



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

REDACTED COPY

Confidential information has been redacted. The complete original is located in the confidential section of the site file.

AUG 22 1997

Ref: 8HWM-ER

ACTION MEMORANDUM AMENDMENT

SUBJECT: Request for a Classic Emergency Removal Action Ceiling Increase and Modification of the Proposed Action for the Aspen Park Solvents Site, at Aspen Park near Conifer, Jefferson County, Colorado. ACTION MEMORANDUM AMENDMENT

FROM: Peter Stevenson, OSC
Emergency Response Branch

THRU: Cheryl Grisler, Chief
Response Section

John Giest, Chief
Emergency Response Branch

TO: Robert L. Duprey, Director
Hazardous Waste Management Division

Category of Removal: Classic Emergency
Fund-Lead

Site ID#: 6D

I. PURPOSE

The purpose of this ACTION MEMORANDUM AMENDMENT is to request and document approval of a ceiling increase and modification of the proposed action for the Removal Action described herein for the Aspen Park Solvents Site (Site) located in the Aspen Park/Conifer community in Jefferson County, Colorado.

This Removal Action at the Site, including the ceiling increase and modification described herein, continues to satisfy the criteria for Removal Actions under Section 300.415 (b) (2) of the National Contingency Plan (NCP). This request is necessary because the Environmental Protection Agency (EPA) needs to continue to install, maintain, and monitor the new treatment systems.



II. SITE CONDITIONS AND BACKGROUND

A. Site Description

Aspen Park is a community near Conifer, Colorado, which derives its drinking water from wells. The initial Removal Action focused upon a plume of contamination which was spreading to wells within the community. Bottled water was provided to residences with wells for which sampling demonstrated high levels of carbon tetrachloride (CCl₄) in the drinking water. The Action Memorandum Amendment dated January 11, 1995, provided treatment units (based on a Treatability Study) instead of bottled water, to the residences with CCl₄ above the MCL and provided for initial monitoring and maintenance of the treatment units.

Carbon tetrachloride was banned for general use in the early 1970's. Contaminant plume characteristics indicate that the spill or spills occurred years ago. There is no reason to believe that the residential lots where the source area is located contain any remaining product or waste carbon tetrachloride. Further, the quantity spilled years ago is most likely 50 gallons or less.

1. Removal site evaluation

Refer to the attached previous Action Memorandum dated December 1, 1994, and the attached Action Memorandum Amendment dated January 11, 1995.

Modification of the Removal Action and a request for additional funding and time is now necessary to:

Install an air stripper or other system to remove ppm levels of CCl₄ at or near the source area. The estimated quantity of spilled carbon tet is 50 gallons or less. Average concentrations in two wells near/in the source area are 40 and 6 ppm. A pump test indicated that a 3.5 gpm pump rate can be sustained. Source removal will continue until carbon tet concentrations remain in the low hundreds ppb range. Estimated time to reach and sustain this level in the source area is one year to 18 months.

This extended action will require additional funding of \$1,452,000, which will raise the total funding ceiling to \$1,985,400.

2. Physical location

Refer to the attached previous Action Memoranda dated December 1, 1994, and January 11, 1995.

3. Site characteristics

Refer to the attached previous Action Memoranda dated December 1, 1994 and January 11, 1995.

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

Since January of 1995 two more quarterly sampling activities and a soil gas survey have occurred at the Site. Ten monitoring wells have been installed, developed, and sampled. The potential source area has been more clearly defined as being between Cornelius and Vosler Streets on the south and north respectively, and extending east to west for approximately two hundred feet. In this area, groundwater to approximately 120' in depth, contains up to 99,000 ppb CCl₄. With a MCL of 5 ppb, this area will continue to "release" CCl₄ for years to come.

For additional documentation regarding the release of CCl₄ into the environment, refer to the attached previous Action Memoranda dated December 1, 1994, and January 11, 1995.

5. NPL status

This Site is not an NPL site, but Pre-NPL screening is in progress.

B. Other Actions to Date

1. Previous actions

The previous actions have already been discussed within this request or are defined in the attached Action Memoranda dated December 1, 1994, and January 11, 1995.

2. Current Actions

EPA is presently treating water at 33 homes and monitoring the results.

Source area identification continues with data interpretation activities.

System design criteria are also being evaluated by review of step-test data, pump test data, aquifer models, and available-land resources for system placement.

C. State and Local Authorities' Roles

1. State and local actions to date

The discovery of the contamination within the water at the Site was a result of routine sampling reported to the State under the Safe Drinking Water Act. The Site was referred to the EPA Site Assessment Program for PA/SI work.

2. Potential for continued State/local response

Continued involvement by the State/local in this Removal Action is expected to be largely in the area of communication with the community and routine sampling. If after 18 months the carbon tetrachloride level in the source area remains above the low hundreds ppb range, negotiations with the Colorado Department of Health and Environment (CDHE), the Jefferson County Health Department, and the local Homeowners Association regarding continued operation of the source removal system will commence.

There is no current action at the local or state level to form a community water supply district, and there is no funding or local support for a public water supply. A reliable and large source of water would need to be found nearby, but if it were, the water would then need to be transmitted to the homes in the area. In some locales, bedrock is at two feet, necessitating blasting to lay transmission lines. Costs, therefore, would be prohibitive. Therefore, it is not feasible to connect the affected homes in Aspen Park to any public water system.

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

A. Threats to Public Health or Welfare

The threats as described in the attached previous Action Memoranda dated December 1, 1994, and January 11, 1995 remain applicable. Furthermore, by finding and defining the

source area, it is now possible to say that CCl₄ will continue to migrate from this area into the downgradient wells, which will continue to produce contaminated water for years to come if the source area is not addressed by the actions described in this Action Memorandum Amendment. In addition, it is anticipated that other private wells will become contaminated if the action that is described in this Action Memorandum Amendment is not undertaken, thereby increasing the public's exposure to CCl₄ and increasing EPA's cost of treatment and monitoring. Current quarterly monitoring includes the 33 affected homes and the 40 immediately around and in the plume. Outside this area are hundreds of additional homes. By conducting this "source area removal", water containing high levels of CCl₄ will be removed, which will help minimize the spread from the source area to the outlying plume area. This area may then experience contaminant removal via home water treating units. Further removal in the source area will help keep the CCl₄ from spreading to the hundreds of homes around the affected area.

B. Threats to the Environment

Refer to the attached previous Action Memoranda dated December 1, 1994, and January 11, 1995.

IV. ENDANGERMENT DETERMINATION

Refer to the attached previous Action Memoranda dated December 1, 1994, and January 11, 1995.

V. EXEMPTION FROM STATUTORY LIMITS

A. Emergency and Consistency Exemption:

1. Site conditions meet the criteria set forth in CERCLA §104(c)(1)(A) and §104(c)(1)(C). There is an immediate risk to public health or welfare and the environment and a need for continued response actions which are appropriate. The threats to public health or welfare and the environment that are prevalent on this Site are explained in more detail in the Action Memoranda dated December 1, 1994, and January 11, 1995.

2. Continued response actions are immediately required to prevent, limit, or mitigate an emergency. A more permanent solution has been found for the residences with CCl₄ above the MCL; however, it is necessary to continue to aggressively pursue cleanup of

the source area, where levels of CCl₄ have been found as high as 99,000 ppb. By conducting the cleanup, the levels of carbon tetrachloride in affected homes outside the source area may eventually be reduced below treatment levels. Homes presently serviced by wells which produce clean water, may continue to receive clean water.

If this request for a \$1,452,000 increase is not granted, children, as well as adults living at the Site, may continue to be exposed to potentially dangerous levels of CCl₄ via vapors and ingestion.

3. Assistance from other government agencies is not anticipated on a timely basis because neither the State nor the County have the funds/capability to take any actions at the Site. Consequently, the timely completion of this Removal Action can only be accomplished if this Action Memorandum Amendment is approved. Furthermore, it is not feasible to connect area homes to an existing public water supply, and no group in the foreseeable future is planning the formation of a water district capable of supplying this area. Consequently, the timely completion of this Removal Action can only be accomplished if this Action Memorandum Amendment is approved.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Evaluate pump test, aquifer model, and all other data in order to produce a system design (most probably a limited pump and treat system).

Procure appropriate permits and land-use permission.

Implement system design.

2. Contribution to remedial performance

The proposed actions will not adversely impact any future Remedial Actions and for the residences it may constitute most of the Remedial Action. There has been a concerted effort in coordination between the Pre-Remedial, Remedial, and Removal Programs to fully address public health concerns in a timely and cost effective manner.

After the individual residence air stripper was put on-line at the home in the source area, a significant reduction of CCl_4 was observed in a well immediately downgradient. This may be an indication that with recharge of treated water via septic systems, reductions of CCl_4 concentrations will be realized throughout the affected area, and by instituting source control the ppm-levels of CCl_4 may be removed. If this is indeed the case, the action proposed in this Action Memorandum Amendment will constitute the Remedial Action.

3. Description of alternative technologies

There are no relevant alternative technologies that may apply to the actions described in this Action Memorandum Amendment that can be undertaken at this time with the amount of data at hand. In order to implement any alternative technology, expensive and time-consuming data collection activities would need to be undertaken and probably would not result in a more effective source area clean up.

With hundreds of homes immediately around the source area, the alternative of letting the CCl_4 spread to additional homes and adding home treatment units is not an option.

4. EE/CA

This is a Classic Emergency Removal Action; thus, an EE/CA is not required and will not be prepared.

5. Applicable or relevant and appropriate requirements (ARARs)

ARARs have been listed in the previous Action Memoranda and will be complied with to the extent practicable.

6. Project schedule

The projected order of work activities is as follows:

- a. Evaluate pump test, aquifer model, and all other data in order to produce system design.
(Projected Completion Date: September 30, 1995)
- b. Procure appropriate permits and land-use permission upon completion of above. Construction

to be completed by December 30, 1995 - weather permitting.

7. Estimated Costs

The January 11, 1995, Action Memorandum Amendment authorized a Project Ceiling of \$533,400 for the Removal Action. The requested Ceiling Increase for this Action Memorandum is \$1,452,000, bringing the total estimated Project Ceiling to \$1,985,400.

	<u>Previous Action</u>	<u>Proposed Action</u>	<u>Proposed New Project Ceiling</u>
<u>Extramural Costs:</u>			
ERCS Treatment/ Disposal Costs	\$ 342,000	\$ 900,000	\$1,242,000
TAT Costs	\$ 60,000	\$ 60,000	\$ 120,000
20% Contingency	\$ 80,400	\$ 192,000	\$ 272,400
TOTAL EXTRAMURAL	\$ 482,400	\$1,152,000	\$1,634,400
<u>Intramural Costs:</u>			
Direct Costs	\$ 16,500	\$ 100,000	\$ 116,500
Indirect Costs	\$ 34,500	\$ 200,000	\$ 234,500
TOTAL, INTRAMURAL	\$ 51,000	\$ 300,000	\$ 351,000
PROJECT CEILING	\$ 533,400	\$1,452,000	\$1,985,400

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

Refer to attached Action Memorandum dated December 1, 1994, and January 11, 1995, for EPA's initial concerns. The water treatment units are necessary to provide a long-term solution until such time as the source of contamination can be determined.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

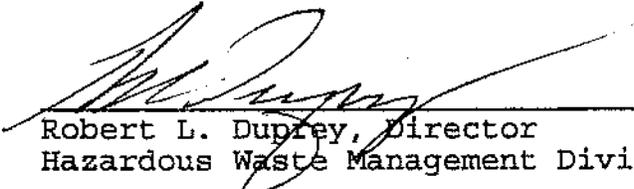
See Attachment A of the Action Memorandum dated December 1, 1994, for a confidential summary of the enforcement status.

X. RECOMMENDATION

This decision document represents the selected Removal Action for the Aspen Park Solvents Site in Aspen Park near Conifer, Jefferson 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)(2) criteria for a removal, and I recommend your approval of the proposed modification of the Removal Action and the ceiling increase of \$1,452,000. The new total project ceiling, if approved, will be \$1,985,400. Of this, an estimated \$1,634,400 will come from the Regional removal allowance.

Approve: _____


Robert L. Duprey, Director
Hazardous Waste Management Division

Date: _____

8/24/95

Disapprove: _____

Robert L. Duprey, Director
Hazardous Waste Management Division

Date: _____

Attachments:

- Action Memorandum dated December 1, 1994.
- Action Memorandum Amendment dated January 11, 1995.
- Attachment A, Confidential Enforcement Strategy

ATTACHMENT A

ENFORCEMENT SENSITIVE

ASPEN PARK SOLVENTS SITE
ASPEN PARK, JEFFERSON COUNTY, COLORADO

The following information was obtained from the records of the Colorado Department of Environmental Health and Safety, Denver, Colorado.