



464963



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

MEMORANDUM

DATE:

SUBJECT: ACTION MEMORANDUM - Request for Approval for Change in Scope and a Ceiling Increase and for an Exemption to the 12-month Statutory Limit at the Wedron Ground Water Site (Site ID # C5B8)

FROM: Steven J. Faryan, On-Scene Coordinator
Emergency Response Branch 2 - Section 3

THRU: Samuel Borries, Chief 
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this memorandum is to request and document your approval of (1) a change in the scope of the Wedron Ground Water Site project; (2) an increase of the project ceiling from \$512,480 to \$1,068,249; and (3) an exemption from the 12-month statutory limit in order to mitigate threats to public health, welfare, and the environment posed by the presence of benzene in private drinking water wells above or near the maximum contaminant level (MCL). The continuing actions proposed herein will mitigate Site conditions by installing replacement private wells at each residence to provide potable water to the residents at the Site. The response action will be conducted in accordance with Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1).

The Action Memorandum would serve as approval for expenditures by the EPA, as the lead technical agency, to take actions described herein to abate the imminent and substantial endangerment posed by hazardous substances at the Site. The proposed removal of hazardous substances would be taken pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR § 300.415.

There are no nationally significant or precedent-setting issues associated with this response.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: ILN000510677

State ID: 09982903

Category: Time-Critical Removal

A. Site Description

1. Removal Site Evaluation

Please refer to the original Action Memorandum approved November 16, 2012 (see Attachment 4).

2. Physical Location

Please refer to the original Action Memorandum approved on November 16, 2012.

3. Site Characteristics

Please refer to the original Action Memorandum approved on November 16, 2012.

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

A release of hazardous substances is present at the Site due to the presence of benzene in the soil and the drinking water which has migrated from several suspected sources and has contaminated the drinking water aquifer that many of the homes in Wedron use as their private drinking water source.

5. NPL status

The Wedron Ground Water Site is not on the National Priorities List.

6. Maps, pictures and other graphic representations

A map of the replacement well locations, potential sources and ground water flow direction is found in Attachment 5.

B. Other Action to Date

From December 14, 2011, to August 13, 2012, EPA collected or oversaw that collection of groundwater, soil and geophysical data at the Site in an effort to find the source of the groundwater contamination. The September 21, 2012 Final Letter Report summarizes the investigation results. Multiple potential sources were identified and the owners and operators

have been sent information requests to obtain additional information. EPA continues overseeing groundwater and soil investigations by BP, Illinois Railway, Technisand, and Wedron Silica Company as agreed through Administrative Orders on Consent (AOCs) with the companies.

EPA has provided bottled water to the affected residents and installed whole house filtration units as an interim measure until an alternate water supply can be provided. The installation of the whole house units began on February 4, 2013 and was completed on February 16, 2013. Sampling for effectiveness of the whole house units was conducted the week of February 19 and volatile organic compound (VOC) groundwater results were all below MCLs.

In spring 2013, EPA and Wedron Silica conducted geophysical studies to identify potable water in the aquifers below Wedron. The studies helped determine the depth and continuity of the aquitard that lies between the upper and lower aquifers in Wedron. EPA used this information from the studies to evaluate a new option to replace individual private wells with wells drilled into the deeper aquifer. This eliminated the need for residents having to create a legal agreement that covers maintenance issues and fees if EPA had gone forward with hooking residences up to single semi-private deep well.

During the week of October 15, 2013, vapor intrusion sampling was conducted in three homes. A subslab and indoor air sample were collected at each property for VOCs. The results showed that vapors inside the homes and under the subslab are below EPA's screening values and do not pose a health risk.

Beginning in October 2013, EPA began installation of drinking water wells at 8 residential homes which have well water containing benzene above or near its MCL. At one of the locations, both a home and a trailer will be hooked up to the drinking water well. The wells are being drilled into a lower aquifer (New Richmond) because it is not contaminated with benzene which was detected in the upper aquifer (St. Peter). Drinking water well installations include drilling the water well, installation of piping and pumps, connecting the well to the homes, and in some cases, installation of electrical panels. The wells will be disinfected and then sampled following installation.

C. State and Local Authorities' Role

1. State and local actions to date

Please refer to the original Action Memorandum approved on November 16, 2012.

The Illinois EPA investigated the complaint of contaminated drinking water wells in Wedron, Illinois starting in 1982. Money was obtained from the State of Illinois under the Illinois Commerce Commission and was used to install two deep semi-private drinking water wells to provide clean drinking water to the 9 residential homes. Some limited ground water investigation was conducted at this time, but no source was reported in the investigation.

The LaSalle County Health Department and Illinois Department of Public Health has provided assistance in collecting drinking water samples in 2010. The Illinois EPA lab has provided analytical services to analyze the samples.

Illinois EPA has accessed the Leaking Underground Storage Tank Liability Trust fund to provide funding for the investigation and potential clean up at the former Hoxsey store and gas station which is one of the suspected sources of the groundwater contamination. In September 2013, Illinois EPA conducted an investigation around the Hoxsey property which included the installation of flush-mounted monitoring wells and the sampling of the wells. EPA is currently awaiting the results of this investigation.

2. Potential for continued State/local response

Illinois EPA will continue the investigation and potential remediation at the former Hoxsey store and gas station using funding from the Leaking Underground Storage Tank Liability Trust fund.

Long term sampling of the private wells in Wedron will have to be conducted. A long term sampling plan is being drafted that will involve the use of local County Health personnel and the Illinois EPA laboratory for a period of two years.

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

The conditions at the Wedron Ground Water Site continue to present an imminent and substantial endangerment to public health, welfare, and the environment and meet the criteria for a time-critical removal action provided for in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 C.F.R. Part 300. These criteria are documented in the Action Memorandum signed on November 16, 2012.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, and in the Action Memorandum signed on November 16, 2012, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Section 104(c) of CERCLA, as amended, limits a Federal emergency response to a time period not to exceed 12-months or \$2 million unless the three criteria below are met. Levels of hazardous substances in drinking water exceed the maximum concentration levels (MCL's) for Benzene at the Wedron Ground Water Site and the potential exists that these hazardous

substances will continue to migrate off the Site. These Site conditions warrant granting an exemption from the 12-month time frame.

The following three factors continue to be present at the Site:

A. There is an immediate risk to public health or welfare or the environment;

The Site is located in a residential area that is unincorporated. There are no public or private water utilities to provide alternate water or sewer service. Eight private drinking water wells have been confirmed to be contaminated with Benzene and other VOCs that exceed or are near MCLs for drinking water. In addition, the potential exists for the inhalation of vapors by the residents during bathing, washing dishes, or washing hands. The potential exists that additional wells may become contaminated within the ground water plume. The movement of the ground water contamination plume is being affected by the pumping of the mining pit # 3 from Wedron Silica. Continued sampling and gauging of the monitoring wells installed in the town will be required to track the movement of the ground water plume.

B. Continued response actions are immediately required to prevent, limit, or mitigate an emergency;

EPA actions are required to complete the restoration and testing of an alternative water source for the eight wells, and to evaluate the overall effectiveness of the selected remedy. Eight new deep wells have been drilled to replace the eight wells that were contaminated. Continued testing of these 8 wells is required to document that the drinking water from these wells meet EPA drinking water standards. EPA will also be sampling residential wells adjacent to the groundwater plume and installing and sampling monitoring wells within the plume to monitor any movement or changes in ground water quality or flow which could impact the effectiveness of the remedy.

C. Assistance will not otherwise be provided on a timely basis.

Illinois EPA referred the Wedron Ground Water Site to EPA for assessment on November 10, 2011. Illinois EPA is investigating one of the sources of the ground water contamination in Wedron, the former Hoxsey store and gas station. The Leaking Underground Storage Tank Liability Trust Fund has been authorized to pay for this investigation. However, funding for remediation will not be approved until the investigation is completed which will not be in time to conduct the actions proposed in this Action Memo.

Based on site conditions documented in this Action Memo, the above three factors are present at the site and an exemption from the 12 month time limit is requested.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action description

The response actions described in this memorandum continue to directly address actual or potential releases of hazardous substances at the Site, which may pose an imminent and substantial endangerment to public health, or wealth, or the environment. The primary change in scope of work documented in this memorandum is the installation of 8 new private wells drilled into the deeper New Richmond aquifer instead of hooking the impacted residents to a shared deep well installed outside the area of contamination. Discovery of a contiguous confining layer in the area makes the current proposal feasible and the best long term option for the residents.

Removal activities on Site will include:

- 1) Eight new private wells for residents with benzene contamination have been installed. The replacement wells were designed to be drilled to the deeper aquifer (New Richmond), steel cased and cemented into the confining layer to prevent downward migration of contaminants. The connection of the new wells to existing plumbing has been completed.
- 2) Sampling of the 8 newly installed wells to determine if the water is potable has been conducted. These wells will be sampled again in 6 months and then the LaSalle County Health Department and Illinois EPA will collect and analyze samples for an additional 2 years.
- 3) Complete the restoration of yards from the well installations. Dispose of drilling mud, sand and drilling concrete.
- 4) Remove the carbon filters from the homes once the wells are determined to be potable. Dispose of the spent carbon.
- 5) Complete vapor intrusion sampling in homes located near suspected source areas and compare results to health screening levels.
- 6) Monitor effectiveness of implemented remedy and continue enforcement efforts to determine the source(s) of the groundwater contamination through the following activities: a) as agreed to with the State, install and sample a limited number of new monitoring wells and existing monitoring wells in the town of Wedron to determine ground water gradients and further define the location of the groundwater plume; b) Conduct residential well sampling at homes adjacent to the groundwater plume for a period not to exceed 12 months and then transition the sampling to LaSalle County

Health Department and Illinois EPA; and c) Conduct ground water modeling utilizing EPA's hydrologist from the Environmental Response Team.

- 7) Install additional private wells if residential well sampling indicates a residential well in or near the plume is contaminated above or near drinking water standards.
- 8) Complete vapor intrusion sampling in homes located near suspected source areas and compare results to health screening levels.
- 9) Continue Public Meetings, implement Community Relations Plan, and provide updates to the community on investigations and remediation.
- 10) Oversee PRP investigations and remediation of source material and conduct split sampling. PRP investigations will be conducted under signed consent orders on respective properties of Illinois Railway, Wedron Silica and Fairmont Minerals, and British Petroleum.

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. The removal actions proposed will not impede future responses based upon available information.

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.

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

Not Applicable

4. Applicable or relevant and appropriate requirements (ARARs)

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. An email request was sent to Bruce Everetts of the Illinois EPA on September 21, 2012, requesting that Illinois EPA identify state ARARs.

5. Project Schedule

The removal activities are expected to take 180 days to complete. Tasks will not be continuous and will involve monitoring, sampling and oversight as necessary.

B. Estimated Costs

The detailed cleanup contractor cost is presented in Attachment 2 and the Independent Government Cost Estimate is presented in Attachment 3. Estimated project costs are summarized below:

REMOVAL ACTION PROJECT CEILING ESTIMATE

Extramural Costs	Current Ceiling	Proposed Increase	Proposed Ceiling
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Regional Removal Allowance Costs

Total Cleanup Contractor Costs	\$ 357,480	\$ 282,728	\$ 640,208
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This cost category include estimates for ERRS, subcontractors, materials and equipment. Includes a 20 % contingency)

Other Extramural Cost Not Funded from the Regional Allowance:

Total START, including multiplier costs	\$ 65,000	\$ 185,000	\$ 250,000
Subtotal, Extramural Subtotal	\$ 422,480	\$ 467,728	\$ 890,208
Extramural Costs Contingency	<u>\$ 85,000</u>	<u>\$ 93,545</u>	<u>\$ 178,041</u>

(20% of Subtotal, Extramural Costs)

TOTAL, REMOVAL ACTION PROJECT CEILING	\$ 507,480	\$561,273	\$1,068,249
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The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health and safety and the environment. These

response actions do not impose a burden on the affected property disproportionate to the extent which that property contributes to the conditions being addressed.

VII. 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 Sections II, III and IV above, the actual or threatened release of hazardous substances and pollutants or contaminants from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare or the environment.

VIII. OUTSTANDING POLICY ISSUES

None

IX. ENFORCEMENT

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

The total U.S. EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,757,656¹.

$$(\$1,068,249 + \$55,500) + (56.41\% \times \$1,123,749) = \$ 1,757,656$$

¹Direct 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 27, 2008. 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.

X. RECOMMENDATION

This decision document represents the selected removal action for the Wedron Ground Water Site in LaSalle County, Illinois. The installation of private wells for the affected residents of Wedron will provide potable water to the residents. Oversight of the potentially responsible party (PRP) investigation and remediation will prevent further migration of the contaminated ground water plume. These decisions were developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the Site (see Attachment 1).

Conditions at the Site continue to meet the NCP Section 300.415(b) criteria for a removal and I recommend your approval of the proposed ceiling increase and 12-month exemption. The total removal action project ceiling if approved will be \$1,068,249. Of this, an estimated \$818,249 may be used for clean-up contractor costs. You may indicate your decision by signing below.

APPROVE:  DATE: 1/16/2014
for Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum

Attachments

- 1. Administrative Record Index
- 2. Detailed Cleanup Contractor Cost Estimate
- 3. Independent Government Cost Estimate
- 4. November 16, 2012 Action Memorandum
- 5. Ground Water Map with contaminants detected

cc: S. Fielding, EPA 5104A
Lindy Nelson U.S. DOI, w/o Enf. Addendum, **w/o Enf. Addendum**
(email: Lindy_Nelson@ios.doi.gov)
V. Darby U.S. DOI, w/o enforcement addendum
(email: Valincia_Darby@ios.doi.gov)
Bruce Everetts, Illinois EPA, **w/o Enf. Addendum**
(email: bruce.everetts@illinois.gov)

BCC PAGE HAS BEEN REDACTED

NOT RELEVANT TO SELECTION OF

REMOVAL ACTION

ENFORCEMENT ADDENDUM – CONFIDENTIAL

ENFORCEMENT ADDENDUM

**ENFORCEMENT SENSITIVE – DO NOT RELEASE –
NOT SUBJECT TO DISCOVERY – FOIA EXEMPT**

**WEDRON GROUND WATER SITE
WEDRON, LASALLE COUNTY, ILLINOIS
OCTOBER 2013**

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

**HAS BEEN REDACTED
FIVE PAGES**

**ENFORCEMENT SENSITIVE
NOT APPLICABLE TO DISCOVERY
NOT RELEVANT TO SELECTION OF REMOVAL
ACTION**

Attachment 1
Administrative Record
Wedron Ground Water Removal Action

ATTACHMENT 1
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
WEDRON GROUNDWATER SITE
WEDRON, LASALLE COUNTY, ILLINOIS

UPDATE #1
DECEMBER 10, 2013

SEMS ID:

<u>NO.</u>	<u>SEMS ID</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	464905		Etscheid, Duttlinger & Associates, Inc.	U.S. EPA	Etscheid, Duttlinger & Associates Notice to Contractors Re: Wedron Groundwater Site Well and Well Pump Construction	50
2	464906	11/13/12	Gahala, A., U.S. EPA	Faryan, S., U.S. EPA	U.S. EPA Potentiometric Surface Map Interpretations and Conclusions Re: Wedron Groundwater Site	4
3	464907	02/01/13	Bussey, D., U.S. EPA	Hyde, T., U.S. EPA	U.S. EPA Memorandum Re: Groundwater Flow with Influences to Groundwater Flow in Wedron, IL	3
4		00/00/00	Faryan, S., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum Re: Request for Approval for Change in Scope and a Ceiling Increase and for an Exemption to the 12-month Statutory Limit at the Wedron Ground Water Site (PENDING)	

ATTACHMENT 2

**DETAILED CLEANUP CONTRACTOR ESTIMATE
FOR
WEDRON GROUND WATER SITE**

HAS BEEN REDACTED

ONE PAGE

**NOT TO RELEVANT TO SELECTION OF REMOVAL
ACTION**

ATTACHMENT 3

INDEPENDENT GOVERNMENT COST ESTIMATE

**DEEP WELL INSTALLATION FOR AFFECTED
RESIDENTS**

HAS BEEN REDACTED

TWO PAGES

**NOT RELEVANT TO SELECTION OF REMOVAL
ACTION**

ATTACHMENT 4

Signed November 16, 2012 Wedron Ground Water Action Memorandum



446464



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 W. JACKSON BLVD

CHICAGO, IL 60604

16 NOV 2012

MEMORANDUM**DATE:****SUBJECT:** Request for Approval and Funding for a Time-Critical Removal Action at the Wedron Ground Water Site (Site ID #C5B8)**FROM:** Steven J. Faryan, On-Scene Coordinator
Emergency Response Branch - Section 3**THRU:** Samuel Borries, Chief *Samuel Borries*
Emergency Response Branch 2**TO:** Richard C. Karl, Director
Superfund Division**I. PURPOSE**

The purpose of this memorandum is to confirm verbal approvals for emergency expenditures and to seek approval of an additional expenditure for mitigation of threats to public health and the environment at the Wedron Ground Water Site in Wedron, LaSalle County, Illinois. On December 15, 2011 the acting Emergency Response Branch 2 Chief, verbally approved a \$2,500 emergency expenditure, and on August 30, 2012 the acting Emergency Response Branch 2 Chief gave an additional verbal approval of \$2,500, for provision of bottled water to residents at the Site. This Action Memorandum requests and seeks your approval to expend up to an additional \$507,480, for a total of \$512,480, in order to mitigate the threat to public health, welfare, and the environment from benzene and other volatile organic compounds (VOCs) in drinking water.

The actions proposed herein will mitigate the threats by providing temporary bottled water and by installing a permanent alternate drinking water source for the residents in the benzene and VOC contaminated ground water plume. The Site is located in an unincorporated area in Dayton Township, LaSalle County, Illinois. The LaSalle County Health Department and Illinois Department of Public Health (IDPH) determined that benzene and other VOCs detected in drinking water wells exceeds the legally enforceable drinking water Maximum Contaminant Level (MCL), set forth at 40 CFR § 141.61, and poses a public health hazard to water users. Due to public health threats at the Site, this removal action is considered Time-Critical. The project will require an estimated 90 working days to complete.

There are no nationally significant or precedent-setting issues associated with the Site. The Site is not on the National Priorities List (NPL).

The Action Memorandum would serve as approval for expenditures by EPA, as the lead technical agency, to take actions described herein to abate the imminent and substantial endangerment posed by hazardous substances at the Site. The proposed removal of hazardous substances would be taken pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID: ILN000510677
State ID: 09982903
Category: Time-Critical Removal

A. Site Description

1. Removal site evaluation

The unincorporated town of Wedron is adjacent to the Fox River, and all of the homes and businesses have private wells as their source of drinking water. A railroad track runs along the border of Wedron, between the town and the Fox River, which is currently owned by Illinois Railway, LLC (Illinois Railway). There are approximately 40 private homes in this unincorporated area, and no municipal water system exists. Residential homes and businesses in Wedron obtain drinking water from private wells that are typically 140-200 feet in depth. EPA has sampled 33 of the private wells. Currently, four homes exceed the MCL for benzene of 5 parts per billion (ppb), and one home has concentrations at 3 ppb for benzene. EPA projects that many of the residential homes that do not have contaminated wells may experience drinking water contamination at a later date based on their proximity to the ground water contamination plume. The closest public water supply is approximately 5 miles away in Ottawa, Illinois. Wedron does not have a local body of government, and is governed by the Dayton Township.

The major industry in town includes the Wedron Silica Company (Wedron Silica), owned by Fairmont Minerals, and Technisand, Inc., also owned by Fairmont Minerals. Both operations reside in town and operate as a silica mining, processing and loading operation, and a sand coating operation, respectively. Wedron Silica regularly pumps and recycles water in its mining pits as part of the sand mining process. In addition, Wedron Silica owns and operates a technical center and laboratory in Wedron.

Wedron has a history of contamination in drinking water, dating back to April of 1982. The Illinois Environmental Protection Agency (IEPA) and IDPH conducted an investigation from 1982-1985 and determined that seven of eight private wells and a well at the former Martin Marietta Corporation (Martin Marietta) facility were contaminated with VOCs and high levels of

benzene. The well at the former Martin Marietta scale house contained the highest level of contamination. IEPA identified several underground storage tanks at facilities near the contaminated wells located at the former Doyle Hoxsey gas station and store (Hoxsey property) and on the former WD Grain Company (WD Grain) property. IEPA installed three monitoring wells in the vicinity of suspected sources in May of 1984. Ground water elevations at the time of the investigation indicated the ground water flow was to the north and toward the residential homes in Wedron. In addition, soil vapors were noted in the sub-surface soil on the former Martin Marietta scale house property, which is now owned by Wedron Silica.

In 1985, the Illinois Commerce Commission installed two deep wells on the former Martin Marietta property near the existing Wedron Silica technical center, and seven residences were hooked up to the wells. IEPA investigated several sources during this time including: the former WD Grain property located on the current railroad right-of-way; the Hoxsey property; and the former Martin Marietta property. IEPA halted ground water monitoring and investigation into the source of contamination once the residences were connected to the deeper wells.

IEPA and IDPH sampled residential wells in Wedron in October of 2011 and found two private wells were contaminated with benzene and other VOCs above the MCLs. IEPA referred the Site to EPA for assistance in a letter dated November 10, 2011 from Bruce Everetts to EPA.

In July and August 2012, IEPA assisted EPA in conducting an investigation into the groundwater contamination. The Agencies conducted this investigation to determine potential sources of the contamination and to define the extent of the ground water contamination plume. EPA is basing the action proposed herein on information from the investigation and on historical information provided by the IEPA. The properties with contaminated wells will be provided with a whole house treatment unit or an alternate source of drinking water to prevent further exposure to benzene and other VOCs.

2. Physical location

The Site is located in Dayton Township, in LaSalle County, Illinois. The coordinates for the Site are Latitude: 41° 26' 13.303" and Longitude: -88° 46' 28.156". The unincorporated town contains approximately 40 residences, including children and elderly residents. The surrounding land use is mostly agricultural to the north of Wedron and sand mining to the west, east, and south of Wedron. The Fox River forms the eastern most border of Wedron. A railroad track runs along the border of Wedron, between the town and the Fox River.

The area surrounding the Wedron 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 6 and 7. Therefore, Region 5 does not consider this to be a high-priority potential EJ area of concern. Please refer to the attached EJ analysis for additional information (Attachment 5).

3. Site characteristics

The Site is mixed residential, commercial and industrial, with contaminated wells on residential properties and potential sources of contamination on industrial or commercial properties.

Wedron Silica operates numerous sand mining pits where silica is mined, processed, and loaded for shipment by rail and truck. The operation uses several mining pits, which are pumped for water to use in the mining process. These reservoir mining pits are pumped throughout the year, and historically were pumped to extremely low levels. The historical pumping caused residential wells to become dry, and Wedron Silica provided water to residents for some years, as a result. EPA is investigating whether current pumping and recycling water in the mining pits influences groundwater flow at the Site.

Several historical spills have occurred along the railroad tracks in Wedron, most recently in June 2012 when Illinois Railway released 600-800 gallons of diesel fuel. An alleged derailment resulting in a major release of pure benzene along the track occurred in the late 1960s or early 1970s. Two underground storage tank locations were identified on Illinois Railway property. Illinois Railway conducted a limited voluntary investigation in August 2012 to partially characterize potential releases from those locations.

A gas station and convenience store were located on the Hoxsey property, which ceased operation in 1977 after an all consuming fire, according to information provided by Ms. Godman. Ms. Godman is a Trustee of the property after owner Doyle Hoxsey's death, the Inette M. Godman Trust, and a member of the current property owner, Wedron Lots 1-2, Block 9, LLC. A 2012 IEPA investigation in the right-of-way adjacent to the Hoxsey property found VOC contamination in soils. As a result, on July 26, 2012, counsel representing Ms. Godman, the Inette M. Godman Trust, and Wedron Lots 1-2, Block 9, LLC reported a hazardous material leak or spill incident from underground tanks at the Hoxsey property to the Illinois Emergency Management Agency. The owner of the property conducted test excavation pits to determine whether underground storage tanks were present on the property. The investigation and test pits were conducted on November 5, 2012 and the observations were that no underground tanks were present on the property.

Past owners and operators of businesses in Wedron may have used, stored, transported, and/or released benzene and/or other VOCs during historical business operations, including farm supply business operations, laboratory operations, former sand mining operations, and railroad transport.

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

In October 2011, IDPH collected samples at the Site from ten residential wells. Two of the residences showed levels of benzene and other VOCs exceeding the MCL. Since December 2011, EPA has sampled 30 residential wells and determined that 5 of the wells have levels of benzene near or above the MCL of 5 ppb. Additionally, EPA will conduct vapor intrusion sampling to assess potential vapor intrusion inside the homes and under concrete slabs.

TABLE 1- Residential Well Water Sample Results

Sample Location	Date	Sampled By	Benzene (ug/L)	Benzene MCL (ug/L)
WGC RW01 121411	12/14/11	Faryan/ Senna	9.2 ug/L	5
WGC RW02 121411	12/14/11	Faryan/ Senna	2200 ug/L	5
WGC RW01 013012	01/30/2012	Senna	140 ug/L	5
WGC RW02 041212	04/12/2012	Faryan/ Senna	3.5 ug/L	5
WGC RW01 053112	05/31/12	Faryan/ Columb	2400 ug/L	5

EPA continues to investigate and identify potential sources of contamination. The groundwater contamination plume has the potential to migrate and contaminate additional residential wells, based on IEPA ground water flow information from the 1980s and due to the potential influence on current ground water wells caused by Wedron Silica mining operations. As a contingency, EPA estimates that an additional 5 residential homes that do not have contaminated wells may experience drinking water contamination during the removal action based on their proximity to the ground water contamination plume. This action memorandum covers the cost of additional ground water sampling and the potential for providing alternative water supply to a total of 10 residential homes.

5. NPL status

The Site is not on the NPL and will not be proposed for the NPL or receive a Hazard Ranking System rating.

6. Maps, pictures and other graphic representations

The map in Attachment 4 identifies the homes that have been sampled.

B. Other Actions to Date

1. Previous actions

IEPA and IDPH became aware of ground water contamination at the Site in 1982. At that time, the Agencies identified seven residences with private wells contaminated with benzene and other VOCs. IEPA conducted a ground water investigation in 1984 and installed three monitoring wells. For a final remedy, IEPA drilled two deeper wells to provide clean water to all the residents with contaminated wells. The Illinois Commerce Commission obtained funding in 1985 to install these deep wells, which continue to provide water for the seven residents that were affected by the contamination in the 1980s. None of the residents using the deep wells installed in 1985 are experiencing current drinking water contamination.

In October 2011, IDPH collected samples at the Site from ten residential wells. Two of the residences showed levels of benzene and other VOCs exceeding the MCL. IEPA subsequently referred the Site to EPA for assistance.

2. Current actions

Starting on December 16, 2011, EPA made arrangements to supply commercial water dispensers to two homes with well water that exceeded the MCL for benzene. EPA supplied two additional homes with bottled water in March 2012 and May 2012 when benzene was detected in wells above or near the MCL. The map in Attachment 4 identifies the homes that have been sampled. EPA has sampled a total of 33 residential wells, including the deep wells installed in 1985, and determined that 4 homes have levels of benzene above the MCL of 5 ppb and one home has a concentration of 3 ppb for benzene. Residences that are in close proximity to the plume may need to be provided whole house treatment units or an alternate water supply if conditions change and the wells become impacted. This action memorandum contains a contingency to provide treatment units or an alternative water supply for up to 5 additional residences if it is determined during the removal action that their wells have been impacted.

EPA plans to conduct a vapor intrusion assessment at up to 12 homes in accordance with EPA Region 5 Vapor Intrusion Guide Book. This action memorandum considers the cost of conducting vapor intrusion assessments to determine if there is a vapor intrusion problem. If a documented vapor intrusion problem exists and conditions present a health threat to the residents, then EPA may install remediation systems to remove the vapors from beneath the concrete slabs or basements.

C. State and Local Authorities' Roles

1. State and local actions to date

The LaSalle County Health Department and IDPH worked together to collect samples from private wells in Wedron during October 2011, in response to residents' complaints of odor in their drinking water. IDPH collected drinking water samples for VOCs analysis.

The State and County health departments' primary role is to insure that people who have private wells are aware of the risks associated with using the groundwater.

IEPA assisted in the ground water contamination investigation in July and August of 2012. IEPA used their geoprobe unit to collect ground water and soil samples, which were used to prepare the September 21, 2012 Final Letter Report for the Site. IEPA continues to assist the investigation to identify sources of contamination and to supplement existing ground water flow information. EPA notified IEPA's Underground Storage Tank Section of a buried underground storage tank that may exist at the Hoxsey property.

2. Potential for continued State/local response

IEPA continues to assist with the Site investigation to identify sources of contamination and to supplement existing ground water flow information. Additionally, IEPA is evaluating whether the State Underground Storage Tank Trust Fund can be accessed to address cleanup of the Hoxsey property if investigation confirms a buried leaking underground storage tank at the property.

Given the exigency of the situation, neither the State nor Local governments have the funds to conduct a time-critical removal action in a timely manner to provide an alternate source of drinking water to residents with contaminated wells.

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

The conditions at the Wedron Ground Water Site present an imminent and substantial threat to public health, or welfare, and the environment, and meet the criteria for a time-critical removal action provided for in the NCP, 40 C.F.R. § 300.415(b)(2). These criteria include, but are not limited to, the following:

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

EPA sample results show 5 drinking water wells are contaminated with benzene and other VOCs within a plume of contaminated groundwater. Residents using the contaminated wells, including children, are exposed to hazardous substances by drinking well water and using the well water for cooking. There is the potential for additional exposure from inhaling vapors during showering

and washing dishes, or from vapor intrusion through the basements of homes located in the groundwater contamination plume. The highest level of benzene detected by EPA is 2,400 ppb. The Removal Action Level and MCL for benzene is 5 ppb. MCL exceedance and Removal Action Levels are criteria that EPA considers when it evaluates taking an emergency removal action.

Benzene is a Class A human carcinogen. Exposure to benzene at the levels found in the private wells at the Site above the MCL over long periods of time may lead to disorders of the blood and bone marrow system, such as anemia, and may increase the lifetime risk of cancer. Benzene in drinking water poses a potential exposure threat to humans via ingesting contaminated water, as well as the potential of inhaling vapors during showering and washing dishes.

b. Actual or potential contamination of drinking water supplies or sensitive ecosystems.

In October 2011, IDPH and IEPA documented two drinking water wells contaminated with levels of benzene and other VOCs in excess of the MCLs. Subsequent sampling by EPA confirmed the original two residential wells are contaminated and three additional wells were documented to be above or near the MCL for benzene. Since the first samples were collected, detections above safe drinking water standards have become more frequent and appear to be increasing.

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

No other federal or state response mechanism is available to respond in a timely manner to provide an alternate source of drinking water to residents with contaminated wells, given the exigencies of the situation.

The actions proposed herein do not address clean up of potential sources of contamination. EPA is considering the use of CERCLA and other federal or state response mechanisms to further identify and remediate sources of the groundwater contamination.

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 at this Site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

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

- 1) Continue to provide bottled water to residents with contaminated wells until an alternative water source is implemented;
- 2) Evaluate options for implementing an alternative water supply, including:
 - a. Option 1 is to install whole house treatment units at each home with contaminated well water. The treatment units will utilize a combination carbon treatment unit and air stripper unit that will remove VOCs. The property owner will be responsible for maintenance of the units;
 - b. Option 2 is to drill a shared deep well that will be double cased to prevent any downward migration of the hazardous substances. Implementing a new deep well will require EPA to help negotiate legal agreements among the residents before EPA can tie multiple homes with contaminated wells into one shared deep well; and
 - c. Option 3 is to tie the homes with contaminated wells into a deep well that currently exists in Wedron at Wilbur Thompson Park. Fairmount Minerals owns the well and leases the property to the Dayton Township to use and operate.
- 3) Provide whole house treatment units or an alternative water supply to residences with contaminated wells using one of the three options, or a combination of options, evaluated above;
- 4) Close the wells that are contaminated in the event EPA connects the homes to a deep well (if a whole house treatment unit is installed at a home with a contaminated well, the well will not be closed);
- 5) Restore residential property after construction work is completed;
- 6) Conduct vapor intrusion assessments, as necessary, at up to 12 homes in accordance with the EPA Region 5 Vapor Intrusion Guide Book.
- 7) Perform vapor intrusion mitigation at properties where relevant indoor air action levels are exceeded in accordance with current EPA guidance. The OSC will request a consultation

from ATSDR for site-specific vapor intrusion action levels. This task may include installation of vapor mitigation systems and post-installation proficiency sampling in accordance with the most current Region 5 and national vapor intrusion guidance; and

- 8) Conduct a ground water investigation to provide additional information on ground water flow at the Site and determine depths of the contaminants.

The removal actions will be conducted in a manner not inconsistent with the NCP. The OSC 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.

EPA will not be able to select an Option for implementing an alternate supply of water until EPA determines whether Fairmount Minerals will allow connecting homes with contaminated wells to the Wilbur Thompson Park well (described in Option 3).

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.

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

Not Applicable

4. Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) of Federal and State law will be complied with to the extent practicable considering the exigencies of the circumstances. An e-mail was sent to Bruce Everetts of the IEPA on November 13, 2012, requesting that IEPA identify any State ARARs that may apply.

5. Project Schedule

The removal activities described in this memorandum will require an estimated 90 on-site working days to complete.

B. Estimated Costs

Independent government cost estimates for Options 1 and 2 are provided in Attachment 3. The detailed cleanup contractor costs for Option 1, whole house treatment units (most expensive option), are presented in Attachment I, and are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

REMOVAL ACTION PROJECT CEILING ESTIMATE	
<u>Extramural Costs:</u>	
<u>Regional Removal Allowance Costs:</u>	\$ 357,480
Total Cleanup Contractor Costs (Install up to 10 whole house filters includes estimates for ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Includes a 20% contingency)	
<u>Other Extramural Costs Not Funded from the Regional Allowance:</u>	
Total START, including multiplier costs	\$ 65,000
Total Decontamination, Analytical & Tech. Services (DATS)	\$ 0
Total CLP	\$ 0
Subtotal	\$ 65,000
Subtotal Extramural Costs	\$422,480
Extramural Costs Contingency (20% of Subtotal, Extramural Costs rounded up to nearest thousand)	<u>\$ 85,000</u>
TOTAL REMOVAL ACTION PROJECT CEILING	\$507,480

The response actions described in this memorandum directly address the actual or threatened release at the Site of a hazardous substance, or of a pollutant, or of a contaminant 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 Sections II, III and IV above, actual or threatened release of hazardous substances and pollutants or contaminants from the Site, failing to take or delaying action may increase public health risks through prolonged exposure to ground water contamination.

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 \$879,481.¹

$$(\$507,480 + \$36,720) + (61.61\% \times \$544,200) = \$879,481$$

IX. RECOMMENDATION

This decision document represents the selected removal action for the Wedron Ground Water Site, Wedron, LaSalle County, Illinois, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site (Attachment 2). Conditions at the Site meet the criteria of the NCP (40 C.F.R. § 300.415(b)(2)) for a removal, and I recommend your approval of the removal action proposed in this Action Memorandum.

The total removal action project ceiling, if approved, will be \$512,480. Of this, an estimated \$447,480 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: *[Signature]* DATE: 11/16/12
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

¹Direct 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.

Enforcement Addendum

Attachments

1. Detailed Cleanup Contractor Cost Estimate
2. Administrative Record Index
3. Independent Government Cost Estimate
4. Site Location Map
5. EJ Analysis

cc: S. Fielding, EPA 5104A
L. Nelson, U.S. Department of Interior, **w/o Enf. Attachment**
(email: Lindy_Nelson@ios.doi.gov)
V. Darby U.S. DOI, **w/o Enf. Addendum**
(email: valincia_Darby@ios.doi.gov)
B. Everetts, IEPA, **w/o Enf. Addendum**
(email: bruce.everetts@illinois.gov)

[REDACTED]

ENFORCEMENT ADDENDUM HAS BEEN REDACTED

SIX PAGES

ENFORCEMENT SENSITIVE

NOT APPLICABLE TO DISCOVERY

NOT RELEVANT TO SELECTION OF REMOVAL ACTION

ATTACHMENT ONE HAS BEEN REDACTED

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NOT RELEVANT TO SELECTION OF REMOVAL ACTION

ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR WEDRON GROUNDWATER SITE WEDRON, LASALLE COUNTY, ILLINOIS

ORIGINAL
OCTOBER 2012

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	1982-85			Illinois EPA Background Files re: Wedron Ground- water Site (NOT COPIED FOR PHYSICAL INCLUSION INTO THE ADMINISTRATIVE RECORD)	57
2	11/10/11	Everetts, B., Illinois EPA	Ribordy, M., U.S. EPA	Letter re: IEPA Request for U.S. EPA Assistance at the Wedron Groundwater Site	3
3	11/29/11	Pressley, J., Illinois Dept. of Public Health	Residents	Letters re: Results of October 19, 2011 Ground Water Sampling	2
4	09/21/12	Patel, O., Weston Solutions, Inc.	Faryan, S., U.S. EPA	Final Letter Report for the Wedron Groundwater Site	260
5	00/00/00	Faryan, S., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for Approval and Funding for a Time-Critical Removal Action at the Wedron Ground Water Site (PENDING)	13

ATTACHMENT THREE OPTION ONE

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ONE PAGE

NOT RELEVANT TO SELECTION OF REMOVAL ACTION

ATTACHMENT THREE OPTION TWO

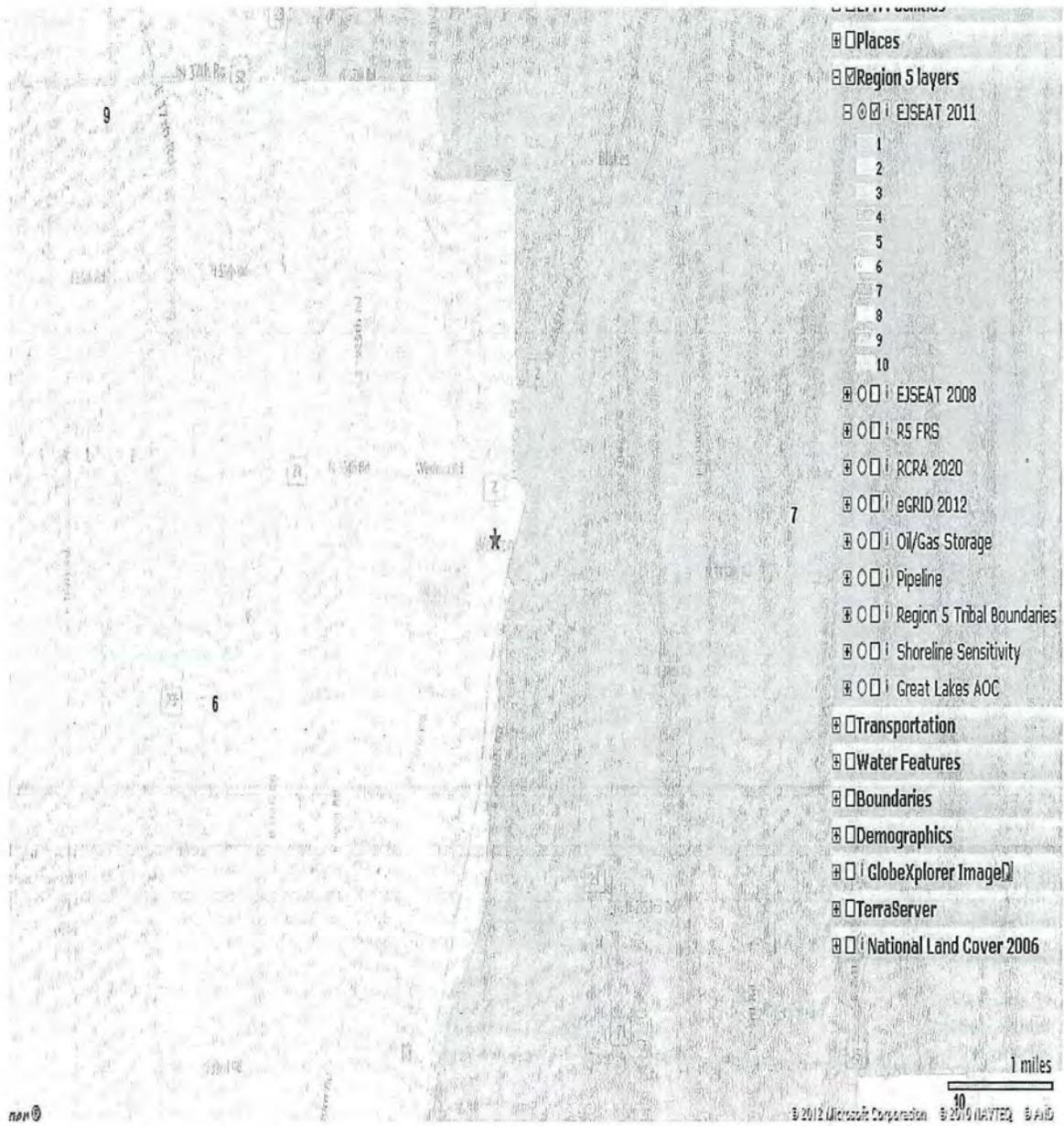
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TWO PAGES

NOT RELEVANT TO SELECTION OF REMOVAL ACTION

ATTACHMENT 5

EJ Map Wedron Ground Water Site



Attachment 5
Wedron Ground Water Flow Map
And Suspected Sources

Attachment 5 Wedron Ground Water Flow Map And Suspected Sources

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