



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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September 23, 2019

Ref: 8SEM-EMR

ACTION MEMORANDUM AMENDMENT

SUBJECT: Approval and Funding for Amendments to Modify the Time Critical Removal Action and Increase the Cost Ceiling at the Boston and Colorado (B&C) Smelter Site, Alma, Park County, Colorado

FROM: Pete Stevenson
Federal On-Scene Coordinator

THRU: Laura Williams, Chief
Response Section

Laura Williams 9/13/19

Deirdre Rothery, Chief
Emergency Management Division

DR acting for 9/13/19

TO: Betsy Smidinger, Director
Superfund and Emergency Management Division

Site ID# A8H4

I. PURPOSE

The purpose of this Action Memorandum Amendment is to modify the remedy and request a ceiling increase due to an increase in estimated transportation, disposal, and site operational costs for the time critical removal action described herein for the B&C Smelter Site in Alma, Park County, Colorado.

This time-critical removal action (TCRA) as outlined in the June 24, 2019 Action Memorandum (AM) (copy attached) originally involved the in-situ treatment, loading, and transport to an offsite disposal facility of three slag piles and contaminated soils associated with the former smelter site in the town of Alma adjacent to the town playground (Attachment 1). Since that time, Toxicity Characteristic Leaching Procedure (TCLP) samples of the slag piles have identified that some of the slag cannot be treated in-situ and disposed of as non-hazardous solid waste. Disposal of slag as a hazardous waste will require additional on-site handling and disposal at a facility that is twice the distance from the Site as the intended disposal facility for non-hazardous waste, resulting in costs that approximately double the originally expected cost ceiling. The conditions existing at the Site continue to present an endangerment to human health and the environment and meet the criteria for initiating a removal action under 40 CFR 300.415(b)(2) of the National Contingency Plan (NCP).

This removal action involves no nationally-significant or precedent-setting issues. This removal action will not establish any precedent for future response actions and will not commit the U.S. Environmental Protection Agency (EPA) to a course of action that could have a significant impact on future responses or resources.

II. SITE CONDITIONS AND BACKGROUND

Site Name: B&C Smelter Site
Superfund Site ID (SSID): A8H4
NRC Case Number:
CERCLIS Number:
Site Location: Alma, Park County, CO, 80420
Lat/Long: 39.284669/ -106.063242
Potentially Responsible Party:
NPL Status: Non NPL
Removal Start Date: FY'20/1 (October, 2019)

A. Site Description

1. Removal Site Evaluation

New information related to the waste profile has led to significantly increased costs to conduct the removal action. The originally selected TCRA remedy has not been initiated due to the increased costs required for disposal. The designation of slag in piles as hazardous waste will require:

- a. Crushing of slag chunks to less than 6 inches, necessitating an additional on-site materials handling step with dust suppression and noise abatement (limited hours of operation);
- b. Loading of trucks and doubling the distance to haul to Last Chance, Colorado, with significantly higher disposal costs; and
- c. After removing the slag in piles, treating remaining in-situ contaminated soil and slag below grade, and loading and hauling as solid waste as planned in the original AM.

Should this ceiling increase not be approved, the slag and contaminated soils will continue to weather and migrate and pose an ongoing threat to the public health, welfare and environment. For other site information, see the AM dated June 24, 2019.

2. Physical Location

See the AM dated June 24, 2019.

3. Site Characteristics

See the AM dated June 24, 2019.

4. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant, or Contaminant

See the AM dated June 24, 2019.

5. NPL Status

This Site is neither on nor currently being considered for inclusion on the NPL.

6. Maps, Pictures, Other Geographic Representations

See the AM dated June 24, 2019.

B. Other Actions to Date

1. Previous Actions

See the AM dated June 24, 2019.

2. Current Actions

There are no current activities at the Site.

C. State and Local Authorities' Role

1. State and Local Actions to Date

See the AM dated June 24, 2019.

2. Potential for Continued State/Local Response

See the AM dated June 24, 2019.

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

See the AM dated June 24, 2019.

IV. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

In July of 2019, the disposal facility explained that any smelter waste in piles could not be treated in-situ and must be mitigated as hazardous waste. Re-sampling of the slag in piles occurred in August of 2019. This composite sample did not pass the TCLP criteria indicating that the slag is hazardous waste. All contaminated soil and slag with lead concentrations of greater than 400 mg/kg will be addressed during this removal action either as hazardous waste (slag in piles) or treated in-situ to lead levels that are not hazardous and removed. The locations are identified in Figure 2 of the June 24, 2019 AM and comprise an area of approximately two acres, including the slag piles. An estimated

3,000 tons will be removed. The increased tonnage versus the estimated cubic yards is anticipated due to the extremely heavy nature of the slag piles. Engineering controls and best management practices will be implemented to ensure that the removal action will have no impact on the middle fork of the South Platte River. These wastes, estimated at 800 cubic yards, must therefore undergo the following treatment and disposal steps:

1. Excavate slag piles and crush to less than 6 inches,
2. Stage on-site for loading,
3. Haul (double distance, as hazardous waste),
4. Dispose as hazardous waste at an acceptable facility, and
5. The remaining contaminated soil and below grade slag, if any, will be treated in-situ and disposed of as solid (non-hazardous) waste.

The contaminated soil will be treated in-situ and rendered non-hazardous. A proprietary product called Enviroblend CS, which has been shown to work at other sites, will be mixed with the waste at a rate of two percent or one quarter of an inch per foot of dig depth. This mixing rate was determined by bench tests utilizing Site slag and is adequate to render the waste non-hazardous. The waste will then be loaded into trucks and hauled as non-hazardous materials to a solid waste landfill. The disturbed ground will be graded and seeded and allowed to revegetate. The EPA contractor will utilize a water truck with a spray nozzle to keep work areas and any piles moist to minimize dust.

In a December 2016 directive, Mathy Stanislaus, EPA Assistant Administrator of the Office of Land and Emergency Management, wrote that the Agency's risk reduction goal is "...to limit exposure to soil lead levels such that a typical (or hypothetical) child or group of similarly exposed children would have an estimated risk of no more than 5% of exceeding a 10ug/dL blood lead level." (December 22, 2016 OLEM Lead Directive).

To meet this risk reduction goal, in a May 11, 2017, Removal Action Assessment of Health Risks at B&C Smelter, EPA Senior Toxicologist, Susan Griffin, PhD, DABT, provided an assessment of the human health risks associated with the Site and wrote, "A preliminary remediation goal of 400 ppm for lead in soil would allow no more than a 5% probability that a child would exceed a blood lead level of 10 ug/dL and would be protective for this Site." (See full text as Attachment #3 in the June 24, 2019 AM).

2. Contribution to Remedial Performance

The actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action at the Site. However, no further federal action is anticipated at this time because no waste will be left in place.

3. Engineering Evaluation/Cost Analysis (EE/CA)

An EE/CA is not required for a time-critical removal action.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

See the AM dated June 24, 2019.

5. Project Schedule

This removal action is proposed to start in October of 2019 and will last approximately three weeks.

B. Estimated Costs*

Tasks	Current Ceiling	Proposed Increase	Proposed Ceiling
START	\$36,500	\$3,500	\$ 40,000
ESAT	\$0	\$0	\$ 0
ERRS	\$243,500	\$416,500	\$660,000
Subtotal	\$280,000	\$420,000	\$700,000
Contingency costs (10% of subtotal)	\$75,000	(\$5,000)	\$ 70,000
Total Removal Project Ceiling	\$350,000	\$420,000	\$770,000

*EPA direct and indirect costs, although cost recoverable, do not count toward the removal ceiling for this removal action. Liable parties may be held financially responsible for costs incurred by the EPA as set forth in Section 107 of CERCLA

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

A delay in action or no action at this Site would increase the actual or potential threats to public health and/or the environment.

VI. OUTSTANDING POLICY ISSUES

None.

VII. ENFORCEMENT

A separate Enforcement Addendum was previously prepared providing a confidential summary of current and potential future enforcement actions.

VIII. RECOMMENDATIONS

This decision document represents the selected removal action for the B&C Smelter Site in Alma, Park County, Colorado, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site meet the NCP section 300.415(b) criteria for a removal action and I recommend your approval of the proposed increase of \$420,000 from the previously approved project ceiling of \$350,000. The total project ceiling, if approved, will be \$770,000; this amount will be funded from the Regional removal allowance.

Approve: Betsy Smidinger
Betsy Smidinger, Director
Superfund and Emergency Management Division

Date: 9/23/19

Disapprove: _____
Betsy Smidinger, Director
Superfund and Emergency Management Division

Date: _____

Attachment: June 24, 2019 Action Memorandum