



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

SEP 26 2008

**ACTION MEMORANDUM AMENDMENT**

**SUBJECT:** Request for Ceiling Increase and Change in Scope of Work at the Garvey Elevator Site, Adams County, Hastings, Nebraska

*for* **FROM:** Randy Schademann, On-Scene Coordinator  
Emergency Response and Removal North Branch

*for* **THRU:** Kenneth S. Buchholz, Chief  
Emergency Response and Removal North Branch

**TO:** Cecilia Tapia, Director  
Superfund Division

Site ID#:	A72Z
CERCLIS ID#:	NEN000704351
Nationally Significant:	No
Precedent Setting:	No
Category of Removal:	Time-critical

**I. PURPOSE**

The purpose of this Action Memorandum Amendment is to request and document approval of the proposed project ceiling increase and change in scope of work for the removal action for the Garvey Elevator Site, Adams County, Hastings, Nebraska. The total project costs will increase from \$802,150 to \$1,196,650. The proposed change in the scope of the response includes (1) fabrication of an enclosure for the existing on-site groundwater and soil vapor treatment/extraction systems, (2) extension of two existing water main lines, and (3) installation of water service hookups for affected residential users of contaminated groundwater.

**II. SITE CONDITIONS AND BACKGROUND**

**A. Site Descriptions**

**1. Removal site evaluation**

See previously approved Action Memorandum dated May 19, 2008.

**2. Physical location and site characteristics**

See previously approved Action Memorandum dated May 19, 2008.

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

See previously approved Action Memorandum dated May 19, 2008.

**4. National Priority List (NPL) status**

See previously approved Action Memorandum dated May 19, 2008.

**5. Maps, pictures, and other graphic representations**

See previously approved Action Memorandum dated May 19, 2008.

**B. Other Actions to Date**

**1. Previous actions**

See previously approved Action Memorandum dated May 19, 2008.

Previous actions at this site are summarized in the following Action Memoranda:

- Enforcement Action Memorandum dated July 11, 2005 (Attachment 1)
- Enforcement Action Memorandum Amendment dated August 8, 2006 (Attachment 2)
- Fund-lead Action Memorandum, signature date May 19, 2008 (Attachment 3)

In summary, the Enforcement Action Memoranda described actions to be performed by a potentially responsible party (Garvey Elevator, Inc.), which included operation and assessment of the groundwater extraction and treatment system and soil-vapor extraction system at the source area and provision of alternative water to affected residences. Due to Garvey Elevator, Inc., filing for bankruptcy on March 27, 2008, EPA assumed control of these and related activities. This change from an "enforcement-lead" response to a "fund-lead" response is documented in the Action Memorandum dated May 19, 2008.

**2. Current actions**

See previously approved Action Memorandum dated May 19, 2008.

**C. State and Local Authorities' Roles**

**1. State and local actions to date**

See previously approved Action Memorandum dated May 19, 2008.

**2. Potential for continued state/local response**

See previously approved Action Memorandum dated May 19, 2008.

**D. Community Involvement Activities**

See previously approved Action Memorandum dated May 19, 2008.

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

**A. Threats to Public Health or Welfare**

See previously approved Action Memorandum dated May 19, 2008.

**IV. PROPOSED ACTIONS AND ESTIMATED COSTS**

**A. Proposed Actions**

**1. Proposed action description**

**a. Fabrication of an enclosure for on-site treatment systems**

The treatment components of both systems (e.g., manifolds, blowers, stripping tower, etc.) are housed within an unimproved Quonset™ building, allowing extreme fluctuations in temperature and the intrusion of moisture outside of the normal operating range of the treatment components. That portion of the Quonset™ building that houses the systems will be enclosed and a small heating and cooling system installed to provide a controlled climate. This will reduce system downtime, reduce maintenance costs and extend the life and effectiveness of the existing system.

**b. Extension of two existing water main lines**

To provide long-term alternate water solution, a water main will be extended approximately 1,225 feet south of the current terminus on South Wabash Street to Idlewilde Road. Similarly, an existing main will be extended approximately 5,280 feet south of

East J Street along Showboat Boulevard to Idlewilde Road. This will be more protective of human health and cost effective than long-term operation and maintenance of carbon filtration units.

c. **Water service hookups for affected residential users**

Affected users will be provided service from the aforementioned extensions of the existing Hastings, Nebraska, public water supply water mains. The objective is to discontinue whole-house filtration at affected residences, while providing an alternate water solution that is more cost effective and protective. These public water supply hookups will eliminate the possible routes of exposures that would result from inhalation, ingestion, and dermal absorption from the contaminated groundwater. (Note: Future sampling events may indicate a need for whole-house filtration systems at residences where it would be impracticable to be connected to current or planned water mains. In accordance with actions previously approved, these residences would be offered whole-house treatment systems.)

**2. Contribution to remedial performance**

Refer to previously approved Action Memoranda (attached). This is an NPL site where additional remedial action is planned. This action will abate the most immediate human health threats and is consistent with the permanent remedy that will eventually be proposed for this site.

**3. Description of alternative technologies**

Refer to previously approved Action Memoranda (attached).

**4. Applicable or relevant and appropriate requirements (ARARs)**

Refer to previously approved Action Memoranda (attached).

**5. Project Schedule**

Refer to previously approved Action Memoranda (attached).

**B. Estimated Costs**

Costs summarized below reflect increased cost estimates (relative to the May 19, 2008, Action Memorandum) for, primarily, water main construction.

Extramural Costs

	<u>Current Ceiling</u>	<u>Proposed Increase</u>	<u>Amended Ceiling</u>
Extramural Costs	\$ 425,000	\$250,000	\$675,000
Extramural Cost Contingency	<u>85,000</u>	<u>50,000</u>	<u>135,000</u>
Subtotal, Extramural Cost	\$ 510,000	\$300,000	\$810,000

EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

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

See previously approved Action Memorandum dated May 19, 2008.

**VI. EXEMPTION FROM STATUTORY LIMITS**

See previously approved Action Memorandum dated May 19, 2008.

**VII. OUTSTANDING POLICY ISSUES**

None.

**VIII. ENFORCEMENT**

See attached Confidential Enforcement Addendum. The total costs for this removal action, based on full cost-accounting practices, are estimated to be \$1,196,650.

Intramural Costs


Direct	\$100,000	\$ 0	\$100,000
Indirect (Total Costs x 0.315)	<u>\$192,150</u>	<u>\$ 94,500</u>	<u>\$286,650</u>
Total Intramural	\$292,150	\$ 94,500	\$386,650
<b>TOTAL PROJECT COSTS</b>	<b>\$802,150</b>	<b>\$394,500</b>	<b>\$1,196,650</b>

Direct costs include direct extramural 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 prejudgment 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 total costs from this estimate will affect the United States' right to cost recovery.

## IX. RECOMMENDATION

This decision document represents the selected removal action amendment for the Garvey Elevator Site, developed in accordance with the Comprehensive Environmental Response, Compensation, and Liabilities Act, as amended, and is not inconsistent with the National Contingency Plan (NCP). This decision is based on the Administrative Record for the site.

Conditions at the site continue to meet the NCP section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed ceiling increase and amended removal action. The revised removal project ceiling, if approved, will be \$810,000 and will be funded from the Regional Removal Allowance.

  
Cecilia Tapia, Director  
Superfund Division

9/26/08  
Date

Attachments

February 9, 2005

**ACTION MEMORANDUM/ENFORCEMENT**

**SUBJECT:** Request for Removal Action  
Garvey Elevator Site, Hastings, Nebraska

**FROM:** Brian Mitchell, Site Assessment Manager  
Enforcement Fund Lead Removal Branch  
Superfund Division

**THROUGH:** Kenneth Buchholz, Chief  
Enforcement Fund Lead Removal Branch

**TO:** Cecilia Tapia, Director  
Superfund Division

Removal Action Lead -	PRP Lead
CERCLIS ID # -	NEN000704351
Site Spill ID # -	A72Z
Removal Category -	Time-Critical
Nationally Significant -	No

**I. PURPOSE**

The purpose of this Action Memorandum is to request approval of a proposed removal action for the Garvey Elevator Site, Hastings, Nebraska. The proposed action will provide an alternative water supply to residents/businesses with contaminated private wells and measures to control off-site migration of contaminated ground water. Alternative water will take the form of either bottled water, partial or whole-house/business water treatment units, or service connection to the municipal water system, depending on contaminant levels and location. Control of off-site migration of contaminated ground water will be accomplished via operation of an on-site soil vapor extraction system and an on-site ground water extraction and treatment system. This action is considered necessary to provide a source of water to impacted residents and businesses and to contain the off-site migration of contaminated ground water.

**II. SITE CONDITIONS AND BACKGROUND**

**A. Site Description**

### 1. Removal Site Evaluation

The Garvey Elevator facility is located at 2315 West Highway 6, Hastings Nebraska. The facility is located in an area legally described as the NW 1/4 of Section 23, Township 7 North, Range 10 West. Investigations at and near the facility show that carbon tetrachloride has been released into the soils at the facility and into the ground water, which is the drinking water source for some nearby residents and businesses and is also a source of water for livestock and crops.

Sampling of one municipal and 61 private wells in the area of and down gradient to the Garvey Elevator facility revealed that one municipal well and 35 resident/business/irrigation/livestock wells were contaminated with carbon tetrachloride. Thirty (30) of the wells contaminated with carbon tetrachloride yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. This is the level above which residents/businesses will be supplied an alternate source of drinking water. The alternate source of drinking water will be either bottled drinking water, partial house/business water treatment unit, or connection to the municipal water system. The Nebraska Health and Human Services System (NHHSS) recommends a removal action level of 23 ug/l of carbon tetrachloride in water for inhalation and dermal contact (general usage) purposes. This level does not include exposure due to ingestion/consumption. Therefore, 23 ug/l is the level at which authorities are recommending whole-house/business water treatment systems or connection to the municipal water system.

### 2. Proximal Location and Information

The Site is located in the southwest corner of the City of Hastings, Nebraska. The population of the City of Hastings according to the 2000 census data is 24,064. The area of ground water contamination has not been defined and is likely to include areas east and southeast of the facility.

There are several residents or businesses which utilize private wells for drinking water or general usage within, or in the proximity of the known contaminated area. The areal extent of the contaminated ground water plume has not been determined.

In addition to the private wells, the City of Hastings utilizes ground water for their public drinking water system. Drinking water is provided for the City of Hastings by several wells. One municipal well has already yielded ground water which shows the presence of carbon tetrachloride. That one municipal well has been taken out of service and is used only as an emergency backup water supply. The municipal water distribution system serves most of the residents/businesses within city limits.

### 3. Site Characteristics

Land use in the area is a mix of residential, commercial and agricultural. The current location of the known ground water contamination is primarily east and southeast of the Garvey Elevator



facility, which is located on the southwestern edge of the City of Hastings, Nebraska. The extent of ground water contamination is not known.

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

Carbon tetrachloride has been detected in groundwater at and away from the Site. Carbon tetrachloride is listed as a hazardous substance pursuant to 40 C.F.R. §302.4. As such, it is a "hazardous substance" as defined in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601(14).

5. NPL Status

EPA is currently preparing an HRS Package in anticipation of proposing the Site on the NPL.

6. Maps, pictures and other graphic representations

A map showing the location of the Site is attached as Figure 1.

B. Other Actions to Date

1. Previous Actions

Garvey Elevator became aware of contamination at its Hastings, Nebraska facility and submitted an application for participation in the Nebraska Department of Environmental Quality (NDEQ) Remedial Action Plan Monitoring Act Program (RAPMA) on April 13, 1995. Since that date, Garvey Elevator has taken soil gas samples in an attempt to characterize the on-site contaminated soil. Garvey Elevator has installed and is operating a soil vapor extraction and treatment system and a ground water extraction and treatment system in an attempt to control the migration of contamination from the facility. Garvey Elevator has installed several monitoring wells both on-site and off-site. Garvey Elevator has been identifying and supplying certain residents and businesses with contaminated drinking water supply wells with bottled water, carbon filtration units, and/or connections to the municipal water supply.

2. Current Actions

Garvey Elevator is assessing data and identifying additional residents/businesses that may have impacted private water supply wells. Garvey Elevator is continuing to operate the soil vapor extraction and ground water extraction systems

C. State and Local Authorities' Role

## 1. State and Local Actions to Date

In correspondence dated October 17, 2002, NDEQ requested EPA assistance in conducting a removal assessment evaluation to determine the appropriateness of a removal action to identify the extent and potential containment of the ground water related to the Garvey Elevator Site, located in Hastings Nebraska. NDEQ expressed its concerns about the ground water quality in the area of the Garvey Elevator Site and Garvey's ability to address off-site contamination. NDEQ stated that they were not confident that the lateral and vertical extent of the ground water plume has been accurately characterized. NDEQ has performed a PA/SI for the Site.

In correspondence dated December 9, 2003, NDEQ expanded its October 17, 2002, request for EPA assistance. Specifically NDEQ requested EPA's assistance to provide alternate water supplies to impacted private well users, evaluate the effectiveness and make recommendations for improving the on-site source control system, characterize the ground water plume, and evaluate potential remedial alternatives for the off-site ground water plume.

Garvey Elevator and the City of Hastings have extended some municipal water lines into areas impacted by the contaminated ground water. Some residents and businesses have been connected to the municipal water supply.

## 2. Potential for Continued State/local Response

NDEQ has requested EPA assistance to address the contamination at the Site. EPA is currently negotiating a CERCLA Administrative Order on Consent with Garvey Elevator which provides for certain removal actions to be performed under EPA oversight and an RI/FS to be performed under NDEQ oversight. NDEQ will remain involved with overall Site RI/FS process and remediation activities. NHHSS may provide additional risk assessment support.

### D. Community Involvement Activities

The Administrative Record supporting this Action Memorandum will be placed in a local repository and the EPA Region 7 Records Center.

Garvey Elevator and EPA will initiate discussions with city leadership (city manager, superintendent of water department) regarding Garvey Elevator and EPA Site activities.

Future public meetings will be scheduled as developments warrant.

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

A. Threats to Public Health or Welfare

Site conditions pose a significant threat to public health and welfare which meet the criteria for response action under 40 C.F.R. § 300.415(b)(2) of the National Contingency Plan (NCP), which are described as follows:

1. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.  
[300.415 (b) (2) (i)]

Thirty (30) resident/business/irrigation/livestock water supply wells yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. Carbon tetrachloride is a hazardous substance. Short and long term-exposure to carbon tetrachloride may cause liver and kidney damage, headaches, dizziness, sleepiness, nausea, and vomiting. Short and long term exposure to carbon tetrachloride may also cause certain birth defects. The EPA has determined that carbon tetrachloride is a probable human carcinogen.

2. Actual or potential contamination of drinking water supplies or sensitive ecosystems. [300.415(b)(2)(ii)]

Thirty (30) resident/business/irrigation/livestock water supply wells yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. The length of time that residents have been drinking water contaminated above threshold concentrations is unknown. However, it is possible that residents have been drinking contaminated water for a number of years. One City of Hastings Municipal Well, MW-13, has had detections of carbon tetrachloride and other contaminants and is used only as an emergency backup water supply.

3. The availability of other appropriate federal or state response mechanisms to respond to the release. [300.415(b)(2)(vii)]

NDEQ has requested EPA's assistance to respond to the contamination at the Site. There are no other state or federal authorities who are able to respond to the release of hazardous substances at the Site.

4. Other situations or factors that may pose threats to public health or welfare of the United States or the environment. [300.415(b)(2)(viii)]

The extent of carbon tetrachloride contamination in the ground water has not yet been identified. Thus, the extent of the problem is unknown. It is possible that carbon disulfide, ethylene

dibromide, chloroform, dichloromethane, and chloromethane, EPA identified hazardous substances, may also be in the ground water above health based standards.

#### **IV. ENDANGERMENT DETERMINATION**

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

#### **V. PROPOSED ACTIONS**

##### **A. Proposed Actions**

##### **1. Proposed Action Description**

##### **GENERAL TASK DESCRIPTION**

EPA is currently negotiating a Consent Order for removal action with Garvey Elevator. Pursuant to this Consent Order, Garvey will be required to implement the following:

- Identify and sample all wells used for drinking water at residences and businesses in the geographic area defined in the Statement of Work for Removal Action that may be impacted by contamination emanating from the Site.
- Provide and maintain alternate water supplies to individuals/businesses exposed to contaminants of concern over the levels specified in the Statement Of Work.
- Perform regular monitoring of drinking water wells with detections of any contaminants of concern.
- Conduct containment measures to mitigate the release of contamination from the Site. This may include, but not be limited to, operation, evaluation, and expansion of the existing soil vapor extraction and groundwater pump and treat systems.

##### **2. Health Consultation and Threshold Concentration Discussion**

The threshold concentration of carbon tetrachloride in drinking water has been set at 5 ug/l, the EPA drinking water maximum contaminant level. Residences and businesses with well water contamination above this level will be provided an alternate water source for consumption or the well water will be treated so that water used for consumption will be below 5 ug/l carbon tetrachloride. Based on the recommendations of the NHHSS, the threshold concentration of carbon

tetrachloride for general usage is set at 23 ug/l. Residences and businesses with well water contamination above this level will be provided an alternate water source for general usage or the well water will be treated so that water used for general usage will be below 23 ug/l carbon tetrachloride. The threshold concentration for the other contaminants of concern (carbon disulfide, ethylene dibromide, chloroform, dichloromethane, and/or chloromethane) in drinking water is set at respective EPA drinking water maximum contaminant level for each constituent or where one does not exist the EPA Region IX Preliminary Remedial Goal shall apply. NHHSS will be consulted on general water usage levels for carbon disulfide, ethylene dibromide, chloroform, dichloromethane, and/or chloromethane if detected above the respective EPA drinking water maximum contaminant level or Region IX PRG.

### 3. Contribution to Remedial Performance

Future remedial actions have not yet been determined for this Site. However, these removal activities will be consistent with any future remedial actions.

### 4. Description of Alternative Technologies

Carbon filtration systems and bottled water are the most widely used short-term alternatives for addressing contaminated water for private home/business use at CERCLA sites. Alternative technologies will be considered during the RI/FS.

### 5. Applicable or Relevant and Appropriate Requirements (ARARs)

#### Federal - Waste Determination

Wastes collected by the activated carbon for individual residences would be considered household wastes in accordance with 40 C.F.R. §261.4(b), and, as such, would be subject to control under RCRA Subtitle D regulations.

#### Federal

The National Oil and Hazardous Substances Pollution Contingency Plan at 40 C.F.R. Part 300.415 requires that removal actions shall, to the extent practicable, considering the exigencies of the situation, attain ARARs under federal environmental, state environmental, or facility-siting laws. The following ARARs have been identified as being potentially applicable for this action:

Action/Prerequisite	Requirement	Citation
Disposal of spent activated carbon filters	Disposal at RCRA Subtitle D facility	40 C.F.R. § 257
Drinking water quality	Treatment to achieve compliance with MCLs	40 C.F.R. §§ 141, 142, and 143
Operation, treatment, and discharge of ground water extraction and treatment system	Treatment to achieve compliance with Safe Drinking Water Act	40 C.F.R. §§ 144, 145, 146, 147, and 148
Operation of soil vapor extraction and treatment system	Treatment to achieve compliance with Clean Air Act	40 C.F.R. §§ 51, 52, 71, and 72

#### State

Nebraska has been contacted and requested to provide guidance for state ARARs. Potential ARARs received by EPA from NDEQ will be considered in accordance with 40 C.F.R. §300.400(g).

#### 6. Project Schedule

This action will begin upon Garvey Elevators agreement to the Consent Order as set forth in the schedule agreed to by the parties..

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

The proposed actions for the Garvey Elevator Site should be taken immediately. Should these actions be delayed, the potential threats to human health and the environment will increase.

#### VII. OUTSTANDING POLICY ISSUES

None.

#### VIII. ENFORCEMENT


EPA is currently negotiating a Consent Order with Garvey Elevator for implementation of the removal actions set forth in this action memorandum.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Garvey Elevator Site, located in Hastings Nebraska. This decision document was developed in accordance with CERCLA as amended, and is consistent with the NCP. This decision is also based on the Administrative Record for the Site.

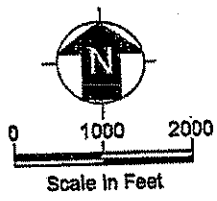
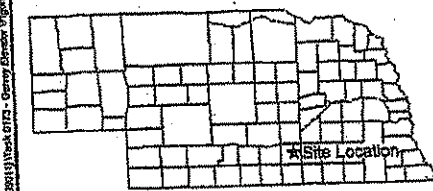
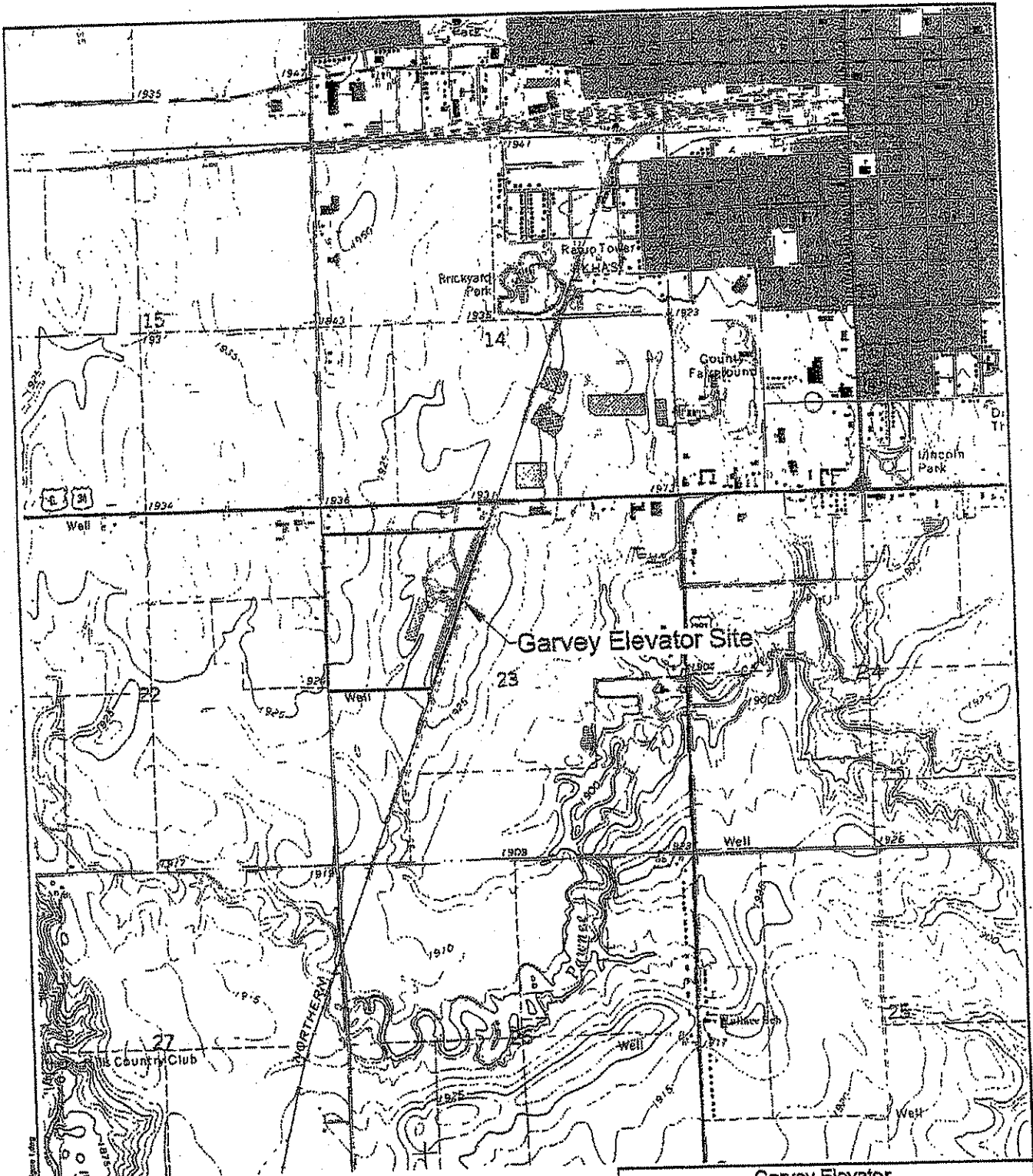
Conditions at the Site meet the NCP section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action.


Approved:

  
Cecilia Tapia, Director  
Superfund Division

7/11/2005  
Date

Attachments



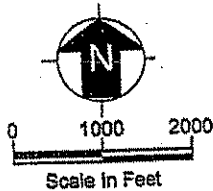
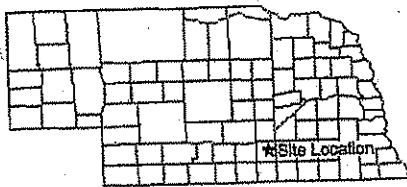
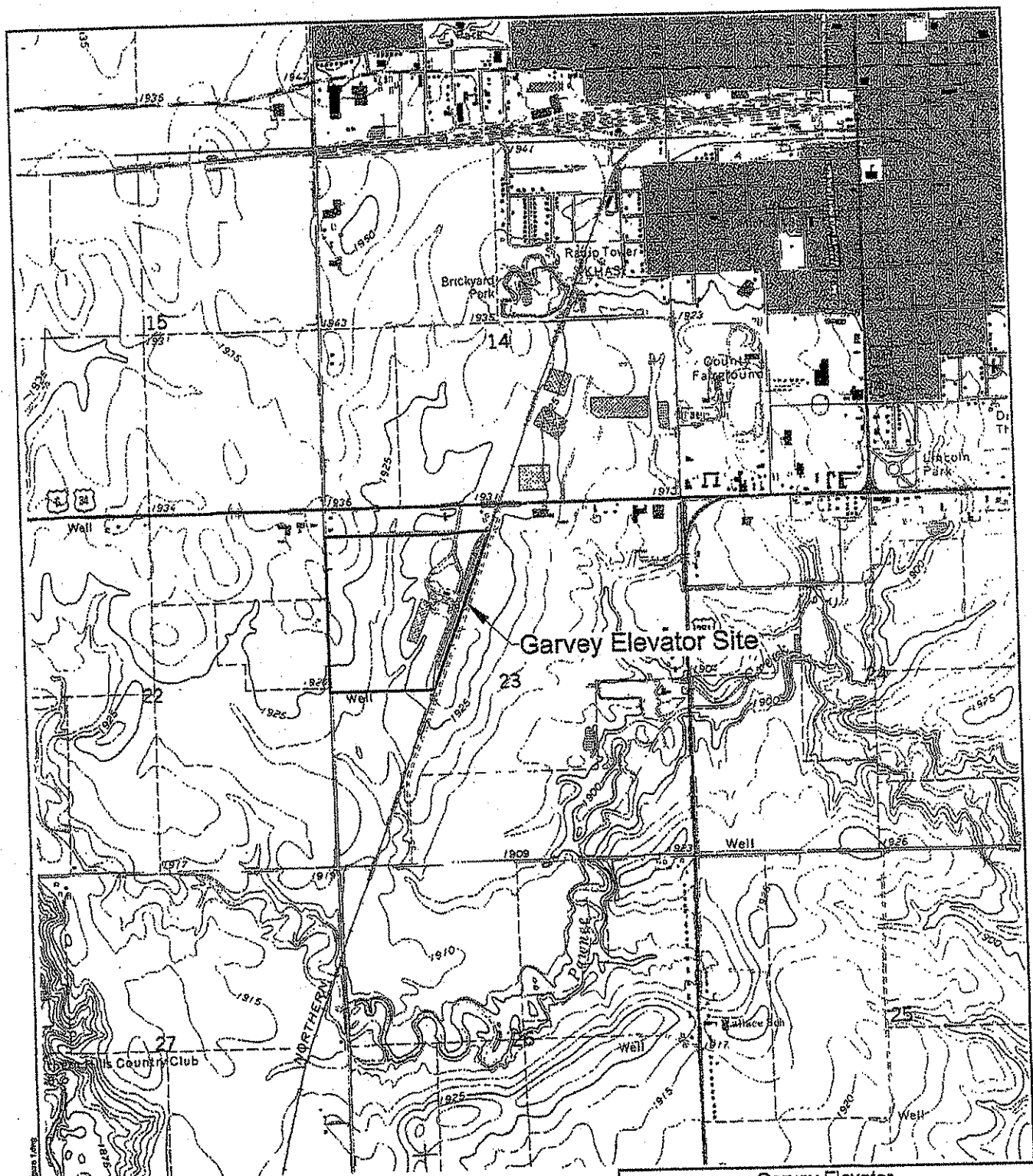
Garvey Elevator Hastings, Nebraska	
Figure 1 Site Location Map	
	Tetra Tech EM Inc.
<small>Date: 01/15/04</small>	<small>Drawn By: Roger Shul</small>
<small>Project No: GP011.L-00.D073.00</small>	

Source: USGS Hastings West, NE 7.5 Minute Topo Quad, 1988, PR 1983



**APPENDIX D**

**MAP OF THE GARVEY ELEVATOR SITE**



Garvey Elevator  
Hastings, Nebraska

**Figure 1**  
Site Location Map



**Tetra Tech EM Inc.**

Date: 01/15/04

Drawn By: Roger Zia

Project No: G9011.L-02.0172.00

Source: USGS Hastings West, NE 7.5 Minute Topo Quad, 1989, PR 1983



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

AUG 8 2006

A72Z  
Garvey Elevator  
NEN000704351  
2.0

SRC 8.8.06

ENFORCEMENT ACTION MEMORANDUM AMENDMENT

SUBJECT: Request for Project Funding for Oversight at the Garvey Elevator Site in Adams County, Nebraska

FROM: Brian Zurbuchen, Ph.D  
Remedial Project Manager  
Iowa/Nebraska Remedial Branch

THRU: Kenneth Buchholz, Chief *Att for KB*  
Enforcement/Fund Lead Removal Branch

TO: Cecilia Tapia, Director *Att for CT*  
Superfund Division

CERCLIS ID#: NEN000704351  
SITE ID#: A72Z  
CATEGORY OF REMOVAL: Time-Critical  
NATIONALLY SIGNIFICANT: No

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of funding for oversight of the Potentially Responsible Party (PRP) removal action. The original Action Memorandum did not address oversight costs incurred by the Environmental Protection Agency (EPA) at the Garvey Elevator Site (Site). As described in the original Action Memorandum, this removal action will continue to eliminate or reduce potential exposure due to the presence of carbon tetrachloride (and the other contaminants of concern) in the onsite and offsite groundwater. This removal action will also continue to conduct containment measures to mitigate the release of contamination from the Garvey Elevator Site. Funding is needed to adequately document and oversee the PRP's actions.

II. SITE CONDITIONS AND BACKGROUND

Pursuant to the Administrative Order on Consent (AOC) that became effective October 7, 2005, the PRP began conducting removal action activities in October 2005. The PRP currently funds these activities through an Escrow Fund (funded by the sale of the Garvey Elevator facility to AGP Grain Marketing) in accordance with the Comprehensive Environmental Response

40252047



SUPERFUND RECORDS



Compensation and Liability Act (CERCLA), Docket No. 07-2005-0268 (Agreement). Pursuant to the Agreement, PRP costs incurred in performance of the removal action are reimbursable from the Escrow Fund, but require EPA approval before a disbursement request can be submitted to the escrow agent. Pursuant to the AOC, the PRP has agreed to pay EPA's oversight costs. In accordance with the Agreement, the Escrow Fund will provide funds to pay for EPA's response costs.

Since the start of removal action activities in October 2005, the PRP has submitted, and EPA has approved, the Removal Action Work Plan (ENSR, January 2006) that outlined a schedule and rationale for selecting and analyzing the water from impacted and potentially impacted residences/businesses. In addition, the PRP has submitted, and EPA has approved with modifications, the Soil Vapor and Groundwater Extraction and Treatment System Evaluation Work Plan (SEWP) (ENSR, April 2006). The SEWP outlined a two-phased plan to assess the effectiveness of the existing soil vapor extraction (SVE) system and groundwater extraction and treatment system (GETS) to contain and reduce the source area contamination. In the first phase, the PRP will evaluate the nature and extent of soil and groundwater contamination at the source area. In the second phase, the PRP will assess the effectiveness of the existing SVE system and GETS and make recommendations to ensure containment and reduce the source area contamination. Based on the results of the assessment, the PRP will make recommendations regarding the operation and maintenance of the system and possible extension of the existing system.

### III. PROPOSED ACTIONS AND ESTIMATED COST

#### A. Proposed Action Description

The PRP continues to conduct time-critical removal actions as described in the original Action Memorandum and as required by the AOC. The PRP has identified numerous impacted and potentially impacted residents, provided the results to the EPA and the residents, and has provided alternate water to residences/businesses impacted above the removal action levels. In August 2006 the PRP will be initiating work described in the SEWP.

An evaluation of the removal action activities performed to date and the invoices submitted has led EPA to determine that an increased oversight role is appropriate. This oversight is required to assure prompt and proper cleanup, to assure adequate documentation, and to assure judicious use of the Escrow Fund. It is expected these time-critical removal activities will be completed by July 30, 2008.

B. Estimated CostsExtramural CostsProposed  
Ceiling

Oversight	\$150,000
10% Contingency	<u>\$ 15,000</u>
Proposed Removal Ceiling	\$165,000

Intramural Costs

EPA Direct	\$ 50,000
EPA Indirect (50.69% of Costs)	<u>\$108,983</u>
Intramural Costs Total	\$158,983

Estimated EPA Costs for Removal	\$323,983
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The EPA direct and indirect costs (although cost recoverable) do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

## IV. RECOMMENDATION

This decision document represents a request to fund PRP oversight of removal activities at the Site. The oversight activities were developed in accordance with CERCLA, as amended, and are not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for the Site.

Conditions at the Garvey Elevator Site continue to meet NCP Section 300.415(b) criteria for a removal action and I recommend your approval of the funding amount. The funding amount, if approved, will be \$323,983. This amount comes from the Regional Removal Allowance. Pursuant to the Agreement, the PRP has agreed to pay EPA's oversight costs. In accordance with the Agreement, the Escrow Fund will provide funds to pay for EPA's response costs.

Conditions at the Site meet NCP Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action.

Approved:

  
Cecilia Tapia, Director  
Superfund Division

8/8/02  
Date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

MAY 19 2008

ACTION MEMORANDUM

**SUBJECT:** Request for a Removal Action and 12-Month Exemption at the Garvey Elevator Site, Adams County, Hastings, Nebraska

**FROM:** *Kenneth S. Buchholz*  
for Randy Schademann, On-Scene Coordinator  
Emergency Response and Removal North Branch

**THRU:** *Kenneth S. Buchholz*  
Kenneth S. Buchholz, Chief  
Emergency Response and Removal North Branch

**TO:** Cecilia Tapia, Director  
Superfund Division

Site ID#:	A72Z
CERCLIS ID#:	NEN000704351
Nationally Significant:	No
Precedent Setting:	No
Category of Removal:	Time-critical

I. PURPOSE

The purpose of this action memorandum is to request funding and document approval of the proposed removal action and consistency exemption from the 12-month statutory removal action limitation described herein for the Garvey Elevator Site (a.k.a. Garvey or the Site), Adams County, Hastings, Nebraska. The general objective of the action is the U.S. Environmental Protection Agency's (EPA's) assumption of operation of existing soil vapor extraction (SVE) and groundwater extraction systems, continued maintenance of existing alternative water systems, and installation of alternative water systems as needed. Activities included in this fund-lead action will include assessment of the systems including enhancements or system modifications, scheduled sampling to determine efficiency and effectiveness, operational costs of the systems (i.e., electricity, gas, water), and daily systems checks. In addition, existing alternative water systems (e.g., carbon filtration and bottled water) will be maintained and new systems (including connection to the municipal water system) will be installed where available and if needed.



The aforementioned systems will be operated and installed under this Action Memorandum until such time as the Remedial Investigation/Feasibility Study (RI/FS) is completed and a Record of Decision (ROD) is finalized. It is anticipated that a ROD will be finalized in 4 years.

## II. SITE CONDITIONS AND BACKGROUND

### A. Site Description

#### 1. Removal site evaluation

The Site is located at 2315 West Highway 6 on the southwestern outskirts of Hastings, Nebraska. Between 1959 and 1985 Garvey Elevators, Inc., utilized a formulation containing carbon tetrachloride (CCl<sub>4</sub>) for pest control at the facility.

In 1994 CCl<sub>4</sub> was identified in environmental samples as part of a Phase I Site Assessment. Since then, 36 monitoring wells have been installed with the highest concentration of CCl<sub>4</sub> at 29,943 micrograms per liter (µg/L). At least 40 privately owned domestic and commercial wells have been sampled with concentrations ranging up to 300 µg/L. The Safe Drinking Water Act Maximum Contaminant Level (MCL) for CCl<sub>4</sub> is 5 µg/L.

Numerous on-site investigations have been completed at the Site since 1994. Key findings from the investigations included:

- the detection of CCl<sub>4</sub> at 884 micrograms per kilogram (µg/kg) in soils;
- the detection of CCl<sub>4</sub> at 29,943 µg/L in on-site monitoring well;
- the CCl<sub>4</sub> plume has impacted private wells more than 3 miles downgradient (east-southeast) of the Site.

A layout of the Site is included as Attachment 1.

#### 2. Physical location and site characteristics

The Site is located at 2315 West Highway 6, which is in the southwest portion of Hastings, Nebraska. The Site is located at 40.563893 North latitude and -98.415273 West longitude. This location is in the northwest quarter of Section 23, Township 7 North, Range 10 West.

The Garvey Elevator Site is located on approximately 106 acres of land, 22 of which are improved. Within this acreage is the elevator terminal that consists of a concrete elevator head house and 258 bins that have over four million bushels of capacity. There is also a 818,000-bushel steel bin and a 2.5-million-bushel flat storage structure. Other buildings on Site include

an office building, maintenance shop, scale house, chemical storage warehouse, two electrical rooms, and an elevator bag house.

The facility rests on relatively flat terrain. Surface water flow is to the south-southeast to the Little Blue River, which is approximately 8 miles south of Hastings. Depth to groundwater at the Site is approximately 100 below ground surface (bgs). Groundwater flow direction is to the east-southeast. The immediate area is undeveloped farm land. The nearest residence is approximately 0.6 miles to the east.

Between 1959 and 1985, Garvey utilized a liquid 80-20 grain fumigant (80%  $\text{CCl}_4$  and 20% carbon disulfide). The fumigant was stored in a 3,000-gallon-above-ground storage tank. An underground delivery pipe ran from the tank to the side of the elevator. The fumigant was applied in all upright grain storage areas. Previous employees had indicated that the underground service pipe began leaking and was subsequently repaired on an undetermined date.

Garvey initiated source control measures including an SVE system and a groundwater extraction system in 1998/99. The SVE consists of eight extraction wells with the effluent stream being treated by a catalytic oxidation system. On September 1, 2000, after 20 months of operation, the SVE system was optimized to operate with only one extraction well. On March 1, 2001, the system was completely shut down because Garvey believed the system influent had reached asymptotic levels.

The groundwater treatment system encompasses eight extraction wells. The water is pumped through a particulate filter and into a packed (carbon) tower air stripper. The treated water is pumped through another particulate filter and discharged via two injection wells located on Garvey property upgradient of the suspected source area. The system began operating in 1999, but in the past two years has operated infrequently due to mechanical and electrical problems that have not been addressed by Garvey.

An Administrative Order on Consent (AOC) between EPA and Garvey Elevators, Inc., was signed in the fall of 2005. An accompanying Action Memorandum was developed to support the AOC. A second Action Memorandum was developed in 2006, to provide additional funding for oversight of the PRP activities (both previous Action Memoranda are attached in Attachment 2). Pursuant to the AOC Garvey performed site activities for removal actions and for an RI/FS.

Currently, Garvey Elevators, Inc., has fitted six residences with whole-house carbon filter systems and is supplying bottled water to an additional seven residences. At least one additional residence has been identified as having well water above the MCL with no alternative water supplied.

Garvey Elevator, Inc., filed for Chapter 7 bankruptcy on March 27, 2008. On April 10, 2008, EPA directed Garvey Elevator, Inc., to cease work at the site to conserve resources in the escrow account, established as required by the AOC and funded by the proceeds from the sale of the elevator to AGP that was being used by Garvey to perform work at the Site.



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

Carbon tetrachloride has been detected in private drinking water wells attributable to the Site. This compound is listed as a hazardous substance pursuant to 40 CFR § 302.4. As such, it is a "hazardous substance" as defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601(14).

4. National Priorities List (NPL) Status

The Site was listed on the NPL in September 2005.

5. Maps, pictures and other graphic representations

A Site map is included as Attachment 1.

B. Other Actions to Date

1. Previous actions

- 1994: CCl<sub>4</sub> first identified in environmental samples
- 1995: Garvey submits to Nebraska Department of Environmental Quality (NDEQ) for participation in RAPMA
- 1998: Garvey installs SVE and ground water pump and treat systems
- 2000-present: Garvey identifies residences and business with CCl<sub>4</sub> concentrations that warrant alternative water supplies
- 2003: NDEQ conducts PA/SI
- 2005: Garvey site on NPL list in September
- 2005: AOC signed in October
- 2005: Action Memorandum for PRP activities
- 2008: Garvey files for bankruptcy

2. Current actions

Garvey had been conducting field activities related to the removal action and the RI/FS. Garvey has filed for bankruptcy and has ceased operations including maintenance of the SVE and groundwater systems and maintenance of alternative water supplies.

C. State and Local Authorities' Roles

1. State and local actions to date

See summary above in II.B.1.

2. Potential for continued state/local response

NDEQ will be kept apprised of EPA actions and may be requested to provide sampling and/or monitoring assistance.

D. Community Involvement Activities

The Administrative Record supporting previous actions at the Site had been previously developed. This Action Memorandum will be added to the repository and the EPA Region 7 Records Center. EPA will keep the city of Hastings and NDEQ informed of all actions performed at the Site. Future public meetings will be scheduled as developments warrant.

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

A. Threats to Public Health or Welfare

Site conditions pose a significant threat to public health and welfare which meet the criteria for response action under 40 CFR § 300.415(b)(2) of the National Contingency Plan (NCP), which are described as follows:

**Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants (40 CFR § 300.415[b][2][i])**

At least 13 residential or commercial wells have been identified with CCl<sub>4</sub> concentrations that warrant alternative water supplies.

Carbon tetrachloride as a liquid is clear with a sweet smell that produces a largely odorless vapor. Past uses of CCl<sub>4</sub> have included as a pesticide, refrigerant, propellant for aerosol cans, and as a cleaning agent/degreaser. Concerns over environmental and health hazards associated with CCl<sub>4</sub> have greatly curtailed its use. Inhaling vapors and ingestion of contaminated drinking water supplies are the main routes of human exposure. Damage to the liver, kidneys, and the central nervous system have all been attributed to exposure to CCl<sub>4</sub>. In addition, long-term exposure in study animals has reduced fertility. The Department of Health and Human Services has determined that CCl<sub>4</sub> may reasonably be anticipated to be a carcinogen.

**Actual or potential contamination of drinking water supplies or sensitive ecosystems (40 CFR § 300.415[b][2][ii])**

At least 13 residential or commercial wells have been identified with CCl<sub>4</sub> concentrations that warrant alternative water supplies. Continued operation of the SVE and groundwater pump-and-treat systems will be required to mitigate further migration of the plume.

**The availability of other appropriate federal or state response mechanisms to respond to the release (40 CFR § 300.415[b][2][vii])**

NDEQ has referred the Site to EPA for action. There are no other state or federal authorities that are able to take the necessary immediate actions.

**Other situations or factors that may pose threats to public health or welfare of the United States or the environment. (40 CFR § 300.415[b][2][viii])**

The extent of CCl<sub>4</sub> contamination in the groundwater has not yet been fully determined. Thus, the full extent of the impact to the drinking water supply is unknown.

#### IV. PROPOSED ACTIONS AND ESTIMATED COSTS

##### A. Proposed Actions

##### 1. Proposed action description

The objective of this time-critical removal action is to assume operation of the SVE and groundwater extraction systems. Activities included in this action will include assessment of the systems—including enhancements or system modifications, scheduled sampling to determine efficiency and effectiveness, operational costs of the systems (i.e., electricity, gas, water), and daily systems checks. In addition, EPA will assume the maintenance of existing alternative water supplies and install additional systems as the need arises.

##### 2. Contribution to remedial performance

This removal action will prevent further migration of contaminants from the source area, while subsequent remedial response actions investigations will better determine the long-term solution to the contamination. As a result, the long-term remedial action will be less costly because it will prevent further mitigation and spreading of contaminants from the source area.

##### 3. Description of alternative technologies

The current SVE and groundwater pump and treat systems will be evaluated to determine whether modifications are warranted to achieve containment of the source area. Bottled water, partial or whole-house carbon filtration systems, or service connection to the municipal water supply system will be evaluated and installed where available and if needed for residential and commercial wells that have been identified as contaminated with CCl<sub>4</sub>, as well as those that may be impacted in the future.

##### 4. Applicable or relevant and appropriate requirements (ARARs)

##### Federal

Occupational Safety and Health Act Standards - 29 CFR part 1910 and part 1926.20 - 1926.26, will be applicable to all actions.

Clear Air Act, National Ambient Air Quality Standards - 40 CFR §§ 50.6 and 50.12 are the national ambient air quality standards for air quality pertaining to particulate matter. The standards and the method of measurement are discussed in these sections. Engineering controls (e.g., dust control) will be used at this Site to achieve those standards. Also 40 CFR §§ 51, 52, 71, and 72 relating to the operation of the SVE system.

Safe Drinking Water Act - 40 CFR §§ 144-148, related to the treatment and discharge of the groundwater pump-and-treat system.

#### State

EPA requested that NDEQ identify requirements that the state of Nebraska wanted EPA to consider as potential state ARARs for this removal action. To qualify as state ARARs these requirements must be (1) promulgated, (2) identified by the state within the time period specified in this letter, and (3) more stringent than federal requirements.

#### 5. Project schedule

Primary on-site activities can commence within seven days of approval of this Action Memorandum.

#### B. Estimated Costs

##### Extramural Costs

Removal	\$425,000
20% Cost Contingency	<u>85,000</u>
Removal Ceiling	\$510,000

EPA direct and indirect costs, although cost recoverable, does not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

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

The proposed actions for the Garvey Site should be taken immediately. Should these actions be delayed, the potential threats to human health and the environment will increase.

## VI. EXEMPTION FROM STATUTORY LIMITS

### 12-Month Exemption

Consistency Exemption: This removal action will prevent further migration of contaminants from the source area, while subsequent remedial response actions will determine the long-term solution to the contamination at this Site. The response action will otherwise be appropriate and consistent with the future remedial actions to be taken.

## VII. OUTSTANDING POLICY ISSUES

None.

## VIII. ENFORCEMENT

See attached confidential enforcement addendum.

The total EPA costs for this removal action, based on full cost-accounting practices, are estimated to be \$802,150.

Direct Extramural Costs	\$510,000
Direct Intramural Costs	100,000
EPA Indirect Costs (\$610,000 x 31.5 %)	<u>192,150</u>
 TOTAL PROJECT COSTS	 \$802,150

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 the 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.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for the Site.

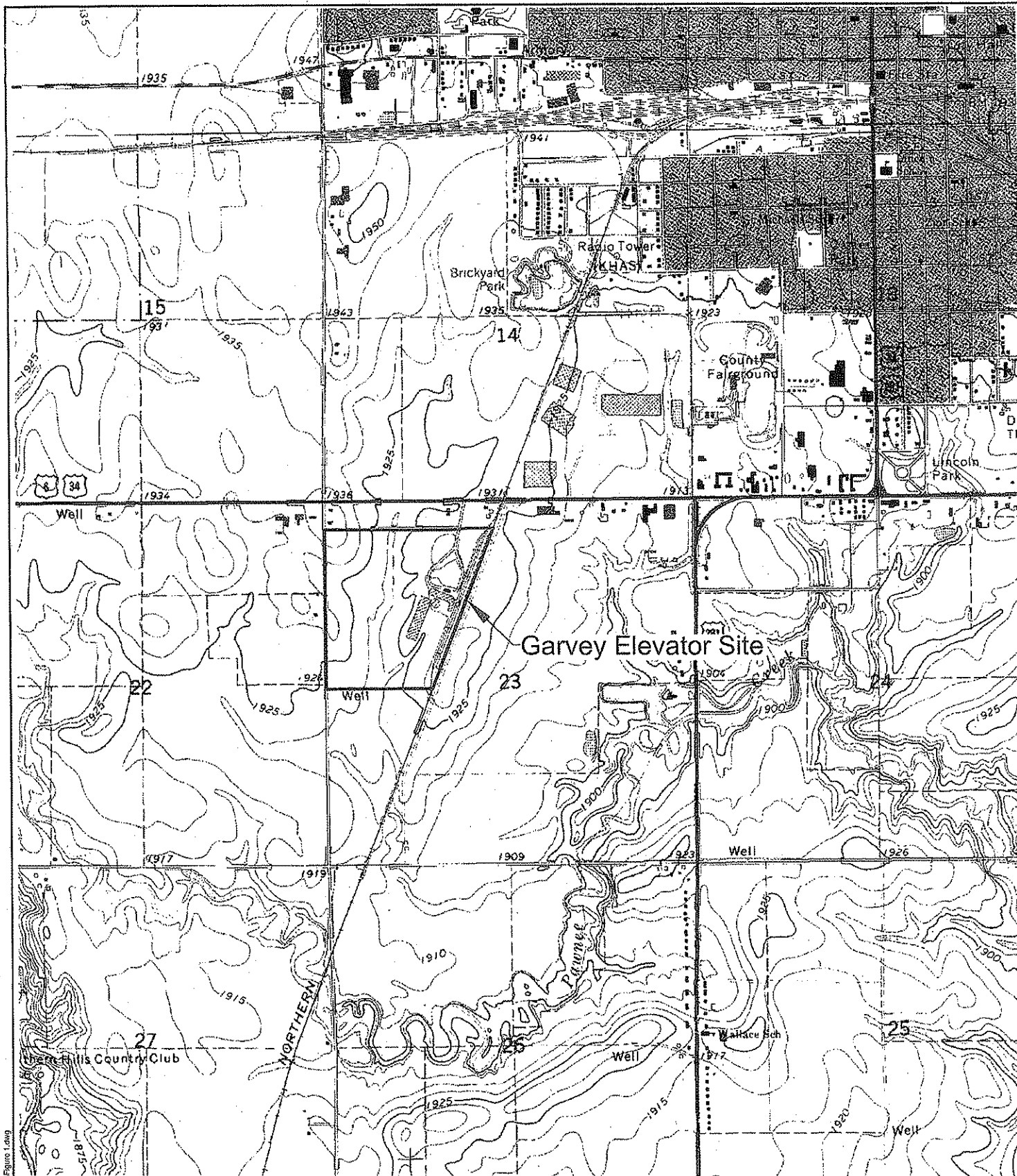
Conditions at the Site meet the NCP section 300.415(b)(2) criteria for a removal and the CERCLA 104(e) consistency exemption. I recommend your approval of the proposed removal action and exemption from the 12-month statutory limitation. The removal project ceiling, if approved, will be \$510,000 and will be funded from the Regional Removal Allowance.

  
Cecilia Tapia, Director  
Superfund Division

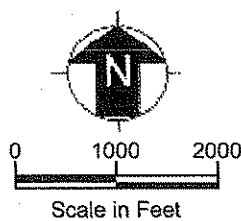
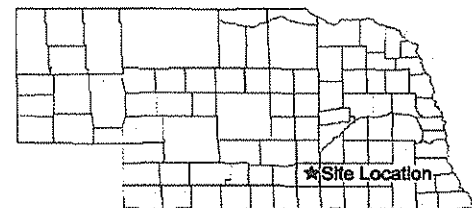
5/19/08  
Date

Attachments:

1. Site Map
2. (2) Previous Action Memoranda
3. Confidential Enforcement Addendum



V:\START 2\G9011\Task 0173 - Garvey Elevator\Figures\Figure 1.dwg



Garvey Elevator  
Hastings, Nebraska

**Figure 1**  
Site Location Map



**Tetra Tech EM Inc.**

Source: USGS Hastings West, NE 7.5 Minute Topo Quad, 1969, PR 1983

Date: 01/15/04

Drawn By: Roger Stull

Project No: G9011-L-03.0173.00



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

AUG 8 2006

A72Z  
Garvey Elevator  
NEN000704351  
-2-0

SRC 8.8.06

ENFORCEMENT ACTION MEMORANDUM AMENDMENT

SUBJECT: Request for Project Funding for Oversight at the Garvey Elevator Site in Adams County, Nebraska

FROM: Brian Zurbuchen, Ph.D.  
Remedial Project Manager  
Iowa/Nebraska Remedial Branch

THRU: Kenneth Buchholz, Chief *Att for KB*  
Enforcement/Fund Lead Removal Branch

TO: Cecilia Tapia, Director *Att for CT*  
Superfund Division

CERCLIS ID#: NEN000704351  
SITE ID#: A72Z  
CATEGORY OF REMOVAL: Time-Critical  
NATIONALLY SIGNIFICANT: No

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of funding for oversight of the Potentially Responsible Party (PRP) removal action. The original Action Memorandum did not address oversight costs incurred by the Environmental Protection Agency (EPA) at the Garvey Elevator Site (Site). As described in the original Action Memorandum, this removal action will continue to eliminate or reduce potential exposure due to the presence of carbon tetrachloride (and the other contaminants of concern) in the onsite and offsite groundwater. This removal action will also continue to conduct containment measures to mitigate the release of contamination from the Garvey Elevator Site. Funding is needed to adequately document and oversee the PRP's actions.

II. SITE CONDITIONS AND BACKGROUND

Pursuant to the Administrative Order on Consent (AOC) that became effective October 7, 2005, the PRP began conducting removal action activities in October 2005. The PRP currently funds these activities through an Escrow Fund (funded by the sale of the Garvey Elevator facility to AGP Grain Marketing) in accordance with the Comprehensive Environmental Response

40252047



SUPERFUND RECORDS





Compensation and Liability Act (CERCLA), Docket No. 07-2005-0268 (Agreement). Pursuant to the Agreement, PRP costs incurred in performance of the removal action are reimbursable from the Escrow Fund, but require EPA approval before a disbursement request can be submitted to the escrow agent. Pursuant to the AOC, the PRP has agreed to pay EPA's oversight costs. In accordance with the Agreement, the Escrow Fund will provide funds to pay for EPA's response costs.

Since the start of removal action activities in October 2005, the PRP has submitted, and EPA has approved, the Removal Action Work Plan (ENSR, January 2006) that outlined a schedule and rationale for selecting and analyzing the water from impacted and potentially impacted residences/businesses. In addition, the PRP has submitted, and EPA has approved with modifications, the Soil Vapor and Groundwater Extraction and Treatment System Evaluation Work Plan (SEWP) (ENSR, April 2006). The SEWP outlined a two-phased plan to assess the effectiveness of the existing soil vapor extraction (SVE) system and groundwater extraction and treatment system (GETS) to contain and reduce the source area contamination. In the first phase, the PRP will evaluate the nature and extent of soil and groundwater contamination at the source area. In the second phase, the PRP will assess the effectiveness of the existing SVE system and GETS and make recommendations to ensure containment and reduce the source area contamination. Based on the results of the assessment, the PRP will make recommendations regarding the operation and maintenance of the system and possible extension of the existing system.

### III. PROPOSED ACTIONS AND ESTIMATED COST

#### A. Proposed Action Description

The PRP continues to conduct time-critical removal actions as described in the original Action Memorandum and as required by the AOC. The PRP has identified numerous impacted and potentially impacted residents, provided the results to the EPA and the residents, and has provided alternate water to residences/businesses impacted above the removal action levels. In August 2006 the PRP will be initiating work described in the SEWP.

An evaluation of the removal action activities performed to date and the invoices submitted has led EPA to determine that an increased oversight role is appropriate. This oversight is required to assure prompt and proper cleanup, to assure adequate documentation, and to assure judicious use of the Escrow Fund. It is expected these time-critical removal activities will be completed by July 30, 2008.

B. Estimated Costs

<u>Extramural Costs</u>	<u>Proposed Ceiling</u>
Oversight	\$150,000
10% Contingency	<u>\$ 15,000</u>
Proposed Removal Ceiling	\$165,000

Intramural Costs

EPA Direct	\$ 50,000
EPA Indirect (50.69% of Costs)	<u>\$108,983</u>
Intramural Costs Total	\$158,983

Estimated EPA Costs for Removal      \$323,983

The EPA direct and indirect costs (although cost recoverable) do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

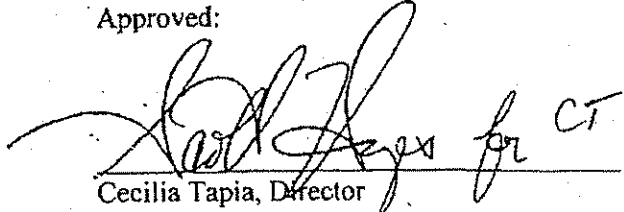
IV. RECOMMENDATION

This decision document represents a request to fund PRP oversight of removal activities at the Site. The oversight activities were developed in accordance with CERCLA, as amended, and are not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for the Site.

Conditions at the Garvey Elevator Site continue to meet NCP Section 300.415(b) criteria for a removal action and I recommend your approval of the funding amount. The funding amount, if approved, will be \$323,983. This amount comes from the Regional Removal Allowance. Pursuant to the Agreement, the PRP has agreed to pay EPA's oversight costs. In accordance with the Agreement, the Escrow Fund will provide funds to pay for EPA's response costs.

Conditions at the Site meet NCP Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action.

Approved:

  
Cecilia Tapia, Director  
Superfund Division

  
Date

February 9, 2005

ACTION MEMORANDUM/ENFORCEMENT

TES  
Site: Garvey Elevator  
ID# NEN000704351  
Expend: 2.0  
Cost: 2-9-05  
4722

SUBJECT: Request for Removal Action  
Garvey Elevator Site, Hastings, Nebraska

FROM: Brian Mitchell, Site Assessment Manager  
Enforcement Fund Lead Removal Branch  
Superfund Division

THROUGH: Kenneth Buchholz, Chief  
Enforcement Fund Lead Removal Branch

TO: Cecilia Tapia, Director  
Superfund Division

Removal Action Lead -	PRP Lead
CERCLIS ID # -	NEN000704351
Site Spill ID # -	A72Z
Removal Category -	Time-Critical
Nationally Significant -	No

**I. PURPOSE**

The purpose of this Action Memorandum is to request approval of a proposed removal action for the Garvey Elevator Site, Hastings, Nebraska. The proposed action will provide an alternative water supply to residents/businesses with contaminated private wells and measures to control off-site migration of contaminated ground water. Alternative water will take the form of either bottled water, partial or whole-house/business water treatment units, or service connection to the municipal water system, depending on contaminant levels and location. Control of off-site migration of contaminated ground water will be accomplished via operation of an on-site soil vapor extraction system and an on-site ground water extraction and treatment system. This action is considered necessary to provide a source of water to impacted residents and businesses and to contain the off-site migration of contaminated ground water.

**II. SITE CONDITIONS AND BACKGROUND**

**A. Site Description**



## 1. Removal Site Evaluation

The Garvey Elevator facility is located at 2315 West Highway 6, Hastings Nebraska. The facility is located in an area legally described as the NW 1/4 of Section 23, Township 7 North, Range 10 West. Investigations at and near the facility show that carbon tetrachloride has been released into the soils at the facility and into the ground water, which is the drinking water source for some nearby residents and businesses and is also a source of water for livestock and crops.

Sampling of one municipal and 61 private wells in the area of and down gradient to the Garvey Elevator facility revealed that one municipal well and 35 resident/business/irrigation/livestock wells were contaminated with carbon tetrachloride. Thirty (30) of the wells contaminated with carbon tetrachloride yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. This is the level above which residents/businesses will be supplied an alternate source of drinking water. The alternate source of drinking water will be either bottled drinking water, partial house/business water treatment unit, or connection to the municipal water system. The Nebraska Health and Human Services System (NHHSS) recommends a removal action level of 23 ug/l of carbon tetrachloride in water for inhalation and dermal contact (general usage) purposes. This level does not include exposure due to ingestion/consumption. Therefore, 23 ug/l is the level at which authorities are recommending whole-house/business water treatment systems or connection to the municipal water system.

## 2. Proximal Location and Information

The Site is located in the southwest corner of the City of Hastings, Nebraska. The population of the City of Hastings according to the 2000 census data is 24,064. The area of ground water contamination has not been defined and is likely to include areas east and southeast of the facility.

There are several residents or businesses which utilize private wells for drinking water or general usage within, or in the proximity of the known contaminated area. The areal extent of the contaminated ground water plume has not been determined.

In addition to the private wells, the City of Hastings utilizes ground water for their public drinking water system. Drinking water is provided for the City of Hastings by several wells. One municipal well has already yielded ground water which shows the presence of carbon tetrachloride. That one municipal well has been taken out of service and is used only as an emergency backup water supply. The municipal water distribution system serves most of the residents/businesses within city limits.

## 3. Site Characteristics

Land use in the area is a mix of residential, commercial and agricultural. The current location of the known ground water contamination is primarily east and southeast of the Garvey Elevator

facility, which is located on the southwestern edge of the City of Hastings, Nebraska. The extent of ground water contamination is not known.

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

Carbon tetrachloride has been detected in groundwater at and away from at the Site. Carbon tetrachloride is listed as a hazardous substance pursuant to 40 C.F.R. §302.4. As such, it is a "hazardous substance" as defined in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601(14).

5. NPL Status

EPA is currently preparing an HRS Package in anticipation of proposing the Site on the NPL.

6. Maps, pictures and other graphic representations

A map showing the location of the Site is attached as Figure 1.

B. Other Actions to Date

1. Previous Actions

Garvey Elevator became aware of contamination at its Hastings, Nebraska facility and submitted an application for participation in the Nebraska Department of Environmental Quality (NDEQ) Remedial Action Plan Monitoring Act Program (RAPMA) on April 13, 1995. Since that date, Garvey Elevator has taken soil gas samples in an attempt to characterize the on-site contaminated soil. Garvey Elevator has installed and is operating a soil vapor extraction and treatment system and a ground water extraction and treatment system in an attempt to control the migration of contamination from the facility. Garvey Elevator has installed several monitoring wells both on-site and off-site. Garvey Elevator has been identifying and supplying certain residents and businesses with contaminated drinking water supply wells with bottled water, carbon filtration units, and/or connections to the municipal water supply.

2. Current Actions

Garvey Elevator is assessing data and identifying additional residents/businesses that may have impacted private water supply wells. Garvey Elevator is continuing to operate the soil vapor extraction and ground water extraction systems

C. State and Local Authorities' Role

## **I. State and Local Actions to Date**

In correspondence dated October 17, 2002, NDEQ requested EPA assistance in conducting a removal assessment evaluation to determine the appropriateness of a removal action to identify the extent and potential containment of the ground water related to the Garvey Elevator Site, located in Hastings Nebraska. NDEQ expressed its concerns about the ground water quality in the area of the Garvey Elevator Site and Garvey's ability to address off-site contamination. NDEQ stated that they were not confident that the lateral and vertical extent of the ground water plume has been accurately characterized. NDEQ has performed a PA/SI for the Site.

In correspondence dated December 9, 2003, NDEQ expanded its October 17, 2002, request for EPA assistance. Specifically NDEQ requested EPA's assistance to provide alternate water supplies to impacted private well users, evaluate the effectiveness and make recommendations for improving the on-site source control system, characterize the ground water plume, and evaluate potential remedial alternatives for the off-site ground water plume.

Garvey Elevator and the City of Hastings have extended some municipal water lines into areas impacted by the contaminated ground water. Some residents and businesses have been connected to the municipal water supply.

## **2. Potential for Continued State/Local Response**

NDEQ has requested EPA assistance to address the contamination at the Site. EPA is currently negotiating a CERCLA Administrative Order on Consent with Garvey Elevator which provides for certain removal actions to be performed under EPA oversight and an RI/FS to be performed under NDEQ oversight. NDEQ will remain involved with overall Site RI/FS process and remediation activities. NHHSS may provide additional risk assessment support.

### **D. Community Involvement Activities**

The Administrative Record supporting this Action Memorandum will be placed in a local repository and the EPA Region 7 Records Center.

Garvey Elevator and EPA will initiate discussions with city leadership (city manager, superintendent of water department) regarding Garvey Elevator and EPA Site activities.

Future public meetings will be scheduled as developments warrant.

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

A. Threats to Public Health or Welfare

Site conditions pose a significant threat to public health and welfare which meet the criteria for response action under 40 C.F.R. § 300.415(b)(2) of the National Contingency Plan (NCP), which are described as follows:

1. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants. [300.415 (b) (2) (i)]

Thirty (30) resident/business/irrigation/livestock water supply wells yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. Carbon tetrachloride is a hazardous substance. Short and long term-exposure to carbon tetrachloride may cause liver and kidney damage, headaches, dizziness, sleepiness, nausea, and vomiting. Short and long term exposure to carbon tetrachloride may also cause certain birth defects. The EPA has determined that carbon tetrachloride is a probable human carcinogen.

2. Actual or potential contamination of drinking water supplies or sensitive ecosystems. [300.415(b)(2)(ii)]

Thirty (30) resident/business/irrigation/livestock water supply wells yielded water samples above EPA's drinking water maximum contaminant level for carbon tetrachloride, which is 5 ug/l. The length of time that residents have been drinking water contaminated above threshold concentrations is unknown. However, it is possible that residents have been drinking contaminated water for a number of years. One City of Hastings Municipal Well, MW-13, has had detections of carbon tetrachloride and other contaminants and is used only as an emergency backup water supply.

3. The availability of other appropriate federal or state response mechanisms to respond to the release. [300.415(b)(2)(vii)]

NDEQ has requested EPA's assistance to respond to the contamination at the Site. There are no other state or federal authorities who are able to respond to the release of hazardous substances at the Site.

4. Other situations or factors that may pose threats to public health or welfare of the United States or the environment. [300.415(b)(2)(viii)]

The extent of carbon tetrachloride contamination in the ground water has not yet been identified. Thus, the extent of the problem is unknown. It is possible that carbon disulfide, ethylene

dibromide, chloroform, dichloromethane, and chloromethane, EPA identified hazardous substances. may also be in the ground water above health based standards.

#### **IV. ENDANGERMENT DETERMINATION**

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

#### **V. PROPOSED ACTIONS**

##### **A. Proposed Actions**

##### **1. Proposed Action Description**

##### **GENERAL TASK DESCRIPTION**

EPA is currently negotiating a Consent Order for removal action with Garvey Elevator. Pursuant to this Consent Order, Garvey will be required to implement the following:

- Identify and sample all wells used for drinking water at residences and businesses in the geographic area defined in the Statement of Work for Removal Action that may be impacted by contamination emanating from the Site.
- Provide and maintain alternate water supplies to individuals/businesses exposed to contaminants of concern over the levels specified in the Statement Of Work.
- Perform regular monitoring of drinking water wells with detections of any contaminants of concern.
- Conduct containment measures to mitigate the release of contamination from the Site. This may include, but not be limited to, operation, evaluation, and expansion of the existing soil vapor extraction and groundwater pump and treat systems.

##### **2. Health Consultation and Threshold Concentration Discussion**

The threshold concentration of carbon tetrachloride in drinking water has been set at 5 ug/l, the EPA drinking water maximum contaminant level. Residences and businesses with well water contamination above this level will be provided an alternate water source for consumption or the well water will be treated so that water used for consumption will be below 5 ug/l carbon tetrachloride. Based on the recommendations of the NHHSS, the threshold concentration of carbon



tetrachloride for general usage is set at 23 ug/l. Residences and businesses with well water contamination above this level will be provided an alternate water source for general usage or the well water will be treated so that water used for general usage will be below 23 ug/l carbon tetrachloride. The threshold concentration for the other contaminants of concern (carbon disulfide, ethylene dibromide, chloroform, dichloromethane, and/or chloromethane) in drinking water is set at respective EPA drinking water maximum contaminant level for each constituent or where one does not exist the EPA Region IX Preliminary Remedial Goal shall apply. NHHSS will be consulted on general water usage levels for carbon disulfide, ethylene dibromide, chloroform, dichloromethane, and/or chloromethane if detected above the respective EPA drinking water maximum contaminant level or Region IX PRG.

### 3. Contribution to Remedial Performance

Future remedial actions have not yet been determined for this Site. However, these removal activities will be consistent with any future remedial actions.

### 4. Description of Alternative Technologies

Carbon filtration systems and bottled water are the most widely used short-term alternatives for addressing contaminated water for private home/business use at CERCLA sites. Alternative technologies will be considered during the RI/FS.

### 5. Applicable or Relevant and Appropriate Requirements (ARARs)

#### Federal - Waste Determination

Wastes collected by the activated carbon for individual residences would be considered household wastes in accordance with 40 C.F.R. §261.4(b), and, as such, would be subject to control under RCRA Subtitle D regulations.

#### Federal

The National Oil and Hazardous Substances Pollution Contingency Plan at 40 C.F.R. Part 300.415 requires that removal actions shall, to the extent practicable, considering the exigencies of the situation, attain ARARs under federal environmental, state environmental, or facility-siting laws. The following ARARs have been identified as being potentially applicable for this action:

Action/Prerequisite	Requirement	Citation
Disposal of spent activated carbon filters	Disposal at RCRA Subtitle D facility	40 C.F.R. § 257
Drinking water quality	Treatment to achieve compliance with MCLs	40 C.F.R. §§ 141, 142, and 143
Operation, treatment, and discharge of ground water extraction and treatment system	Treatment to achieve compliance with Safe Drinking Water Act	40 C.F.R. §§ 144, 145, 146, 147, and 148
Operation of soil vapor extraction and treatment system	Treatment to achieve compliance with Clean Air Act	40 C.F.R. §§ 51, 52, 71, and 72

#### State

Nebraska has been contacted and requested to provide guidance for state ARARs. Potential ARARs received by EPA from NDEQ will be considered in accordance with 40 C.F.R. §300.400(g).

#### 6. Project Schedule

This action will begin upon Garvey Elevators agreement to the Consent Order as set forth in the schedule agreed to by the parties..

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

The proposed actions for the Garvey Elevator Site should be taken immediately. Should these actions be delayed, the potential threats to human health and the environment will increase.

#### **VII. OUTSTANDING POLICY ISSUES**

None.

#### **VIII. ENFORCEMENT**

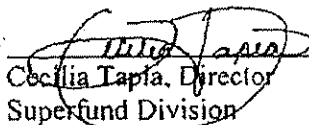
EPA is currently negotiating a Consent Order with Garvey Elevator for implementation of the removal actions set forth in this action memorandum.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Garvey Elevator Site, located in Hastings Nebraska. This decision document was developed in accordance with CERCLA as amended, and is consistent with the NCP. This decision is also 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 removal action.

Approved:

  
Cecilia Tapia, Director  
Superfund Division

7/11/2005  
Date

Attachments