



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

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

DEC 1 1994

Ref: 8HWM-ER

ACTION MEMORANDUM

SUBJECT: Request for a Classic Emergency Removal Action at the Aspen Park Solvents Site at Aspen Park near Conifer, Jefferson County, Colorado.

FROM: Peter Stevenson, OSC
Emergency Response Branch

THROUGH: Cheryl A. Crisler, Chief
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TO: Robert L. Duprey, Director
Hazardous Waste Management Division

Site ID#: 6D
Case #: CO940161
Category of Removal: Classic Emergency
Fund-Lead

I. PURPOSE

The purpose of this Action Memorandum is to document approval of 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 addressed the response to groundwater contamination from carbon tetrachloride (CCl₄). Conditions existing at the Site presented an imminent and substantial endangerment to human health and the environment and met the criteria for initiating a Classic Emergency Removal Action under 40 CFR, §300.415 (b) (2) of the National Contingency Plan (NCP). This Action Memorandum serves to record that the On-Scene Coordinator (OSC) has proceeded under the \$50,000 Emergency Removal Action funding authority.

There were no nationally significant or precedent-setting issues associated with this Removal Action.



II. SITE CONDITIONS AND BACKGROUND

A. Site Description

Aspen Park is a community near Conifer, Colorado, which derives its drinking water from wells. The Creative Child Learning Center, a day care, was the catalyst for a community concern regarding contamination of its well-water, and this Removal Action focuses on a plume of contamination which appears to be spreading to wells within the community.

1. Removal site evaluation

In 1994 a sampling of an Aspen Park Day Care Facility drinking water well by the Colorado Department of Health (CDH), in accordance with Colorado drinking water regulations for "non-transient non-community" systems, showed its well to contain CCl_4 in concentrations (9 parts per billion [ppb]) above the Maximum Contaminant Level (MCL) [5 ppb]. Four other drinking water wells within a 1/2 mile radius were tested, with no detections of CCl_4 . A subsequent sampling of the "subject well" in January of 1994 confirmed the presence of 7 ppb of CCl_4 . Detectable amounts of other volatile organic compounds (VOCs) were also found at the Creative Child Learning Center (Center), but concentrations were below the MCL for drinking water standards. The Center, no longer a day care, installed a treatment system, and subsequent samplings have shown the water to be clean and at 15 ppb.

As a result of a concern expressed by a potential purchaser of the Center, the Region VIII Environmental Protection Agency (EPA) began a Site Investigation (SI), requiring sampling of the wells surrounding the "subject well". The purpose of the SI was to:

- Determine whether possible exposure to contaminated water extended to other Aspen Park wells;
- Begin to assess the extent of contaminated ground water;
- Identify potential sources of contamination; and,
- Collect non-sampling data for site screening.

cooked with it. Exposure to CCl_4 could also occur through breathing the air containing CCl_4 . Because the CCl_4 evaporates easily from water after it comes out of the tap, other uses of the water will increase the concentration of CCl_4 in the air in the home. Therefore, residents who breathe this air may continue to be exposed. The types of activities that would be of greatest concern are those where large volumes of heated water are agitated or aerated, such as showering/bathing, using an automatic dishwasher, and using a washing machine.

Other Volatile Organics - 1,1,1-Trichloroethane (1,1,1-TCA) and Trichloroethylene (TCE) were also detected at low levels in the wells. TCE concentrations as high as 2900 ppb occur within CCl_4 . Exposure to high levels of 1,1,1-TCA has been shown to damage the liver, central nervous system and circulatory system. TCE has been shown to cause cancer in laboratory animals who were exposed to high levels over their lifetime. Both TCE and 1,1,1,-TCA are hazardous substances as defined by Section 101 (14) of CERCLA.

The presence of other organic substances may be identified when further sampling of the wells is completed.

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**

No previous removal actions have been performed on this Site.

2. **Current actions**

The OSC requested additional sampling; and when the results were received on October 25, 1994, bottled water was supplied to those residences which showed high levels of CCl_4 . Samples are presently being evaluated to locate the plume and source of CCl_4 contamination. Eventually, activated carbon or other appropriate treatment systems will be installed.

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. State and local funds are not available for this Removal.

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

A. Threats to Public Health or Welfare

The conditions at the Site presented an imminent and substantial endangerment to human health and the environment and met the criteria for initiating a Removal Action under 40 CFR §300.415 (b)(2) of the NCP. The following factors from §300.415 (b)(2) of the NCP form the basis for EPA's determination of the threat present, and the appropriate action to be taken:

- (i) Actual or potential exposure to hazardous substances by nearby human populations.
- (ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems; and
- (viii) Other situations or factors that may pose threats to public health or welfare or the environment (extremely high concentrations of CCl₄ and exposure through volatilizing H₂O).

B. Threats to the Environment

Specific threats to wildlife and plants have not been evaluated at this time. It is uncertain whether wildlife in the surrounding habitats are currently being adversely affected by the contaminants present on or off-site.

IV. ENDANGERMENT DETERMINATION

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

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The Removal Action at this Site thus far has been conducted to sample, evaluate, and respond to a potential plume of CCl₄ contamination in the wells/water at the Site. As a result of the sampling, bottled water is temporarily being provided to several of the residents. Additional samples are presently being evaluated to determine the location of the plume, and if the recovery of contaminants is possible. In the future, an Action Memorandum Amendment may be necessary in order to remove the source of contamination and/or install treatment systems as necessary.

2. Contribution to remedial performance

The Removal Action will not affect any future Remedial Action on the Site.

3. Description of alternative technologies

The OSC will review possible remedies to the situation and examine alternative technologies after further evaluation/sampling results are available.

4. EE/CA

This Removal Action is a Classic Emergency (Time-Critical) Response Action, and required immediate mobilization to the Site. An EE/CA is not required for Removal Actions where a planning period of less than six months exists.

5. Applicable or relevant and appropriate requirements (ARARs)

Because this Action is being conducted as a Time-Critical Removal Action, all Federal and State ARARs have not been identified at this time.

B. Estimated Costs

Cost Estimate: A table containing cost estimates for the Removal project ceiling is shown below:

Extramural Costs:

Regional Allowance Costs

ERCS	\$ 20,000
Technical Assistance Team (TAT) Cost	\$ 10,000
20% Contingency	\$ 6,000
TOTAL, EXTRAMURAL COSTS	\$ 36,000

Intramural Costs:

Intramural Direct Costs	\$ 4,500
Intramural Indirect Costs	\$ 9,500
TOTAL, INTRAMURAL COSTS	\$ 14,000
TOTAL, REMOVAL PROJECT CEILING	\$ 50,000

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

If action had been delayed or not taken at the Site, the health risks would have increased to the residents at the Site who were drinking the contaminated water and using it for cooking, bathing, washing, etc.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

Attachment A contains a confidential summary of the enforcement strategy.

IX. 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 not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site meet the NCP §300.415(b)(2) criteria for a Removal and I utilized the \$50,000 Emergency Removal Action funding authority delegated to Region VIII OSCs to authorize funding for this Removal Action. The total project ceiling is estimated to be \$50,000, and of this, an estimated \$36,000 comes from the Regional removal allowance.

On-Scene Coordinator

Date

ATTACHMENTS:

Attachment A

Confidential Enforcement Strategy

ENFORCEMENT SENSITIVE

ASPEN PARK SOLVENTS SITE
ASPEN PARK, JEFFERSON COUNTY, COLORADO

VIII. ENFORCEMENT

A. Background

The Site is in the Aspen Park residential subdivision near Conifer in Jefferson County, Colorado. Households in the area rely exclusively on wells for water. A drinking water well was found to be contaminated with volatile organic compounds, mainly carbon tetrachloride (CCL₄). A subsequent sampling of area wells revealed several more with similar contamination. Eleven households with well water containing elevated levels of contaminants were placed on bottled water.

The Site Assessment sampling is complete; a report will be issued within a few months. The On-Scene Coordinator is continuing to monitor drinking water wells in the area and attempting to identify the source of the contamination.

B. Potentially Responsible Party (PRP) Search

The source of the contamination is unknown at this time, therefore it has not been possible to identify a PRP.

C. Notification of PRPs of Potential Liability and of the Required Removal Action

A General Notice Letter of Potential Liability will not be issued unless a responsible party can be identified.

D. Decision Whether to Issue an Order

An Order has not been issued as of this date.

E. Negotiation and Order Issuance Strategy

Not applicable since a PRP has not been identified.

State and County agencies are aware of the situation.

Property owners in the area have been very cooperative in granting access to EPA for taking well water samples.