



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

Ref: 8HWM-ER

AUG 12 1991

ACTION MEMORANDUM

DATE:

SUBJECT: Request for a \$2 Million Exemption from the Statutory Limit and Ceiling Increase and a 12-Month Exemption Approval to provide Adequate Funding for a Removal Restart at the Mouat Industries Site, Columbus, Stillwater County, Montana,
ACTION MEMORANDUM

FROM: James J. Scherer, Regional Administrator
Region VIII

TO: Don R. Clay, Acting Assistant Administrator
Office of Solid Waste and Emergency Response

ATTN: Stephen D. Luftig, Director
Emergency Response Division

THROUGH: Henry L. Longest, Director
Office of Emergency and Remedial Response

Site ID#: 65

I. PURPOSE

The initial Removal action for the Mouat Industries site (Site) located at 1102 Clough Avenue, Columbus, Montana 59019, was approved by Region VIII's ACTION MEMORANDUM of March 26, 1990 (See Attachment A). The purpose of this MEMORANDUM is to request a \$2 million exemption and ceiling increase and a 12-month exemption approval to provide sufficient funding for a Removal restart at the Site. High levels of chromium contamination, especially hexavalent chromium (Cr(VI)), in surface/sub-surface soils and groundwater are found at the Site. If approved, it is estimated that an additional \$4,911,700 over the \$37,000 presently obligated, for a new total project ceiling of \$4,948,700, will be required to complete the proposed removal restart.

II. SITE CONDITIONS AND BACKGROUND

The Site CERCLIS ID number is MTD021997689 and the removal is time-critical.

8010405



408024

A. Site Description

1. Removal Site Evaluation

In 1973, as a result of concerns about sodium sulfate waste piles stored at the Site, the Anaconda Minerals Company conducted sampling at the Site which revealed the presence of chromium in soils and in ground and surface waters. Groundwater sampling in 1977, by HKM Associates of Billings, Montana (for the Montana State Department Water Quality Bureau (WQB) and EPA) defined a hexavalent chromium plume migrating from the Site and spreading southeast toward the Yellowstone River.

EPA and the Montana Solid Waste Management Bureau conducted a preliminary site investigation of the Site in June 1979. Further groundwater, surface water and soil sampling was conducted by EPA/FIT in September 1980, August 1983, July 1984, and April 1985. In early 1984, a complaint of unusual cattle deaths downgradient of the Site at the Wegner Ranch was reported to the Montana Department of Health and Environmental Sciences (MDHES). The 1984 and 1985, FIT inspections were conducted in attempts to determine whether a release of Site contaminants may have been associated with the cattle deaths. However, no report indicated that the death of cattle was tied to the chromium contamination.

A Removal action to secure the Site was initiated by EPA on March 30, 1990, after the Emergency Response Branch (ERB) investigations confirmed the presence of high levels of chromium in soils and groundwater at the Site.

That removal action is described in Section II.B. of Attachment A. The proposal in this ACTION MEMORANDUM, if approved, will therefore constitute a Removal restart. Due to the nature and volume of the contaminated soil at the Site, and based on the project schedule (in Section VI.3), it appears likely that an exemption from the 12-month limit is needed to complete the proposed Removal restart.

2. Physical Location

The Mouat Industries Site (See Figure 1) is located in Columbus, Stillwater County, Montana, in the SW-1/4 of the NW-1/4, Section 27, Township 2S, Range 20E of the Columbus East Quadrangle. The town, population of 1431, includes residences, schools, churches and businesses. All are within a mile of the Site. The area adjacent to the Site is a combination of residential and light industrial areas. There is a chromium ore (chromite) pile located just east of the Site.

The Site is located in the flood-plain of the Yellowstone River and is less than 0.6 miles north of the present river channel. A slough, which follows a former river channel, passes about 800 feet south of the Site. The land surface slopes gently to the southeast and the town's surface storm drainage passes through the Site toward the Yellowstone River. Depending on location and season, the groundwater table ranges between 3 to 11 feet below the land surface. Groundwater reportedly flows southeasterly toward the Yellowstone River.

3. Site Characteristics

The Town of Columbus has owned the Site since 1933. Currently, the Site is occupied by the Timberweld Manufacturing Company (manufacturers of laminated wood products) and the American Metallurgy Corporation which owns a chromite ore stockpile at the Site. However, chromite ore which is in trivalent form is known to be quite insoluble and is chemically very stable.

From 1957 to 1963 Mouat Industries operated a processing plant that converted chromium ore (mined from the Stillwater complex in south central Montana) to a high-grade sodium dichromate (used in the market as a corrosion inhibitor). Along with the sodium dichromate product, sodium sulfate wastes containing Cr(VI) were produced and stored at the Site.

The plant operation was transferred from Mouat Industries to the Monte Vista Corporation (MVC) in 1963. MVC subsequently operated at the Site until 1967. In 1973, Anaconda Minerals Company (AMC) allegedly removed approximately 100 tons of wastes and shipped them to Anaconda's mine waste disposal site in Butte, Montana. Anecdotal information obtained from former employees of AMC and other local residents indicate that AMC also treated the contaminated surface soils by spraying an acid/ferrous sulfate solution on visibly contaminated areas. Apparently the intent of spraying the soils was to reduce the Cr(VI) to the less toxic trivalent state (Cr(III)). AMC then applied lime on the sprayed areas to neutralize the acid solution. AMC's attempt at treating contaminated soils ultimately proved unsuccessful at least in part due to the treatment being limited to surface soils only. Soil contamination exists at depth, and eventually the high groundwater table facilitated the upward migration of contamination to the surface.

In 1975, Timberweld covered the area where the chromium processing plant and the chromate waste piles had been located with a two-foot layer of gravel and used the area for a storage yard. In the fall of 1976, the gravel surface showed evidence of yellow mineral deposits, a characteristic of sodium chromate (Cr(VI)). This indicates that the AMC and Timberweld efforts to treat and cover the chromium contaminated soils were unsuccessful.

4. Release or Threatened Releases Into the Environment

Hexavalent chromium is a hazardous substance as defined under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and designated as such in 40 CFR, Parts 117 and 302.

Hexavalent chromium was allegedly released into the environment as a result of sodium dichromate leaching from the sodium sulfate waste piles stored on the Site and as a result of various spills that occurred during Mouat Industries plant operations.

Both trivalent chromium Cr(III) and hexavalent chromium Cr(VI) have been found in the soil, surface water, and groundwater on and/or adjacent to the Site. The groundwater and surface water sample analysis results are given in Table 1; sample locations are depicted in Figures 2 and 3. (Sources: HKM Associates Sampling Report 1977 and EPA/FIT Reports 1980, 1983, 1984 and 1985.) The HKM Associates report indicated that a hexavalent chromium plume is migrating southeast of the Site and could potentially degrade the water quality of the Yellowstone River.

The 1988 EPA/TAT surface soil sample results are given in Tables 2 and 3 (see Figure 4 for sample locations). The results for metals other than Cr(VI) were within the normal range of concentrations found in surface soils in the western United States.

In 1989 and 1990, additional groundwater and surface/sub-surface soil samples were collected by the Environmental Response Team (ERT/REAC) and analyzed for EP Toxicity for total chromium and Cr(VI). A summary of analytical results is found in Tables 4, 5 and 6 (see Figures 2 and 5 for sample locations). Results confirm that substantial concentrations of Cr(VI) still remain in the Site soils. For example, in the 1989 EP Toxicity sampling results, the concentration of Cr(VI) at TP-4 (3 to 6 inches in depth) is 61 mg/l, and TP-8 (2.5 to 6

inches in depth) is between 51-100 mg/l. For 1990 sampling results, the concentrations of Cr(VI) at TP-11, TP-12, TP-14 and TP-19 (3 to 9 inches in depth) are between 10-20 mg/l. Analytical results give an estimate of 20,000 cubic yards of soil containing elevated levels of Cr(VI). These contaminated soils may be a source of ongoing releases to the groundwater and surface water. Groundwater results indicated that the Cr(VI) concentration was increasing in a monitoring well located downgradient from the Site (samples at well W-5 showed 4.5 mg/l in 1983's result and 7.2 mg/l in 1989's result). The proposed Maximum Contamination Level (MCL) for chromium is 0.1 mg/l. This indicates that the groundwater plume is continuing to migrate southeastward toward the Yellowstone River.

5. NPL Status

The Site was proposed for the National Priorities List (NPL) in October 1984. The Site received an HRS of 31.66 and has been listed on the NPL since June 1986. The Remedial Investigation/Feasibility Study (RI/FS) is expected to begin in 1993.

6. Maps, Pictures and other Graphic Representations

Figure 1: Site Map
Figure 2: Groundwater Sample Locations
Figure 3: FIT Sample Locations
Figure 4: 1988 TAT Sample Locations
Figure 5: 1989/1990 ERT/REAC Sample Locations
Figure 6: 1989/1990 Total Chromium Concentrations
and 7 Contours

Table 1: 1977 HKM Associates and 1980-1985 FIT Groundwater/Surface Water Analytical Results
Table 2: 1988 TAT XRF Analytical Results
Table 3: 1988 TAT Chromium Analytical Results
Table 4: 1989 ERT/REAC Groundwater Analytical Results
Table 5: 1989 ERT/REAC Soils Analytical Results
Table 6: 1990 ERT/REAC Soils Analytical Results

B. Other Actions to Date

1. Previous Actions

Anaconda Minerals Company allegedly attempted limited site cleanup as discussed in Section II.A.3.

As discussed in Section II.A.1., EPA and the MDHES conducted investigation and sampling activities in the early 1980s. As a result, EPA sent a letter in 1984 to the Town of Columbus stating that numbers of monitoring wells sampled exceeded the recommended drinking water standards for chromium and recommended that the contaminated groundwater not be used for human or animal consumption.

In 1989, ERB requested that the ERT and EPA/Risk Reduction Engineering Laboratory's contractor (PEI Associates, Inc.) in Cincinnati, Ohio, develop and assess a method for treating the chromium contaminated soil. The work included a soil treating study and an evaluation of technical and economic feasibilities.

In March 1990, the Emergency Response Branch initiated a Removal action to (1) secure the Site and to mitigate the threat of direct contact to hazardous materials by Timberweld's workers and nearby individuals, and (2) provide run-on, runoff drainage control for the Site. Approximately 1,400 feet of 6-foot industrial chain link fencing with two 20-foot wide gates with locks were installed. The fence secures the area that used to be Timberweld's storage yard. The removal was completed April 14, 1990, at a cost of \$28,650.

In addition to the ERB Removal and upon the OSC's request, the Town of Columbus re-routed the drainage ditch which had channeled storm runoff water directly onto the contaminated soils at the Site.

2. Current Actions

There are no current actions at the Site.

C. State and Local Authorities' Role

As discussed in Section II.A.1, MDHES conducted investigations and studies related to reported contamination. Once the Site became an NPL Site, the lead was passed to EPA and the State has been in a support role. The State is not expected to participate in the removal action at the Site. The potential for the Town of Columbus to respond to the proposed removal action is indicated in the Enforcement Section.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

A. Threats to Public Health or Welfare

The threat to public health posed by the Site is through exposure to Cr(VI) contaminated soils, surface water and

groundwater through the direct contact, inhalation and ingestion pathways.

Direct contact with contaminants on-site and inhalation of airborne contaminants off-site by Timberweld's workers or individuals living near the Site appear likely to result in exposures that could pose significant health risks. Direct contact with contaminants on-site is likely to be a significant pathway because surface contamination has been found in the former Timberweld storage yard, and Timberweld workers regularly work near the area. Inhalation of airborne contaminants by nearby residents might also be significant because one-fourth of the town's residences (approximately 350 people) are located within a 500-yard radius of the Site.

The Site is partly located in a floodplain area. Storm waters or snow melt runoff allow contaminants to move off the Site.

The groundwater has been tracked via 19 monitoring wells since 1977. Six of these wells still have Cr(VI)/total chromium levels exceeding the MCL drinking water standard of 0.1 mg/l as evidenced by the latest well sampling. The levels in these six wells are from 0.18 to 7.2 mg/l (ppm), exceeding the drinking water standard by as much as 72 times. It is noted that the groundwater near the Site is not presently used as a drinking water source because city water is available. However, the groundwater downgradient from the Site is a potential source of irrigation water for the golf course, crops and nearby lawns.

The threats described above meet the removal criteria specified in the NCP at 40 CFR Section 300.415 (b)(2)(i),(ii),(iv),(v).

The Agency for Toxic Substances and Disease Registry (ATSDR) conducted a preliminary Health Assessment in 1989 at Mouat Industries and determined that there was a public health concern at the Site. In April 1991, ATSDR reviewed the updated analytical results and the current conditions at the Site. ATSDR recommendations read in part: "Although the restriction of access to the contaminated soils should reduce the likelihood of Timberweld employees contacting the contaminated soils, there is still a potential for exposure while surface contamination is present. This is of concern since sodium dichromate is an irritant and is caustic to the skin and mucous membranes.

Also, there are private wells, for irrigation purposes, located downgradient of the facility and on-site monitoring wells indicate elevated concentrations of chromium. ATSDR feels there is adequate justification for the proposed removal at Mouat Industries in Columbus, Montana." (see Attachment B).

B. Threat to the Environment

Hexavalent chromium has been found in surface waters down gradient from the Site, i.e., in the golf course pond (0.5 to 0.59 mg/l - Table 1), in the slough south of the Site (0.14 to 0.54 mg/l - Table 1), and in a water sample from the slough at a point about a mile west of the Site where cattle died (0.1 mg/l - MDHES 1984). The slough is a former channel of the nearby Yellowstone River and is presently a wetland area. This threat meets the removal criteria specified in the NCP at 40 CFR Section 300.415(b)(2).

Additionally, the groundwater plume is believed to be continuing to move toward the Yellowstone River. If or when the contaminated groundwater begins to discharge to the Yellowstone River it could have adverse impacts on the sport fishery which is an important economic and recreational resource for the area.

IV. **ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this ACTION MEMORANDUM, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. **EXEMPTION FROM STATUTORY LIMITS**

The proposed Removal action at the Mouat Site meets the consistency exemption for the 12 month and \$2 million statutory limitations as described under CERCLA section 104(c) because continued response actions are otherwise appropriate and consistent with the Remedial action to be taken at the Site. Soil treating and stabilizing to mitigate the source of chromium release will not interfere with the likely remedial alternatives to address groundwater contamination and will eliminate the threats associated with surface contamination.

The Site is currently listed on the NPL. The Remedial Investigation/Feasibility Study (RI/FS) is scheduled to begin in 1993. The proposed Removal action is appropriate because removal of the source of the Cr(VI) in the soils will prevent further migration of the contaminant and will contribute to the long-term Remedial action at the Site by minimizing the scope of

the cleanup and the potential for harm to human health and the environment. Subsequent remedial action could be a groundwater treatment system utilizing chemical reduction and precipitation treatment technologies for chromium removal.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The following Removal actions are proposed to eliminate the source of contamination which continues to be released into the groundwater and surface water. There are two options being considered:

Option 1: On-site Soil Treatment

Phase I - Utilize a site-specific contract to perform a pilot-scale operation on-site using the vender technology selected to optimize chromium soil treatment performance. A statement of work (SOW) and specific performance criteria will be developed based on ERT recommendations. Results from the pilot-scale treatability operation will define the operation for full-scale soil treatment. Cleanup levels to be achieved by the treatment process will be determined based on analyzing the treated soils using the Toxicity Characteristics Leaching Procedures (TCLP) method. The resulting leachate must meet the MCL for chromium. This criteria was chosen since the contaminated soils are the source of groundwater contamination and one objective of the Removal is to eliminate the groundwater contamination source.

Develop a design of full-scale operation for chromium soil treatment and soil stabilization/solidification processes. A full-scale demonstration will be conducted. The result of this demonstration will be validated prior to the contractor going into a full-scale operation.

If the contractor is unable to meet the requirements outlined in the SOW, the Phase II contract described below will be cancelled and Option 2 (Off-site soil disposal) will be selected for the Removal. In doing this, there is an opportunity to apply innovative technologies to treat contaminated soil on-site. If the treatment requirements outlined in the SOW are not met, only limited costs will be incurred.

Phase II - Excavate and treat approximately 20,000 cubic yards of hexavalent chromium contaminated soil. The excavated soil area is approximately 45,000 square feet. All soils which have total chromium levels in the 1989 and 1990 Extraction Procedure

Toxicity analytical results higher than 0.1 mg/l are planned to be excavated. This means soils will be excavated up to 12 feet in depth for treatment. The treatment procedures depend on the results obtained in Phase I and may include: an acid washing process to leach the chromium from the soil; reduction of the residual hexavalent chromium in the soil to Cr(III), and neutralization of acidified soil.

Solidify the treated soil and backfill on-site. The soil solidification will prevent the treated soil from being re-contaminated by high levels of Cr(VI) in the groundwater.

Collect post-treatment soil samples for Toxicity Characteristics Leaching Procedures (TCLP) analyses to confirm non-leachability characteristics (approximately 50 samples).

If any materials are found which can not be treated in the soil treatment process will be disposed in an appropriate disposal facility.

Option 2: Off-site Soil Disposal

Approximately 20,000 cubic yards of contaminated soil with total chromium concentrations as high as 14,000 mg/kg will be excavated for disposal and taken to an approved disposal facility. A statement of work (SOW) will be developed in compliance with EPA's off-site disposal policy and all existing applicable regulations. Soils will be prepared for shipping such that the composite load will not meet the TCLP criteria for RCRA characteristic wastes.

Perform post-disposal TCLP analyses to verify the leachability characteristics of the remaining soils (approximately 50 samples).

Line the excavated area and backfill with imported clean soil.

2. Applicable or Relevant and Appropriate Requirements (ARARs)

Federal ARARs determined to be practicable for the Site are:

Option 1:

Clean Air Act - Applicable

Excavation and preparation of soil for treatment may generate airborne dusts. Dusts suppression methods will be employed to minimize any potential air contamination.

Resource Conservation and Recovery Act (RCRA) - Applicable

The treated soils will be returned to the on-site excavated areas so as to comply with the Land Disposal Restrictions (LDRs). In order for this disposal to be permissible the soils will have to be treated to such a degree that the soils are not RCRA characteristic wastes.

Option 2:

Clean Air Act - Applicable

Excavation and preparation of soil for treatment may generate airborne dusts. Dusts suppression methods will be employed to minimize any potential air contamination.

Resource Conservation and Recovery Act (RCRA) - Applicable

Soil will be prepared for shipping such that the composite loads sent off-site will not meet the TCLP criteria for RCRA characteristic wastes. Soil sample results from investigation activities have been informally submitted to a RCRA subtitle C facility for consideration and have received tentative approval for disposal.

The State of Montana was requested to identify State ARARs in June 1991. As of date of this Action Memorandum, no ARARs information has been received from the State.

3. Project Schedule

September - October 91: Site specific contract

November - February 92: Pilot scale study/and
demonstration

February - May 92: Full-scale design
(non-construction season)

May 92 - July 92: Soil excavation
Full scale operation demonstration

July 92 - October 92: Soil treatment and solidification

November 92: Demobilization

If the full-scale demonstration results show that the treatment requirements are not met, Option 2 will be scheduled from July to November 1992.

B. Cost Estimate

Option 1
(On-site Soil Treatment)

Soil To Be Treated: 120 ft x 375 ft x 12 ft or
 40 yd x 125 yd x 4 yd or
 approximately 20,000 cubic yards

<u>EXTRAMURAL COSTS:</u>	<u>Current</u> <u>Ceiling</u>	<u>Costs</u> <u>To Date</u>	<u>Proposed</u> <u>Ceiling</u>
<u>Regional Allowance Costs:</u>			
Site Fencing	\$26,000	\$ 22,600	\$ 26,000
Pilot Scale Soil Washing			175,000
Full-Scale Design, Equipment, Set-up and Operations			1,019,000
Soil Excavation/Washing/Treatment			874,000
Soil Stabilization/Solidification and Backfill			1,000,000
Chromium Sludge Disposal			150,000
10% Contingency			321,900
			<u>\$3,540,600</u>

Other Extramural Cost Not Funded From
the Regional Allowance:

ERT/REAC			\$ 150,000
Total TAT	\$ 3,000		53,000
Total Non-CLP			40,000
Subtotal, Extramural Costs			<u>\$3,780,600</u>
20% Extramural Contingency			<u>756,100</u>
TOTAL EXTRAMURAL COSTS			\$4,536,700

INTRAMURAL COSTS:

Direct Costs	\$ 3,000	\$ 1,950	\$ 128,700
Indirect Costs	<u>5,000</u>	<u> </u>	<u>255,000</u>
TOTAL INTRAMURAL COSTS			\$ 383,700
TOTAL PROJECT CEILING ESTIMATED	\$ 37,000	\$ 28,650	\$4,948,700

Option 2
(Off-site Soil Disposal)

Soil To Be Removed: 120 ft x 375 ft x 12 ft or
40 yd x 125 yd x 4 yd or
approximately 20,000 cubic yards

<u>EXTRAMURAL COSTS:</u>	<u>Current</u> <u>Ceiling</u>	<u>Costs</u> <u>To Date</u>	<u>Proposed</u> <u>Ceiling</u>
--------------------------	----------------------------------	--------------------------------	-----------------------------------

Regional Allowance Costs:

ERCS Operations Costs	\$ 26,000	\$ 22,600	\$ 276,000
Equipment and Soil Excavation			80,000
Soil Transportation (\$900x900 Truck Load)			810,000
Soil Disposal (\$95/ton or \$2280/Load)			2,052,000
Soil Backfill (\$3/cu.yd.)			60,000
10% Contingency			325,200
			\$3,577,200

Other Extramural Cost Not Funded From the Regional Allowance:

ERT/REAC/TAT	\$ 3,000		153,000
Total Non-CLP			40,000
Subtotal, Extramural Costs			\$3,767,200
20% Extramural Contingency			753,400
TOTAL EXTRAMURAL COSTS			\$4,520,600

INTRAMURAL COSTS:

Direct Costs	\$ 3,000	\$ 1,950	\$ 103,000
Indirect Costs	5,000		205,000

TOTAL, INTRAMURAL COSTS			\$ 308,000
-------------------------	--	--	------------

TOTAL PROJECT CEILING	\$37,000	\$28,650	\$4,857,600
-----------------------	----------	----------	-------------

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

The hexavalent chromium contamination will most likely continue to spread from the Site to the nearby surface water or to the groundwater which may also eventually discharge to the Yellowstone River. In addition, direct contact with airborne contaminants and with the soils by the nearby workers and individuals is likely to continue.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

See Attached.

X. RECOMMENDATION

Conditions at the Mouat Industries Site meet the criteria for a CERCLA section 104(c) consistency exemption Removal. I recommend your approval of the proposed Removal action, an exemption from the \$2 million limitation, an exemption from the 12-month limit, and a ceiling increase for the proposed Removal action. The total project ceiling, if approved, will be \$4,948,700, of which an estimated \$3,540,600 will be funded from the Regional removal allowances.

Approve: _____ Date: _____
Don R. Clay
Acting Assistant Administrator
Office of Solid Waste and
Emergency Response

Disapprove: _____ Date: _____
Don R. Clay
Acting Assistant Administrator
Office of Solid Waste and
Emergency Response

CONCURRENCE COPY

Ref: 8HWM-ER

ACTION MEMORANDUM

DATE: July 30, 1991

SUBJECT: Request for a \$2 Million Exemption from the Statutory Limit and Ceiling Increase and a 12-Month Exemption Approval to provide Adequate Funding for a Removal Restart at the Mouat Industries Site, Columbus, Stillwater County, Montana,
ACTION MEMORANDUM

FROM: James J. Scherer, Regional Administrator
Region VIII

TO: Don R. Clay, Acting Assistant Administrator
Office of Solid Waste and Emergency Response

ATTN: Stephen D. Luftig, Director
Emergency Response Division

THROUGH: Henry L. Longest, Director
Office of Emergency and Remedial Response

Site ID#: 65

I. PURPOSE

The initial Removal action for the Mouat Industries site (Site) located at 1102 Clough Avenue, Columbus, Montana 59019, was approved by Region VIII's ACTION MEMORANDUM of March 26, 1990 (See Attachment A). The purpose of this MEMORANDUM is to request a \$2 million exemption and ceiling increase and a 12-month exemption approval to provide sufficient funding for a Removal restart at the Site. High levels of chromium contamination, especially hexavalent chromium (Cr(VI)), in surface/sub-surface soils and groundwater are found at the Site. If approved, it is estimated that an additional \$4,911,700 over the \$37,000 presently obligated, for a new total project ceiling of \$4,948,700, will be required to complete the proposed removal restart.

II. SITE CONDITIONS AND BACKGROUND

The Site CERCLIS ID number is MTD021997689 and the removal is time-critical.

7/30
8HWM-ER
T.N., OSC

8/1/91
7/30/91

7/31/91
Stulenstock
RRM