai County, Arizona

FROM: Martin Powell, On-Scene Coordinator
Emergency Response Section (SFD-9-2)

TO: Daniel Meer, Assistant Director
Superfund Division

THROUGH: Harry Allen, Chief
Emergency Response Section (SFD-9-2)

I. PURPOSE

The purpose of this Action Memorandum is to request the continuation of the time-critical removal action beyond 12 months to complete the mitigation of threats to human health and the environment posed by the presence of uncontrolled hazardous substances at the Iron King Mine-Humboldt Smelter Superfund Site, Dewey-Humboldt, Yavapai County, Arizona.

The United States Environmental Protection Agency (U.S. EPA) initiated a federal removal action on August 29, 2011, to mitigate threats to human health and the environment posed by the presence of high concentrations of arsenic and lead in soils and tailings on residential and public properties in the Town of Dewey-Humboldt, Yavapai County, Arizona. More than 12 months have elapsed since the beginning of the Federal response, and additional time is necessary to complete the removal action as proposed in the July 26, 2011, Action Memorandum (Attachment 1).

II. SITE CONDITIONS AND BACKGROUND

Site Status: NPL
Category of Removal: Time-Critical
CERCLIS ID: AZ0000309013
SITE ID: 09MX

A. Site Description

1. Physical location

The Iron King Mine-Humboldt Smelter Superfund Site (Site) is located in Dewey-Humboldt, Yavapai County, Arizona. Dewey-Humboldt was incorporated on December 20, 2004 from the existing unincorporated towns of Dewey and Humboldt, located adjacent to one another in the Agua Fria River Valley, 15 miles east of Prescott. The estimated population of the town was 3,613 according to the 2005 census estimates. The geographic coordinates of Dewey-Humboldt are 34 degrees, 31.57 minutes North latitude and 112 degrees, 15.9 minutes West longitude.

The Site is a combination of sources and releases from two facilities: the Iron King Mine located west of Highway 69, and the Humboldt Smelter, located east of Highway 69 and south of the main portion of town. The majority of Dewey-Humboldt is situated between the mine and the smelter. Three waterways (Chaparral Gulch, Galena Gulch, and Agua Fria River) also transect the Site.

2. Site characteristics

Please refer to the attached July 26, 2011, Action Memorandum for a description of the site and its conditions. This portion of the removal action is focused on the restoration of previously remediated parcels, which were recently and adversely impacted by severe rains during the 2012 Monsoon. These rains have been described as a 50 year event.

3. Removal site evaluation

Please refer to the attached July 26, 2011, Action Memorandum.

The proposed actions of the July 26, 2011 Action Memorandum were successfully completed on November 15, 2011. Due to severe rain events during July 2012, certain previously remediated properties were adversely impacted, and require additional remediation. Hydrological restoration is necessary in the unsurfaced right-of-way and embankment adjoining the Sweet Pea Lane residential properties. Resurfacing and restoration of the area down gradient of the right-of-way is also necessary. The parcels most affected by the Monsoon are described as OFS-260 and OFS-360 in the attached July 26, 2011, Action Memorandum.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Please refer to the attached July 26, 2011 Action Memorandum.

5. National Priorities List ("NPL") status

Please refer to the attached July 26, 2011 Action Memorandum.

B. Other Actions to Date

Please refer to the attached July 26, 2011 Action Memorandum.

In addition, the actions proposed in the July 26, 2011 Action Memorandum were completed between August 29, 2011 and November 15, 2011.

C. State and Local Authorities' Roles

Please refer to the attached July 26, 2011 Action Memorandum.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Please refer to the attached July 26, 2011 Action Memorandum.

IV. ENDANGERMENT DETERMINATION

Please refer to the attached July 26, 2011 Action Memorandum.

V. EXEMPTION FROM STATUTORY LIMITS

Section 104(c) of CERCLA generally restricts federal lead removal actions to a total extramural direct cost of \$2 million or 12 months per 42 U.S.C. § 9604(c)(1). The July 26, 2011, Action Memorandum for this Site provided for a \$1,944,000 Removal Action Project Ceiling.

Pursuant to Section 104(c)(1)(A) of CERCLA and 40 C.F.R. § 300.415(b)(5)(i), application of the emergency exemption continues to be appropriate when: 1) there is an immediate risk to public health or welfare or the environment; 2) the response actions are immediately required to prevent, limit, or mitigate an emergency; and 3) such assistance will not otherwise be provided on a timely basis. Each of these requirements is addressed below:

A. Emergency Exemption

1. There is an immediate risk to public health or welfare or the environment

The likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of potential future releases and migration of those substances, pose an imminent and substantial endangerment to public health.

2. Continued response actions are immediately required to prevent, limit or mitigate an emergency

An immediate and continued response is necessary to prevent direct human contact with contaminated soils which threaten to be exposed by continued loss of the protective clean soil cover through erosion caused by heavy rains.

3. Assistance will not otherwise be provided on a timely basis

Current Site conditions pose the threat of on-going and potential future releases of CERCLA hazardous substances, namely arsenic and lead. The likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of potential future releases and migration of those substances, pose an imminent and substantial endangerment to public health, and/or welfare, or the environment based on the factors set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2). These factors are documented in the July 26, 2011 Action Memorandum.

No other appropriate federal, local or state public funding source has been identified to respond to the release.

B. Consistency Exemption

EPA asserts that the selected time-critical removal activities are consistent with likely remedial alternatives for the Site.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Please refer to the attached July 26, 2011 Action Memorandum.

This continuation of the removal action is focused on the restoration of certain previously remediated parcels, which were recently and adversely impacted by severe rains during the 2012 Monsoon. These rains have been described as a 50 year event. Restorative activities will be performed under the terms of a U.S. EPA Environmental Response Team hydrological restoration design and will broadly include:

- Installation of improved rip rap spillways along the embankment between the Sweet Pea Lane and city right-of-way parcels,

- Silt removal and resurfacing impacted areas down gradient of the embankment,
- Installations of a rock-lined toe drain at the base of the embankment, and
- Any other activities, including the possible importation of additional clean backfill soils, that may be deemed necessary in the final removal mobilization.

2. Contribution to remedial performance

Please refer to the attached July 26, 2011 Action Memorandum.

3. Applicable or relevant and appropriate requirements (ARARs)

Please refer to the attached July 26, 2011 Action Memorandum.

4. Project schedule

In addition to the activities completed under the July 26, 2011 Action Memorandum, it is estimated that the additional removal activities proposed in this 12 Month Exemption Request will take approximately 3 weeks to complete over one or more mobilizations.

B. Estimated Costs

There is no change in the estimated costs from the July 26, 2012 Action Memorandum.

Regional Removal Allowance Costs

Cleanup Contractor	\$ 1,450,000
START Contractor	\$ 120,000
SERAS Contractor	\$ 50,000

Extramural Costs Not Funded from the Regional Allowance

	\$ 0
Extramural Subtotal	\$ 1,620,000
Extramural Contingency (20%)	<u>\$ 324,000</u>
TOTAL, Removal Action Project Ceiling	\$ 1,944,000

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the Site conditions, the nature of the hazardous substances documented on-Site and the potential exposure pathways to nearby populations described in Sections III and IV above, actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to present an imminent and substantial endangerment to public health or welfare, or the environment.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues with the Site identified at this time.

IX. ENFORCEMENT

Please see the Confidential Enforcement Addendum in the July 26, 2011 Action Memorandum for a discussion regarding PRPs and enforcement. In addition to the extramural costs estimated for the proposed action, a cost recovery enforcement action also may recover the following intramural costs:

Intramural Costs¹

U.S. EPA Direct Costs	\$ 60,000
U.S. EPA Indirect Costs (47.71% of Spending \$1,944,000+ \$60,000)	<u>\$ 956,108</u>
TOTAL Intramural Costs	\$ 1,016,108

There is no change to the estimated intramural costs from the July 26, 2011 Action Memorandum. The total EPA extramural and intramural costs for this removal action, based on full-cost accounting practices that will be eligible for cost recovery, are estimated to be \$ 2,960,108. Of this, an estimated spending of \$ 1,944,000 comes from the Regional removal allowance.

X. RECOMMENDATION

¹ Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

Conditions at the Site meet the criteria for the CERCLA 104(c) consistency exemption and I recommend that you approve an exemption from the 12-month limit to allow a continued removal response.

The total removal action project ceiling remains at \$1,944,000 as approved under the July 26, 2011 Action Memorandum. An increase of funds is not requested. If you approve of this action, please indicate your decision by signing below.

Approved:  9-25-2012
Daniel Meer, Assistant Director Date
Superfund Division

Attachments

Action Memorandum dated July 26, 2011

cc: Sherry Fielding, USEPA, OEM, HQ

bcc: Site File
H. Allen, SFD-9-2
C. Benson SFD-9-2
J. Dhont, SFD-6-2
S. Mueller, ORC-3
C. Temple, SFD-9-4