US EPA RECORDS CENTER REGION 5
409779

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BLVD
CHICAGO, IL 60604

SEP 26 2011

MEMORANDUM

SUBJECT: Request for Approval and Funding for a Time-Critical Removal Action at the West Vermont Drinking Water Contamination Site, Speedway, Marion County, Indiana (Site ID # B5UJ)

FROM: Paul Atkociunas, OSC
Emergency Response Branch 2

Shelly Lam, OSC
Emergency Response Branch 1

THRU: Linda M. Nachowicz, Chief
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document your approval to expend up to $237,000 to conduct time-critical removal actions at the West Vermont Drinking Water Contamination Site in Speedway, Marion County, Indiana (West Vermont or the Site). On May 13, 2010, EPA approved an action memorandum for the Site to expend up to $68,704 for an emergency removal action to provide water treatment systems for three residences as well as drinking water prior to installation of the systems.

This memorandum documents the determination of an imminent and substantial threat to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances, and documents your approval of the time-critical removal action to be performed at the Site. The response actions proposed herein are necessary in order to mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Site. The presence of hazardous substances at the Site has been documented.

Specifically, routine testing has detected vinyl chloride in water samples collected from residential drinking water wells at a maximum concentration of 62.7 micrograms per liter (µg/L) which exceeds EPA's Removal Action Level (RAL) of 2 µg/L. The vinyl chloride contamination is the result of a plume or plumes of groundwater contaminated with chlorinated solvents that are potentially derived from three sources, including the Allison Transmission plant to the north, Genuine Parts to the northeast, and Michigan Plaza to the east. Each of these three potential sources is a contaminated industrial property where EPA has documented significant releases of chlorinated solvents to groundwater. Investigations at each one of these three contaminated properties have identified plumes of chlorinated solvents in groundwater associated with releases of such solvents at each facility.

The time-critical removal action is to complete the following: develop and implement site-specific plans including a Health and Safety Plan and a detailed work plan; conduct a hydrogeologic investigation to identify which of the three sources of contamination are impacting the affected residential wells. This investigation will include the collection of soil and groundwater samples; consolidation and packaging of hazardous substances, pollutants and contaminants for transportation and off-site disposal.

EPA will conduct this response action in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC § 9604(a)(1), to abate or eliminate the immediate threat posed to public health and/or the environment by the presence of the hazardous substances at the Site. The uncontrolled conditions of the hazardous substances present at the Site and the potential threats they present require that this action be classified as a time-critical removal action.

The project will require approximately 22 on-site working days to complete.

There are no nationally significant or precedent setting issues associated with the Site. The Site has not been proposed for the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: INN000510429
RCRA ID: Not applicable (NA)
Category: Time-Critical Removal Action

A. Site Description

1. Removal Site Evaluation

The following sections provide background information on the Site. EPA utilized drinking water results provided by Marion County Health Department (MCHD).

During periodic sampling of the neighborhood, MCHD documented the presence of vinyl chloride at three residences along West Vermont Street and Cossell Road at levels up to 62.7 µg/L in groundwater used as a drinking water source. MCHD conducted several sampling events from June 2009 to January 2011. MCHD analytical results are summarized in Table B-1.

Three potential sources are located in the immediate vicinity of the Residential Area where drinking wells have been contaminated by vinyl chloride. These sites include the Allison Transmission to the north of the Residential Area, Genuine Parts to the northeast of the Residential Area, and a former dry cleaner located at Michigan Plaza to the northeast of the Residential Area. These three potential sources have all had current and historical releases of hazardous substances related to the breakdown products of tetrachloroethene (PCE), including vinyl chloride.

Groundwater flow direction in the vicinity of the Residential Area is complex, but trends generally to the south or to the southeast, influenced by Big Eagle Creek and Little Eagle Creek. Groundwater flow direction in the vicinity of the Residential Area in the uppermost and intermediate zones of the aquifer may be influenced by a westerly component in flow direction which EPA's consultant, Weston Solutions indicates is more marked in the intermediate zone of the aquifer and may be attributable to the pumping regime at wells located on the Allison Transmission Site.

An Analytical and Hydrogeological Assessment Technical Memorandum prepared by EPA's Superfund Technical Assessment and Response Team (START) contractor concluded the contamination source(s) could not be determined because of too many data gaps in the residential area. START concluded that additional investigation was necessary to determine the source(s) (Weston Solutions, 2011).

Background information on each of the sites is provided below as is a summary of actions conducted by EPA.

a. Allison Transmission

The Allison Transmission facility began operations in 1939 for the production of aircraft engines. General Motors (GM) formerly owned the facility. In 2007, GM sold Allison Transmission to Clutch Operating Company, now Allison Transmission, Inc.

The facility is comprised of six plants (2, 3, 6, 7, 12, and 14). The main part of the facility is bounded by West 10th Street to the north, North Holt Street to the east, Cossell Road to the south, and North Lynhurst Drive to the west. On April 27, 2005, the facility entered into a Resource Conservation and Recovery Act (RCRA) Corrective Action Voluntary Agreement with EPA to investigate and remediate releases of hazardous substances. The Allison Transmission Site is located directly north of the Residential Area. Groundwater flows south toward the Residential Area.

GM has identified fifty-nine Areas of Interest (AOI) that require further environmental investigation. Releases and discharges at the facility have included petroleum products; polychlorinated biphenyls (PCB); and volatile organic compounds (VOC) such as PCE, trichloroethene (TCE), and trichloroethane. During a 2009 investigation of the AOIs, chlorinated solvents were found to impact groundwater at 19 of approximately 63 locations. The Site has released many contaminants of concern to the environment, including PCBs and VOCs, including PCE and its degradation products. Environmental investigations have documented that groundwater from the facility flows south towards the Residential Area and Big Eagle Creek (Arcadis, 2009). Allison Transmission is considered a potential source of the vinyl chloride in drinking water wells in the Residential Area because contaminated groundwater may have migrated from the Allison Transmission Site prior to control of groundwater through on-site remediation systems.

b. Genuine Parts

Genuine Parts is located at 700 North Olin Avenue, northeast of the Residential Area. Between 1956 and 1973, BHT Corporation (BHT) operated the facility for carburetor and brake re-manufacturing. GM purchased the property from BHT in 1973 and used the facility for warehousing obsolete machines, tooling, and fixtures until the mid-1980s, at which time the property became part of the Allison Gas Turbine (AGT) Division. BHT became part of Genuine Parts, through acquisition and merger, subsequent to the sale of the property to GM. AGT continued to use the facility for warehousing until December 1993 when the property was sold to the Allison Engine Company (AEC). AEC sold the facility to Associated Properties, Inc. in 1998. Associated Properties, Inc. sold the facility to American Art Clay Company, Inc. in 2002, who is the current property owner.

Environmental investigations have documented releases at the Genuine Parts Site, and identified chemicals in soil and groundwater including chlorinated VOCs such as TCE and its associated breakdown products, such as cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride; polynuclear aromatic hydrocarbons (PAH); and metals such as cadmium, chromium, and lead. Concentrations have been documented as high as 15,000 μg/L for TCE; 65,000 μg/L for cis-1,2-DCE; and 1,500 μg/L for vinyl chloride. The groundwater investigations at this Site (Genuine Parts) indicates the presence of at least two or more source areas of TCE, DCE and VC, products associated with the breakdown of chlorinated solvents.

The Genuine Parts Site is located directly up-gradient from the Michigan Meadows Apartment and Michigan Plaza Site properties. As such, a plume of VOC-related contamination may be migrating south and commingling with historic and current sources in the vicinity of the Residential Area. Investigations have also documented that contamination from the Genuine Parts property has migrated to the south and southeast, flowing through a permeable unit beneath Little Eagle Creek, to the east of the Residential Area and mingling with a plume from the Michigan Plaza site (Keramida,

2010). Currently, there is insufficient data east of the Residential Area to define the groundwater plume.

A large plume of DCE trends south from the Genuine Parts Site and extends to south of the Michigan Plaza Site. The magnitude of the DCE concentrations and the extent of the plume are much greater than observed with PCE or TCE. A VC plume extends from the southern quadrant of the Genuine Parts Site across the Michigan meadow Apartment complex to south of the Michigan Plaza Site. The sources of this VC plume may be associated with releases of solvents associated with dry cleaning activities at the Michigan Plaza Site migrating through leaking sewer systems and commingling with contaminant plumes migrating south from the Genuine Parts Site. The Genuine Parts Site is a potential source area for groundwater contamination affecting residential wells in the Residential Area.

c. Michigan Plaza

Michigan Plaza is a strip mall located at 3801-3823 West Michigan Street, just north and east of the Residential Area purchased in 1999 by AIMCO. One of the former tenants, Accent Cleaners, operated a dry cleaning business at the property, from which releases of chlorinated solvents have been documented. PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride have been detected in groundwater at the site. Concentrations have been documented as high as 9,780 μg/L for PCE; 494 μg/L for TCE; 18,300 μg/L for cis-1,2-DCE; and 13,600 μg/L for vinyl chloride.

In 2007 and 2009, Mundell & Associates, the consultant for AIMCO, injected thousands of gallons of water and CAP18, a vegetable oil product, to enhance the dechlorination process. However, injections of CAP18 increased vinyl chloride more than 300 times the original concentrations. For example, in monitoring well MMW-P-01, vinyl chloride increased from 42 μg/L in March 2008 to 13,600 μg/L in February 2010 (Mundell & Associates, 2010).

Some potentiometric data indicate that groundwater may generally flow to the southeast from Michigan Plaza. However, as with the Genuine Parts plume, currently there is insufficient data between Michigan Plaza and the Residential Area to define the geochemistry, nature, extent, and flow of the groundwater plume. The Michigan Plaza Site is a potential contributor to vinyl chloride contamination in the residents' drinking water because CAP18 injections have increased vinyl chloride concentrations in groundwater and added thousands of gallons of water to the water table, potentially changing hydraulic conditions and forcing vinyl chloride to migrate cross-gradient toward the Residential Area.

Additionally, an investigation of the sewer line in 2007 documented that there have been chlorinated solvent releases into the sanitary sewer at the Michigan Plaza site (Mundell & Associates, 2007). As such, there is potential for migration through preferential pathways to have contaminated drinking water in the residential area.

2. Physical Location

The Site is a residential area bounded by West Vermont Street on the south, Holt Road on the east, West Michigan Street on the north, and North Rybolt Avenue on the west in Speedway, Marion County, Indiana (Residential Area, see Figure A-1).

The area surrounding the Site was screened for Environmental Justice (EJ) concerns using Region 5's EJ Assist Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to EPA Region 5. The Site is in a census tract with a score of 1 (Attachment III). Therefore, Region 5 considers this Site to be a high-priority potential EJ area of concern. Please refer to the attached analysis for additional information.

3. Site Characteristics

The Site is a residential neighborhood, where 25 homes rely upon private drinking water wells as their only sources of water. Vinyl chloride has been detected in drinking water wells above the RAL at three properties: 1) West Vermont Street, 2) West Vermont Street, and 3) Cossell Road as depicted by Figure A-2.

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

EPA has documented a release of hazardous substances, pollutants, or contaminants in drinking water at three residences. The threat has been temporarily mitigated by emergency response actions conducted by EPA in November 2009 and February 2010, including the installation of water treatment systems. However, a threat of release of hazardous substances, pollutants, or contaminants remains at the Site due to the presence of additional residences that could be impacted by the groundwater plume. Approximately 25 residences in the Site area receive drinking water from private residential wells. Although below the RAL, vinyl chloride has been detected in drinking water at a number of these residences. As such, there is potential exposure to nearby human populations to hazardous substances, pollutants or contaminants.

5. NPL status

The Site is not currently on the National Priorities List (NPL). It is not known if the Indiana Department of Environmental Management (IDEM) will refer this Site to the NPL site assessment program. EPA has notified the IDEM Site Investigation Section of conditions at the site and will communicate results of EPA actions.

6. Maps, pictures and other graphic representations

Figure A-1 Site Location Map, Figure A-2 Site Layout Map, and Attachment III - Environmental Justice (EJ) analysis are included as attachments.

B. Other Actions to Date

1. Previous actions

In November 2009 and February 2010 EPA, as part of an emergency removal action, installed treatment systems in the three residences due to the presence of vinyl chloride in the drinking water above the RAL. These actions were documented in the previous Action Memorandum. Additionally, EPA conducted investigations to identify the source of the release. A Hydrogeological Assessment prepared by EPA's START contractor concluded that each of the three sites listed above could have potentially contaminated these residential drinking water wells (Weston, 2011).

2. Current actions

MCHD is continuing to sample all drinking water in the Residential Area on a regular basis.

C. State and Local Authorities' Roles

U.S. EPA's Emergency Response Branch was asked by both IDEM and MCHD to mitigate the threat of exposure to vinyl chloride in drinking water.

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

The conditions at the West Vermont Drinking Water Contamination Site present a threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the NCP, 40 CFR 300.415(b)(2). These criteria include, but are not limited to, the following:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Vinyl chloride is present in drinking water in three residential wells as documented by the MCHD (see Table B-1). Concentrations of vinyl chloride range from below 2 to 62 µg/L. The RAL is 2 µg/L.

Vinyl chloride is a hazardous substance, as defined by section 101(14) of CERCLA. According to the Agency for Toxic Substances and Disease Registry (ATSDR), the effects of drinking high levels of vinyl chloride are unknown. However, the U.S. Department of Health and Human Services has determined that vinyl chloride is a known carcinogen. In addition to ingestion, there is a potential exposure to inhalation of vinyl chloride vapors via use of water for cooking, showering, and bathing. Breathing

vinyl chloride for long periods of time can result in permanent liver damage, immune reactions, nerve damage, and liver cancer (ATSDR, July 2006).

Actual or potential contamination of drinking water supplies or sensitive ecosystems;

As documented above, drinking water supplies have been contaminated and potential exists for the groundwater plume to migrate and contaminate approximately 25 additional residential drinking water wells.

The availability of other appropriate federal or state response mechanisms to respond to the release;

U.S. EPA Emergency Response Branch was asked by both IDEM and MCHD to mitigate the threat of exposure to vinyl chloride in drinking water.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the known and suspected hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS

A. Proposed Actions

1. Proposed action description

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. Removal activities on Site will include:

1. Develop and implement project plans including a Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), and a work plan;

2. Conduct a hydrogeologic investigation to identify the source(s) of vinyl chloride contamination in the West Vermont-Cossell neighborhood to include:

    a. Resistivity geophysical survey to aid in locating soil borings;
    b. Advancement of soil borings including field screening and collection of soil samples;
    c. Installation of temporary piezometers and/or monitoring wells;

d. Groundwater sampling from new and existing monitoring wells and/or piezometers;

3. Prepare a report summarizing the results of the investigation. The report will include the results of the investigation and a Conceptual Site Model that details:

   a. The release scenario and source(s);
   b. Spatial and temporal distribution of vinyl chloride and other chlorinated solvents in the various affected media;
   c. Description of site stratigraphy; and
   d. An exposure model that identifies the receptors and exposure pathways.

4. Transport and dispose off-site of Investigation-Derived Waste (IDW) and any hazardous substances, pollutants and contaminants at a CERCLA-approved disposal facility in accordance with U.S. EPA's Off-Site Rule (40 CFR § 300.440).

The removal actions will be conducted in a manner not inconsistent with the NCP. The OSCs will initiate planning for provision of post-removal Site control consistent with the provisions of NCP § 300.415(l).

The threats posed by uncontrolled substances considered hazardous meet the criteria listed in NCP § 300.415(b)(2), and the response actions proposed herein are consistent with any long-term remedial actions which may be required.

The estimated costs to complete the activities outlined above are summarized on the next page. These activities will require an estimated 22 on-site working days to complete.

Detailed contractor costs are presented in Attachment I.

Off-Site Rule

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.

2. Contribution to remedial performance

The proposed action will not impede future actions based on available information. At this time it is not known if long-term remedial actions will be needed for the Site. Although the Site is not on the NPL, the OSC will coordinate with IDEM to address longer term groundwater contamination.

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

Not Applicable

4. Applicable or relevant and appropriate requirements (ARAR)

All applicable or relevant and appropriate requirements (ARAR) will be complied with to the extent practicable. EPA, Region 5 sent a letter to Harry Atkinson of IDEM on February 22, 2010 requesting identification of any potential state ARARs for this response action.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage and disposal shall be treated, stored, or disposed at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 CFR § 300.440.

B. Estimated Costs

The detailed cleanup contractor cost is presented in Attachment I and the Independent Government Cost Estimate is presented in Attachment IV. Estimated project costs are summarized below:

Other Extramural Costs Not Funded from the Regional Allowance	
Total START, including multiplier costs	$206,087
Extramural Cost Contingency (15% of Subtotal, Extramural Costs)	$30,913
TOTAL REMOVAL ACTION PROJECT CEILING	$237,000

The response actions described in this memorandum directly address the actual or threatened release of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

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

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Section II, III, IV, and V above, actual or threatened releases of hazardous substances and pollutants or contaminants from this Site, if not addressed by implementing or delaying the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment, increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $464,289.[1]

($237,000 + $48,260) + (62.76% x $285,260) = $464,289

[1] 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 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 actions for the West Vermont Drinking Water Contamination Site, located in Speedway, Marion County, Indiana, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the Site. Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal, and we recommend your approval of the proposed removal action.

The total removal action project ceiling, if approved, will be $237,000. You may indicate your approval by signing below.

APPROVE _____ DATE: 9/26/2011
for Director, Superfund Division

DISAPPROVE _____ DATE: _____
Director, Superfund Division

Enforcement Addendum

Figures:
- A-1 Site Location Map
- A-2 Sampling Locations Map

Tables:
- B-1 Laboratory Analytical Results

Attachments:
- I. Detailed Cleanup Contractor Cost Estimate
- II. Administrative Record Index
- III. Region V EJ Analysis
- IV. Independent Government Cost Estimate

cc: Sherry Fielding, U.S. EPA, 5104-A
Michael Chezik, U.S. DOI, **w/o Enf. Addendum**
Harry Atkinson, IDEM **w/o Enf. Addendum**

BCC PAGE

(REDACTED 1 PAGE)

ENFORCEMENT CONFIDENTIAL ADDENDUM

WEST VERMONT DRINKING WATER SITE
SPEEDWAY, MARION COUNTY, INDIANA

AUGUST 2011

(REDACTED 4 PAGES)

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

FIGURE A-1

SITE LOCATION MAP

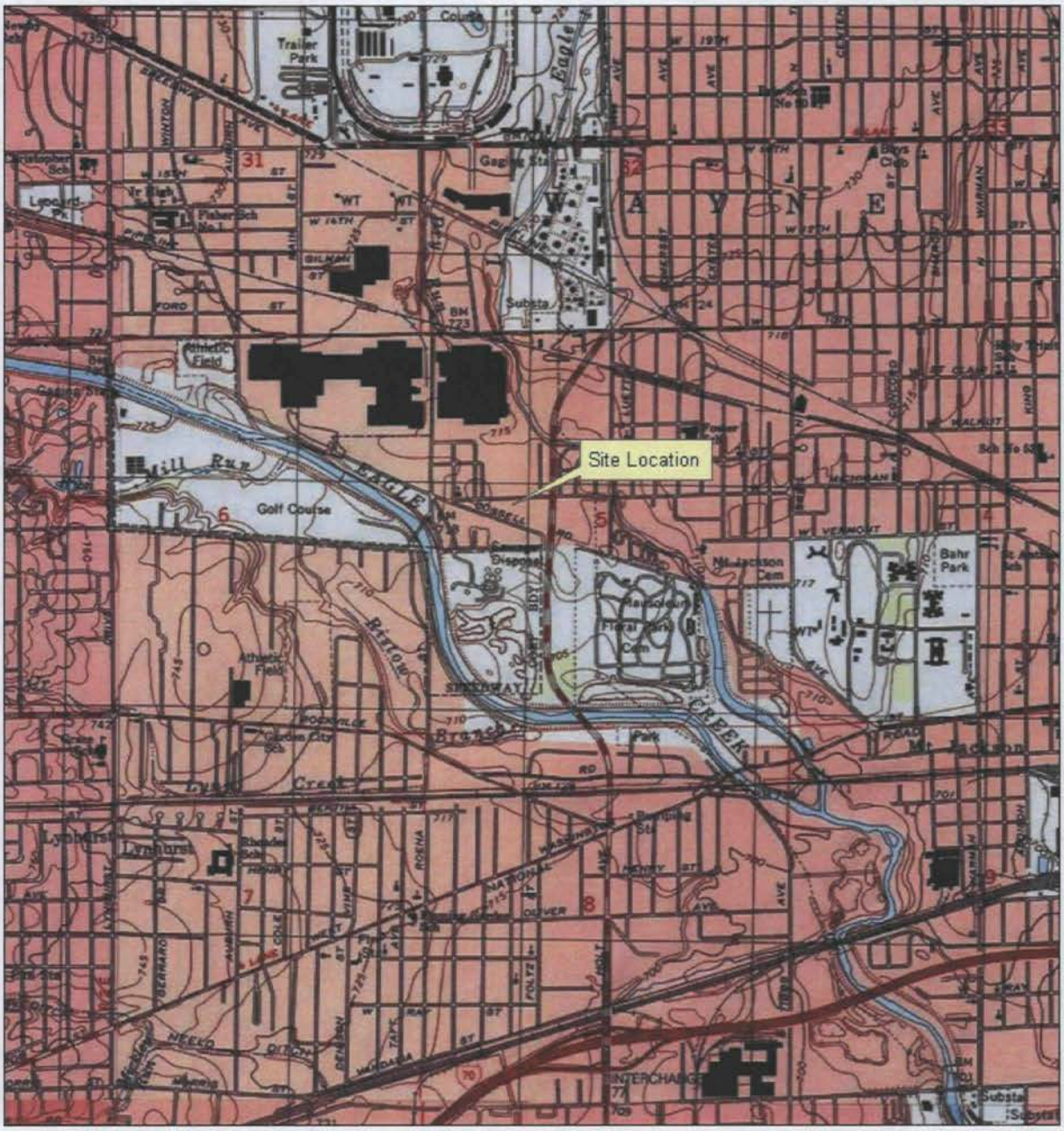


FIGURE A-1
SITE LOCATION MAP
WEST VERMONT DRINKING WATER CONTAMINATION SITE
SPEEDWAY, MARION COUNTY, INDIANA

This map presents land cover imagery for the world and detailed topographic maps for the United States. The map includes the National Park Service (NPS) National Earth physical map at 1:24km per pixel for the world at small scales, hybrid eTOPO 1:250,000-scale maps for the contiguous United States at medium scales, and National Geographic TOPO! 1:100,000 and 1:24,000-scale maps (1:250,000 and 1:63,000 in Alaska) for the United States at large scales.

1:24,000

0 1,500 3,000 4,500 6,000 Feet

FEBRUARY 2, 2011, REV 0

FIGURE A-2

SITE LAYOUT MAP

SITE LAYOUT MAP
WEST VERMONT DRINKING WATER CONTAMINATION SITE
SPEEDWAY, MARION COUNTY, INDIANA

1:10,000

0 1,000 2,000 Feet

(c) 2009 Microsoft Corporation
and its data suppliers
http://www.bing.com/maps

FEBRUARY 3, 2011, REV0

TABLE B-1

LABORATORY ANALYTICAL RESULTS

TABLE B-1
LABORATORY ANALYTICAL RESULTS
WEST VERMONT DRINKING WATER CONTAMINATION SITE

Location	Date	Vinyl Chloride (µg/L) [1]
	Removal Action Level	2
Cossell Rd	11/10/2009	**54**
	12/2/2009	**62.7**
	12/14/2009	**55.6**
	12/29/2009	**45.8**
	1/14/2010	**57.4**
	1/20/2010	**57.4**
	2/19/2010	**5.9**
W. Vermont	6/11/2009	**4.5**
	7/22/2009	**5.1**
	7/27/2009	**4.3**
	8/5/2009	**4.6**
	8/12/2009	**5.6**
	8/20/2009	**5.2**
	8/27/2009	1.3
	9/3/2009	**4.5**
	9/10/2009	**3.6**
	9/17/2009	**3.6**
	9/23/2009	**3.4**
	10/2/2009	**3.6**
	10/8/2009	**4.1**
	10/13/2009	**3.6**
	11/4/2009	**4.2**
	11/11/2009	**2.9**
	11/30/2009	**2.3**
	12/14/2009	1.4
	12/29/2009	1.4
W. Vermont	1/13/2010	0 53
	1/13/2010	**2.6**
	6/11/2009	**2.1**
	6/25/2009	1.5
	7/9/2009	1.5
	7/20/2009	1 7
	7/27/2009	0.77
	8/12/2009	1.2
	8/27/2009	1.8
	9/3/2009	0.73
	9/10/2009	0.85
	9/17/2009	0.59
	9/23/2009	0.87
	10/2/2009	1.2
	10/8/2009	1.9

TABLE B-1
LABORATORY ANALYTICAL RESULTS
WEST VERMONT DRINKING WATER CONTAMINATION SITE

Location	Date	Vinyl Chloride (µg/L) [1]
	Removal Action Level	**2**
W. Vermont	10/13/2009	**2.2**
	11/4/2009	0.54
	11/11/2009	1.1
	12/14/2009	**2.5**
	12/29/2009	0.56
	1/13/2010	**2.6**
	2/19/2010	1.1
	3/4/2010	**2.9**

Notes

1 µg/L - micrograms per liter

2. Bold results exceed the Removal Action Level

ATTACHMENT I

DETAILED CONTRACTOR COST ESTIMATE
INDEPENDENT GOVERNMENT CONTRACTOR ESTIMATE

WEST VERMONT DRINKING WATER CONTAMINATION SITE
SPEEDWAY, MARION COUNTY, INDIANA
JULY 2011

The estimated contractor costs necessary to conduct removal actions at the West Vermont Drinking Water Contamination Site are as follows:

Personnel & Equipment	$82,300
Materials/Misc	$78,539
Transportation & Disposal	$10,900
Plus 20% Contingency	$34,348
Total Contractor Costs	$206,087

ATTACHMENT II

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
WEST VERMONT DRINKING WATER CONTAMINATION SITE
SPEEDWAY, MARION COUNTY, INDIANA
AUGUST 2011

ORIGINAL
(SDMS ID: 363305)
MAY 13, 2010

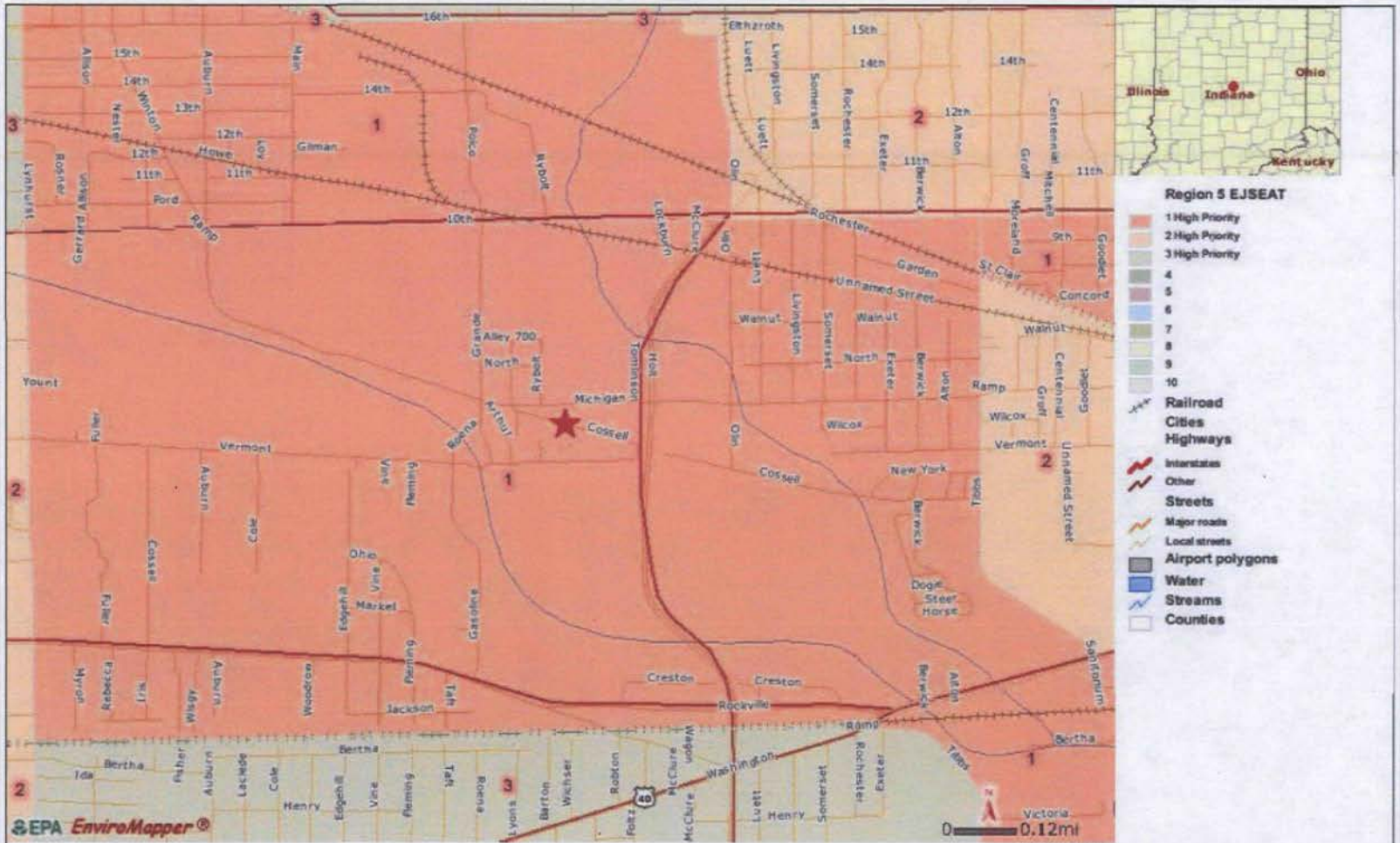
NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	07/00/06	ATSDR	Public	ToxFAQs for Vinyl Chloride (**SDMS ID: 363300)**	2
2	10/08/09	McDaniel, K., IDEM	Gebien, C., U.S. EPA	E-mail Message re: IDEM's Request for U.S. EPA Assistance at the West Vermont Drinking Water Contamination Site (**SDMS ID: 363301)**	5
3	12/00/09	Marion County Health Department	U.S. EPA	Analytical Results for Residential Drinking Water in Speedway, Indiana (6/09-12/09) **(SDMS ID: 363302)**	55
4	02/22/10	Schlieger, B., U.S. EPA	Atkinson, H., IDEM	Letter re: U.S. EPA's Request for IDEM to Identify any/all ARARS for the West Vermont Drinking Water Contamination Site **(SDMS ID: 363303)**	1
5	05/13/10	Schlieger, B., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Documentation and Justification of a Time- Critical Removal Action Conducted at the West Vermont Drinking Water Contamination Site **(PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED/ SDMS ID: 363304)**	14

UPDATE #1
JULY 2011

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	00/00/00	ARCADIS	File	RCRA Facility Investigation Report for Allison	34
2	07/00/06	ATSDR	File	ToxFAQs Sheet for Vinyl Chloride CAS #75-01-4	2
3	04/01/07	Mundell, J., Mundell & Associates, Inc.	Brittain, E., IDEM	Further Site Investigation Addendum I, Michigan Plaza	236
4	04/30/10	Mundell, J. & S. Webb, Mundell & Associates, Inc.	Brittain, E., IDEM	Quarterly Monitoring Progress Report - 1st Quarter 2010 Michigan Plaza w/Cover Letter	137
5	08/12/10	KERAMIDA, Inc.	IDEM	Remediation System Evaluation Report April Through June 2010 for the Former General Motors Corporation, Allison Gas Turbine Division, Plant 10	661
6	03/27/11	Weston Solutions, Inc.	Lam, S., U.S. EPA	Technical Memorandum, Analytical and Hydrogeological Evaluation, West Vermont Street Contamination Site	148
7	00/00/00	Atkociunas, P., U.S. EPA	Karl, R., U.S. EPA	Request for Approval and Funding for a Time-Critical Removal Action at the West Vermont Drinking Water Contamination Site, Speedway, Marion County, Indiana **(PENDING)**	

ATTACHMENT III

REGION 5 EJ ANALYSIS



Region 5 Interim
EJ Screening Tool

West Vermont Drinking Water Contamination Site

EPA United States Environmental Protection Agency

EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.

ATTACHMENT IV

INDEPENDENT GOVERNMENT COST ESTIMATE

WEST VERMONT DRINKING WATER CONTAMINATION SITE
SPEEDWAY, MARION COUNTY, INDIANA

AUGUST 2011

(REDACTED 2 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION