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Fourth Five-Year Review Report for
Galen Myers Dump/Drum Salvage Superfund Site
Osceola, St. Joseph County, Indiana



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5-18-15

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LIST OF ACRONYMS

ACA	Administrative Control Area
ARARs	Applicable or Relevant and Appropriate Requirements
CA	Cooperative Agreement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
COCs	Contaminants of Concern
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FYR	Five-Year Review
HI	Hazard Index
ICs	Institutional Controls
IDEM	Indiana Department of Environmental Management
ISBH	Indiana State Board of Health
LTRA	Long-Term Response Action
LTS	Long-Term Stewardship
MCL	Maximum Contaminant Level
mg/kg	Milligrams per Kilogram
MW	Monitoring Well
NCP	National Contingency Plan
ND	Non-Detect
NPL	National Priorities List
O&M	Operation and Maintenance
ppb	Parts per Billion
PRGs	Preliminary Remediation Goals
RA	Remedial Action
RAOs	Remedial Action Objectives
RD	Remedial Design
RDFI	Remedial Design Field Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SDWA	Safe Drinking Water Act
SJCHD	St. Joseph County Health Department
SSL	Soil Screening Level
SPM	State Project Manager
SVOC	Semi-Volatile Organic Compound
TAT	Technical Assistance Team
TBC	to-be-considered
TCE	Trichloroethylene
µg/L	Micrograms per Liter (Parts per Billion)
UU/UE	Unlimited Use/Unrestricted Exposure
VI	Vapor Intrusion
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

The United States Environmental Protection Agency (EPA), in consultation with the Indiana Department of Environmental Management (IDEM), has completed the fourth Five-Year Review (FYR) of the Galen Myers Dump/Drum Salvage Superfund site (Galen Myers) in Osceola, St. Joseph County, Indiana. The purpose of the FYR is to review information to determine if the site remedy is and will continue to be protective of human health and the environment. The triggering action for this statutory FYR was the signing of the previous FYR report on May 20, 2010.

The 5-acre Galen Myers site was a former drum salvage and dump operation where the contents of 55-gallon chemical drums were dumped into the ground and the drums sold for reuse. In 1981, in response to citizen complaints, the Indiana State Board of Health (ISBH) inspected the site and then requested EPA assistance. In 1985, EPA conducted a removal action and disposed of flammable solids, crushed drums and non-hazardous soils in off-site facilities. Subsequent investigations showed that a long and narrow volatile organic compound (VOC) groundwater contaminant plume (about 200 feet wide and 5,700 feet long) was present beneath a mostly residential area and slowly migrating toward the St. Joseph River. After initially having provided bottled water or home filtration units to some residents with private wells, EPA completed another removal action in 1996 to hook up about 180 residences to the public water supply.

In 1995, EPA selected a site remedy in a Record of Decision (ROD) that called for the excavation and off-site disposal of VOC-contaminated soil, the conduct of a 160-year period of monitored natural attenuation (MNA) of the groundwater plume, and implementation of an institutional control (IC) to prohibit the drilling of private wells in the plume area. In September 1998, EPA issued an Explanation of Significant Differences (ESD) to delete the soil remedy because no VOC contamination was found above cleanup levels during the remedial design.

EPA and IDEM had concluded in the 2010 FYR report that the remedy was functioning as intended by the decision documents and was protective in the short term of human health and the environment. In this 2015 FYR report, based on current data, EPA and IDEM find that the remedy is still functioning as intended and will continue to do so. Long-term groundwater monitoring will continue until cleanup levels are reached.

However, EPA has determined that a protectiveness determination of the remedy cannot be made until further information regarding the soil vapor intrusion (VI) pathway is obtained. EPA shall undertake two deep soil gas sampling events with results estimated to be available by December 30, 2016. If the deep soil gas samples show conclusive results, EPA will make a protectiveness determination in an addendum to this FYR report. If the deep soil gas sampling data is inconclusive, further VI sampling, including sub-slab and/or indoor air sampling at select residences, may be required.

Because hazardous substances, pollutants, or contaminants remain in place at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE), EPA plans to conduct a fifth FYR at the Galen Myers site no later than five years after the signature date of this report.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Galen Myers Dump/Drum Salvage Superfund Site		
EPA ID: IND980999635		
Region: 5	State: IN	City/County: Osceola/St. Joseph County
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: State		
Author name (Federal or State Project Manager): Margaret Gielniewski		
Author affiliation: EPA		
Review period: 05/20/2014-5/13/2015		
Date of site inspection: 11/10/2014		
Type of review: Statutory		
Review number: 4		
Triggering action date: 5/20/2010		
Due date (five years after triggering action date): 5/20/2015		

FIVE-YEAR REVIEW SUMMARY FORM CONTINUED

Issues/Recommendations

Issues and Recommendations Identified during the Five-Year Review:

OU(s): <i>01/Site-wide</i>	Issue Category: Changed Site Conditions			
	Issue: Vapor intrusion could be occurring in residences located over the groundwater contaminant plume.			
	Recommendation: Complete a VI investigation. Based on the results, take additional actions as needed to further investigate and/or mitigate potential exposure of impacted residents to VI.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	EPA	EPA/State	12/30/2016

01/Sitewide Protectiveness Statement

<i>Protectiveness Determination:</i> Protectiveness Deferred	<i>Addendum Due Date:</i> 12/31/2017
<i>Protectiveness Statement:</i> A protectiveness determination of the remedy cannot be made until EPA obtains further information regarding the soil VI pathway. EPA shall undertake two deep soil gas sampling events with results estimated to be available by December 30, 2016. If the deep soil gas samples show conclusive results, EPA will make a protectiveness determination in an addendum to this FYR report. If the deep soil gas sampling data is inconclusive, further VI sampling, including sub-slab and/or indoor air sampling at select residences, may be required.	

I. INTRODUCTION

The purpose of a FYR is to evaluate the implementation and performance of a remedy in order to determine if it will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

EPA prepares FYR reports pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121 and the National Contingency Plan (NCP). CERCLA 121 states:

“If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.”

EPA interpreted this requirement further in the NCP; 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii), which states:

“If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such actions no less often than every five years after the initiation of the selected remedial action.”

EPA has conducted a FYR of the remedy implemented at the Galen Myers Superfund site in Osceola, St. Joseph County, Indiana, although IDEM is the lead agency for implementing the remedy at the site. EPA has reviewed site documentation and IDEM has provided support in the development of this FYR report. This report documents the results of that review.

This is the fourth FYR for the Galen Myers site. The triggering action for this statutory review is the completion date of the previous FYR report on May 20, 2010. This FYR is required because hazardous substances, pollutants, or contaminants remain at the site above levels that allow for UU/UE. The site consists of one operable unit (OU), which is addressed in this FYR report.

II. PROGRESS SINCE THE LAST REVIEW

Table 1 lists the site-wide protectiveness determinations/statement and Table 2 lists the issues/recommendations from the 2010 FYR report.

Table 1: Protectiveness Determinations/Statements from the 2010 FYR Report

OU #	Protectiveness Determination	Protectiveness Statement
01/Site-wide	Short-term Protective	The assessment of this FYR for the Galen Myers site found that the remedy is functioning as intended and is protective of human health and the environment in the short term. The final remedy has been fully implemented except at the residences that declined hookup to municipal water. Steps have been taken by IDEM and EPA to inform those residents of the potential risks in the form of biennial notification letters from IDEM. EPA may periodically sample those private wells. Additionally, ICs were implemented in the form of the SJCHD [St. Joseph County Health Department] Well Ordinance (Ordinance) to restrict well installation without prior permit review and approval by SJCHD within the plume area, known as the Galen Myers Administrative Control Area (ACA). An IC Plan was prepared by EPA and IDEM in 2008 to ensure [Long-Term Stewardship] LTS and confirm that the remedy continues to function as designed. Additionally, while the groundwater plume may have migrated beyond the ACA, there is no evidence of current exposures. This will be further evaluated.

Table 2: Status of Recommendations from the 2010 FYR Report

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Party	Original Milestone Date	Current Status	Completion Date (if applicable)
LTS must be assured; consideration to expand ACA and possibly implement additional ICs; biennial notification letters to residents who have declined the 1996 EPA Removal Action to connect to municipal water.	Review 2008 IC plan and determine whether additional mechanisms are necessary for long-term protectiveness. Expand groundwater monitoring well network to determine whether the contaminant plume expanded beyond the Galen Myers ACA.	IDEM	EPA	November 2010	Completed Completed	IDEM regularly reviews ICs as a part of site Operation and Maintenance (O&M). The most recent review was completed May 16, 2014. October 31 2013, IDEM installed 10 new monitoring wells in 2013.
Determine if EPA should conduct a limited soil vapor [intrusion] investigation.	Determine if a limited soil vapor [intrusion] investigation is necessary.	EPA	EPA	May 20, 2015	Completed	April 14, 2015 EPA should conduct a vapor intrusion (VI) study to determine whether the VI pathway is complete.

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Party	Original Milestone Date	Current Status	Completion Date (if applicable)
The future residents of the remaining 24 residences that declined hookup to municipal water must be protected.	Confirm that residents that declined municipal water connection during the 1996 EPA Removal Action are reminded, biennially, of their responsibilities of use with their private wells.	IDEM	EPA	Annually	Completed	May 14, 2013 IDEM regularly sends notice letters to the remaining residences.
Confirm with SJCHD that no new wells have been installed within the ACA without SJCHD notification and approval.	Confirm with SJCHD that no new wells have been installed within the ACA without prior notification and approval.	IDEM	EPA	Annually	Completed	March 9, 2015 IDEM regularly communicates with SJCHD on the matter.

Recommendation 1:

Generally, this recommendation called for the agencies to determine appropriate and reasonable means of providing notice to prospective purchasers of properties within the Galen Myers ACA that the properties are subject to groundwater-use restrictions by the SJCHD. Accordingly, SJCHD notified new owners of the original 24 properties that had declined municipal water connection during the 1996 EPA removal action of their private well responsibilities as outlined in the 1999 Well Ordinance. As of 2015, there are now 19 properties left that are not connected to municipal water. In 2015, SJCHD officials indicated to EPA that SJCHD intends to continue to notify new owners of their private well responsibilities (including periodic sampling, the permit requirements to re-drill wells on properties; and whether it denied permits resulting in the abandonment of private well and a forced connection to municipal water) once those properties change ownership. EPA recommends that IDEM continue to communicate with SJCHD annually to determine whether properties within the ACA and without public water have changed ownership.

EPA has determined that this issue will no longer be tracked because IDEM will routinely communicate with SJCHD in accordance with the site O&M plan.

Also, this recommendation called for the agencies to determine if the ACA needed to be expanded. IDEM installed ten new monitoring wells in 2013 and sampling results from 2013 and 2014 showed that the ACA boundary did not need to be expanded at this time.

Recommendation 2:

In February 2011, EPA reviewed site information presented in a (draft) Vapor Intrusion Assessment Technical Memorandum written by EPA's technical assistance contractor and determined that there was a potential for the VI pathway to be complete. However, further sampling information was needed before any action could be taken. In April 2015, EPA reviewed the most recent groundwater monitoring data and issued a memorandum entitled *Review of Groundwater Data for Potential Vapor Intrusion Issues at the Galen Myers Site*. EPA now recommends that limited-scope VI sampling should occur. Therefore, from April 2015 through December 2016, EPA will conduct a limited soil vapor investigation to determine whether the VI exposure pathway is complete and if it is causing unacceptable risks to residents. Upon review of the study results, EPA will take appropriate action to protect residents, which may range from taking no further action to initiating indoor-air and/or sub-slab soil vapor sampling in residences and/or to taking mitigative measures, if warranted.

Recommendation 3:

To protect future residents of the properties that declined to be hooked up to municipal water during the EPA removal action in 1996, IDEM sends a reminder notice every two years to 19 residences within the ACA that still decline a municipal water connection to have their private wells sampled.

EPA has determined that this issue will no longer be tracked because IDEM sends notice letters to the remaining residences in accordance with the site O&M plan.

Recommendation 4:

Since the previous FYR in 2010, EPA has confirmed with SJCHD that no new wells have been installed without prior SJCHD consent in the Galen Myers ACA in accordance with the SJCHD Well Ordinance. Three residences within the ACA that were using private wells have been connected to the public drinking water supply since 2012.

EPA has determined that this issue will no longer be tracked because IDEM should continue to communicate with SJCHD to determine the status of well permits within the ACA in accordance with the O&M plan.

Remedy Implementation Activities

EPA and IDEM took no new remedial actions at the site since the 2010 FYR. However, in accordance with a recommendation in the 2010 FYR report, IDEM installed ten new groundwater monitoring wells in 2013 to determine whether the contaminant plume has expanded beyond the ACA area and to replace broken wells within the monitoring well network. Sampling results from 2013 and 2014 showed no evidence that the groundwater contaminant plume has migrated beyond the ACA. (See Appendix A for a discussion of previous site remedial actions.)

Institutional Controls

ICs are required to ensure the protectiveness of the remedy. ICs are non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for exposure to contamination and protect the integrity of the remedy. Compliance with ICs is required to assure long-term protectiveness for any areas which do not allow for UU/UE. Site ICs are summarized in Table 3, below, and only address future groundwater use within the Galen Myers ACA (see Figure 3 (Appendix B)). No ICs are required for soil because the site soil meets cleanup standards that allow for UU/UE.

Table 3: Summary of Planned and/or Implemented ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater contaminant plume	Yes	Yes	Properties located within the ACA.	Prevent installation of new wells in the ACA without prior notification or permission from SJCHD.	SJCHD Well Drilling and Water Supply Systems Ordinance amending Title 24.20; adopted on 4/12/2005, effective 8/1/2005.
Groundwater contaminant plume	Yes	Yes	Currently 19 residences located within the groundwater contaminant plume that declined to be connected to municipal water.	Biennial notice letters to be sent to current residences that declined to be hooked up to the municipal water supply to remind the residents to sample their wells and that they may be required to connect to the municipal water supply at SJCHD's discretion.	Informational IC. Ongoing since 2007.
Site property	To be determined	No	11303 Edison Drive, Osceola, Indiana	Prevent any groundwater use at the site property; protect monitoring wells located on site property.	Potential deed restriction.

Status of Access Restrictions and ICs:

In 1999, SJCHD issued the Well Drilling and Water Supply Systems Ordinance preventing the installation of wells within the Galen Myers ACA without prior approval from SJCHD. In April 2005, the ordinance was amended to become more enforceable and it then became effective in August 2005. Since 1999, SJCHD reviews all permit applications for well installation within the ACA and decides whether or not to approve the installation of wells.

Every two years, IDEM sends notification letters to the remaining residences within the ACA that declined connection to municipal water. This serves as an informational IC, notifying those residence of the status of groundwater contamination and encouraging them to test their wells regularly and to consider connecting to the public water supply.

Current Compliance:

Based on the FYR site inspection and discussions with SJCHD, EPA is not aware of site area groundwater uses that are inconsistent with the stated objectives of the Galen Myers ACA IC. The remedy appears to be functioning as intended. No site uses that are inconsistent with the implemented IC were noted during the site inspection.

In November 2008, EPA and IDEM developed an IC Plan. The purpose of the IC Plan is to conduct IC evaluation activities to ensure that the implemented ICs are effective, to explore whether additional ICs are needed, and to ensure that Long-Term Stewardship (LTS) procedures are in place so that effective ICs are properly maintained, monitored, and enforced.

Long-term protectiveness requires continued compliance with the groundwater-use restrictions to ensure that the remedy continues to function as intended. LTS will ensure that the ICs are maintained, monitored and enforced.

Long-Term Stewardship:

Planning for LTS involves assuring effective procedures are in place to properly maintain and monitor the site, that effective ICs are maintained and monitored, and that the remedy continues to function as intended. The final IC Plan was approved in November 2008. It includes procedures for the agencies to communicate with SJCHD to review whether new wells have been installed within the ACA without prior approval, that exposure to contaminated groundwater is prohibited, and that biennial notification letters are sent to the remaining residents within the ACA that are not connected to municipal water.

The 2008 IC Plan must continue to be reviewed during each five-year period to determine if additional mechanisms are needed to assure protectiveness of human health. Those mechanisms might include, but are not limited to, expansion of the Galen Myers ACA and implementing additional ICs at the residences where the owners have declined to connect to the municipal water supply.

EPA declared the Galen Myers site to be “site-wide ready for reuse” on June 11, 2012.

System Operation/Operation and Maintenance

In accordance with the 1995 ROD, the groundwater monitoring well network is sampled once per year and analyzed for VOC, semivolatile organic compound (SVOC), and inorganic contaminants. In July 2006, EPA determined that certain wells located at the southern edge of the plume would be sampled on a semi-annual basis only for volatile organic compounds (VOCs) to monitor the migration of trichloroethene (TCE) and its breakdown products in the groundwater.

In July 2014, the O&M period began whereupon IDEM assumed the entire costs of and responsibility for undertaking the annual groundwater sampling activities. IDEM will continue sampling site area groundwater until the 1995 ROD cleanup levels are met.

During the FYR period, the agencies conducted the following sampling events:

- The 2010 Annual Sampling Event was conducted in June and included 31 monitoring wells (MW), which included MW 1-9; MW 12-17, MW 19; and MW 22-36.
- The 2010 Semi-Annual Sampling Event was conducted in December and included 14 monitoring wells (MW 1-3; MW 9; MW 13-14; MW 19; MW 26-29; MW 32-33; MW 35).
- The 2011 Annual Sampling Event was conducted from May to June and included 31 monitoring wells (MW 1-9; MW 12-17; MW 22-36).
- The 2012 Annual Sampling Event was conducted in July and included 31 monitoring wells (MW 1-9; MW 12-17; MW 22-36). MW-18 could not be sampled because it was damaged.
- In October 2012, IDEM conducted a limited groundwater investigation to re-evaluate the existing monitoring well network and to assess the presence, degradation and migration of TCE in the lower aquifer. Thirteen groundwater samples were collected from eight locations and analyzed for VOCs.
- The 2013 Annual Sampling Event was conducted in October and included 41 monitoring wells (MW 1-9; MW 12-19; MW 22-45).
- The 2014 Annual Sampling Event was conducted from October 20-23 and November 10-11 and included 41 monitoring wells (MW 1-9; MW 12-19; MW 22-45).

Since February 2002, the homeowners that declined to be connected to the municipal water supply have borne the responsibility for maintaining the future safety of their water supply wells. However, EPA may periodically decide to sample these private wells. During this FYR period, EPA reviewed groundwater data collected from the monitoring well network and found the data to be sufficient so that sampling private wells was not necessary to monitor the plume.

Table 4 on page 16 shows IDEM's annual contractual system operations costs for site work such as conducting project planning activities, producing quarterly progress reports, drilling the ten

additional monitoring wells and performing well maintenance (in 2013), collecting water samples, analyzing samples and preparing sample data reports, and project evaluation.

Table 4: Annual System Operations Costs

Dates		Total Contractual Costs
From	To	
9/2009	9/2010	\$48,000
9/2010	9/2011	37,000
9/2011	12/2012	72,000
7/2013	12/2013	186,000*

*Ten additional monitoring wells were installed, developed, and sampled in 2013.

III. FIVE-YEAR REVIEW PROCESS

Administrative Components

EPA notified IDEM that it was initiating the FYR at the Galen Myers site on May 30, 2014. Margaret Gielniewski, EPA Remedial Project Manager (RPM) led the review. Heriberto Leon provided support as the EPA Community Involvement Coordinator (CIC). Resa Ramsey, IDEM Site Manager, assisted in the review as the representative for the state agency.

The FYR consisted of the following components:

- Community involvement;
- Document review;
- Data review;
- Site inspection; and
- FYR report development and review.

Community Notification and Involvement

In May 2014, the EPA RPM and CIC began planning to involve the community in the FYR process. EPA published a notice in the local newspaper, *The Elkhart Truth*, on March 13, 2015, which stated that EPA was beginning a FYR and inviting the public to submit any comments to EPA. EPA has received no comments on the FYR to date. The results of the review and the report will be made available at the site information repository located at the Mishawaka-Penn-Harris Public Library, 209 Lincolnway East, Mishawaka, Indiana.

Document Review

During this FYR process, EPA reviewed all investigation reports as well as the 1995 ROD and the 1998 ESD, to ensure that all requirements have been met and implemented during remediation and post-remedial activities. EPA also reviewed the site Remedial Action and

Construction Completion Reports as well as the 2010 FYR report. Attachment 1 in Appendix B provides a complete list of documents reviewed for this FYR.

Data Review

Historical data for the site were reviewed along with post-construction data collected during the Long-Term Response Action (LTRA) phase (which ended in 2014) and the start of the O&M phase (2014-present). According to the site Quality Assurance Project Plan, three subsets of monitoring wells (MW) are designated as leading edge, trigger, and sentinel wells. The leading edge wells (MW-26 and MW-29) are located within the plume at the southern and western-most edges. The trigger wells (MW-13, MW-14, MW-19, MW-27, MW-28, MW-32, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, and MW-45) are located just outside of the leading edge of the plume. Sentinel wells (MW-22, MW-23, MW-24, MW-34, and MW-35) are located between the trigger wells and the St. Joseph River. The wells designated as leading edge, trigger, and sentinel may change over time depending on the plume migration pathway (see Figure 3).

Groundwater Monitoring:

The groundwater cleanup goals for the site include federal Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCLs) for the contaminants of concern (COCs), as follows:

<u>COC</u>	<u>MCL*</u>
Trichloroethylene (TCE)	5
<i>cis</i> -1,2-Dichloroethene (<i>cis</i> -1,2-DCE)	70
1,1,1-Trichloroethane (1,1,1-TCA)	200
Vinyl chloride (VC)	2

* micrograms per liter (µg/L)

EPA reviewed historical site data in addition to the analytical results collected during the last five years for the FYR. Results indicate that site COCs continue to exceed the groundwater cleanup goals.

For example, TCE was detected above the MCL in seven of 31 monitoring wells sampled between June 2010 and October 2013, and four of 41 wells sampled in November 2014. In most cases, the TCE concentration remains fairly stable or is decreasing in monitoring wells (MW-04, MW-05, MW06, MW-07, MW-08, and MW-09). Monitoring trends indicate that TCE concentrations are generally decreasing in MW-1, MW-03, MW-09, MW-15, MW-28, MW-31, and MW-32. TCE concentration is decreasing or remains stable in MW-26 and is increasing in MW-29; both wells are located at the southern boundary of the plume.

Table 5 on page 18 summarizes the sampling results for the COCs that have been detected in monitoring wells during the last five years (data taken from the 2010-2014 Annual Groundwater Monitoring Reports and the 2013 LTRA Completion Report).

Table 5: COCs Data Summary

TCE - MCL 5 µg/L

Monitoring Well	Highest Detection	Jun 2010	Dec 2010	Jun 2011	Jul 2012	Oct 2013	Nov 2014
MW-01	4.7 µg/L (Dec 2010)	3.8 µg/L	4.7 µg/L	2 µg/L	3.6 µg/L	0.67 J µg/L	<0.5 U µg/L
MW-03	12 µg/L (Jun 2010)	12 µg/L	5.7 µg/L	3.6 µg/L	11 µg/L	5.6 µg/L	2.2 µg/L
MW-09	72 µg/L (Dec 2010)	69 µg/L	72 µg/L	39 µg/L	22 µg/L	38 µg/L	1.1 µg/L
MW-13	1.4 µg/L (Jun 2011)	0.70 J µg/L	0.57 J µg/L	1.4 µg/L	<1 U µg/L	0.72 J µg/L	1.2 µg/L
MW-15	310 µg/L (Jun 2010)	310 µg/L	not sampled	290 µg/L	270 µg/L	290 µg/L	270 µg/L
MW-25	11 µg/L (Nov 2014)	2.8 µg/L	not sampled	4.6 µg/L	8.1 µg/L	11 µg/L	11 µg/L
MW-26	8 µg/L (Dec 2010)	6.7 µg/L	8 µg/L	7.1 µg/L	5.5 µg/L	5.3 µg/L	5.5 µg/L
MW-28	3 µg/L (Dec 2010)	2.2 µg/L	3 µg/L	2.2 µg/L	0.61 J µg/L	0.70 J µg/L	1.4 µg/L
MW-29	24 µg/L (Jul 2012)	9.5 µg/L	12 µg/L	12 µg/L	24 µg/L	21 µg/L	23 µg/L
MW-30	0.25 J µg/L (Jul 2013)	<1 U µg/L	not sampled	<1 U µg/L	0.22 J µg/L	0.25 J µg/L	<0.5 U µg/L
MW-31	30 µg/L (Jun 2010)	30 µg/L	not sampled	20 µg/L	8.1 µg/L	21 µg/L	<0.5 U µg/L
MW-32	0.31 J µg/L (Dec 2010)	<1 U µg/L	0.31 J µg/L	<1 U µg/L	<1 U µg/L	<1 U µg/L	<0.5 U µg/L

J – Estimated Results. Result is less than the reporting limit.

U – Not Detected.

█ - Bold font used for results that are greater than the MCL.

cis-1,2-DCE - MCL 70 µg/L

Monitoring Well	Highest Detection	Jun 2010	Dec 2010	Jun 2011	Jul 2012	Oct 2013	Nov 2014
MW-01	0.71 J µg/L (Jul 2012)	0.24 J µg/L	0.25 J µg/L	<1 U µg/L	0.32 J µg/L	<1 U µg/L	<1 U µg/L
MW-03	19 µg/L (Oct 2013)	6.8 µg/L	5.4 µg/L	5.7 µg/L	17 µg/L	19 µg/L	1.1 µg/L
MW-09	1.7 J µg/L (Dec 2010)	1.7 J µg/L	0.9 J µg/L	0.6 J µg/L	0.25 J µg/L	<1.4 U µg/L	<1 U µg/L
MW-15	8.7 J µg/L (Jun 2010)	8.7 µg/L	not sampled	4.7 J µg/L	6.4 J µg/L	7.5 J µg/L	3.7 µg/L
MW-25	5.9 µg/L (Nov 2014)	0.9 J µg/L	not sampled	1.3 µg/L	2.5 µg/L	3.8 µg/L	5.9 µg/L
MW-26	5.4 µg/L (Jun 2011)	2.3 µg/L	1.4 µg/L	5.4 µg/L	3.5 µg/L	2.5 µg/L	4.6 µg/L
MW-28	0.9 J µg/L (Jun 2011)	0.6 J µg/L	0.3 J µg/L	0.9 J µg/L	<1 U µg/L	<1 U µg/L	<1 U µg/L

Monitoring Well	Highest Detection	Jun 2010	Dec 2010	Jun 2011	Jul 2012	Oct 2013	Nov 2014
MW-29	18 µg/L (Jun 2011)	6 µg/L	13 µg/L	18 µg/L	6.1 µg/L	12 µg/L	8 µg/L
MW-31	5.7 µg/L (Oct 2013)	3.3 µg/L	not sampled	2.9 µg/L	3.8 µg/L	5.7 µg/L	2.5 µg/L
MW-32	0.26 J µg/L (Oct 2013)	0.26 J µg/L	0.26 J µg/L	0.2 J µg/L	0.24 J µg/L	<1 U µg/L	<1 U µg/L
MW-33	140 µg/L (Nov 2014)	96 µg/L	100 µg/L	93 µg/L	140 J µg/L	140 µg/L	140 µg/L

J – Estimated Results. Result is less than the reporting limit. U – Not Detected.

■ - Bold font used for results that are greater than the MCL.

1,1,1-TCA - MCL 200 µg/L

Monitoring Well	Highest Detection	Jun 2010	Dec 2010	Jun 2011	Jul 2012	Oct 2013	Nov 2013
MW-09	4.8 µg/L (Jun 2010)	4.8 µg/L	4 µg/L	2.3 µg/L	1 µg/L	1.9 µg/L	<1 U µg/L
MW-15	<13 U µg/L (Jul 2012)	<8 U µg/L	not sampled	<8 U µg/L	<13 U µg/L	<11 U µg/L	1.2 µg/L
MW-31	0.26 J µg/L (June 2010)	0.26 J µg/L	not sampled	0.25 J µg/L	<1 U µg/L	<1 U µg/L	<1 U µg/L

J – Estimated Results. Result is less than the reporting limit. U – Not Detected.

VC - MCL 2 µg/L

Monitoring Well	Highest Detection	Jun 2010	Dec 2010	Jun 2011	Jul 2013	Oct 2013	Nov 2014
MW-31	0.69 J µg/L (Jun 2010)	0.69 J µg/L	not sampled	0.63 J µg/L	<1 U µg/L	<1 U µg/L	<0.5 U µg/L
MW-33	0.66 J µg/L (Jun 2010)	0.66 J µg/L	<3.3 U µg/L	<3.3 U µg/L	<6.7 U µg/L	<5 U µg/L	<0.5 U µg/L
MW-42	0.28 J µg/L (Oct 2013)	Well installed and developed in September/October 2013				0.28 J µg/L	<0.5 U µg/L
MW-45	0.22 J µg/L (Oct 2013)	Well installed and developed in September/October 2013				0.22 J µg/L	<0.5 U µg/L

J – Estimated Results. Result is less than the reporting limit. U – Not Detected.

EPA has drawn the following conclusions from the groundwater monitoring data:

- Data from the monitoring well network indicate the plume has not yet expanded beyond the SJCHD Galen Myers ACA. Monitoring well MW-33 is showing an increasing trend of *cis*-1,2-dichloroethene since August 2005. However, new monitoring wells located to the south and east of MW-33, specifically MW-37, MW-38, MW-39, and MW-40, are non-detect for TCE and all daughter products.

- In 2013 samples from new wells MW-42 and MW-45 located in the western bounds of the Galen Myers ACA showed trace concentrations (0.22 µg/L to 0.3 J µg/L) of TCE daughter products, but in 2014, no VOCs were detected.
- Low concentrations of TCE are being detected in the trigger monitoring wells MW-13 and MW-28.
- Concentrations of COCs at sentinel monitoring well locations continue to be non-detect.
- The plume is continuing to slowly migrate south towards the St. Joseph River.
- Detections of TCE in MW-1 in the lower/deeper aquifer have decreased to almost non-detect in 2014 since it was first detected in 2009.
- A general decrease in TCE concentrations and continued presence and/or increase of the respective daughter products (*cis*-1,2-DCE; *trans*-1,2-DCE; and VC) indicate that natural attenuation of TCE is occurring.

Site Inspection

Representatives from IDEM and EPA conducted a site inspection on November 10, 2014 to document any significant changes in the site conditions. Participants in the site inspection were Resa Ramsey (IDEM), Vickie Poole (IDEM) and Margaret Gielniewski (EPA).

The RPM noted property features including a single-family residence; several aluminum-sided sheds and steel buildings/garages used for storage of tree trimming equipment and vehicles; man-made depressions; heavy equipment; vehicles; stacks of whole tree trunks, limbs, split logs; and mounds of woodchips and soil piles. Three plastic containers brought to the site property and used to store purge water from LTRA sampling events are still located near the access lane for the northern portion of the site. The locks were secure on the monitoring well protective casings. The northern portion of the property is fenced with locks securing an access gate.

Interviews

During the FYR site inspection on November 10, 2014, an informal interview was conducted with Resa Ramsey and Vickie Poole of IDEM and with Doug Whittaker, owner of the Galen Myers property since August 2005. The purpose of these interviews was to document any perceived problems or successes with the remedy that has been implemented to date. The community members that were interviewed and that live within the ACA generally have no interest in the site and would prefer that groundwater sampling events be completed as quickly and as noiselessly as possible. EPA also performed a telephone interview with Mark Espich of SJCHD on March 9, 2015. The purpose of the interview was to determine the status of enforcing the Well Ordinance within the Galen Myers ACA. During the interview, SJCHD acknowledged that the ordinance is functioning as intended. It notifies the remaining residences within the ACA that declined municipal water connection of their responsibilities when applying to install a new well. SJCHD uses the data collected by IDEM and groundwater flow maps in making determinations whether to approve well-drilling permit requests in the ACA. (Attachment 5 in

Appendix B provides the interview summaries.)

IV. TECHNICAL ASSESSMENT

Question A: Is the remedy functioning as intended by the decision documents?

Answer A: Yes.

A review of the data and the site inspection indicate that the remedy is functioning as intended by the 1995 ROD and 1998 ESD. The general remedial action goals in the 1995 ROD are: a) protection of human health from exposure to TCE through groundwater, b) compliance with applicable or relevant and appropriate requirements (ARARs), and c) elimination of soil source areas on the site property that threaten contamination of groundwater.

These goals were addressed, as EPA's June 1996 removal action resulted in the connection of about 180 residences to the city water supply, the 1998 ESD determined that further soil cleanup was not necessary because no soil samples exceeded the soil cleanup level for TCE, and available data shows no evidence that the plume has expanded or that it is impacting St. Joseph River water quality. Current groundwater sampling results also demonstrate that the plume is naturally attenuating because it is not expanding and TCE breakdown products are present.

Of the 24 residents that originally declined connection to the municipal water supply, five have since been hooked up to city water. Also, the 1999 SJCHD Well Drilling and Water Supply Systems ordinance was updated in April 2005 and became effective in August 2005. The revised ordinance gives the SJCHD the authority to deny a permit application to install a potable water well where there is a known or potential groundwater contamination threat to public health and safety. The SJCHD ordinance is functioning as intended to prevent the installation of drinking water wells within the ACA without prior review and approval by the SJCHD.

EPA and IDEM prepared an IC Plan in 2008 to ensure mechanisms are in place for LTS. IDEM will review the ICs and LTS provisions during each FYR period to determine if additional mechanisms are required. During this FYR period, EPA determined that additional ICs or LTS mechanisms may be necessary, such as a deed notification could be placed on the former Galen Myers property to notify future property owners of the groundwater-use restrictions at the site. Also, a deed notification should be placed on the remaining properties within the ACA that are not connected to public water to notify prospective purchasers of the SJCHD ordinance and of the recommendation to connect to municipal water.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Answer B: Yes and no.

There have been no changes in toxicity, other contaminant characteristics, and standardized risk assessment methodologies that could affect the protectiveness of the remedy. There have been no changes in standards, to-be-considered (TBC) or cleanup goals that would affect or question the

protectiveness of the remedy.

However, new information has been identified since the 2010 FYR that could affect the protectiveness of the remedy in regards to the VI route of exposure and potential impacts to human health. EPA reviewed the *Draft VI Technical Memorandum* (dated February 14, 2011), and issued the *Review of Groundwater Data for Potential Vapor Intrusion Issues at the Galen Myers Site* memorandum (April 14, 2015), which indicates that the VI pathway cannot be ruled out as being insignificant without further investigation for the homes in near proximity to shallow groundwater wells showing a concentration of TCE above the MCL. EPA recommends that VI samples be taken near residential structures within a 200-foot radius of those wells.

Thus, from April 2015 through December 2016, EPA will conduct a limited soil vapor investigation to determine whether the exposure pathway is complete and causing unacceptable risks. Once that sampling is completed, EPA will take appropriate action, which may include no further action or initiating indoor-air and/or sub-slab VI sampling events.

Question C: Has any other information come to light that could potentially question the protectiveness of the remedy?

Answer C: No.

No other information has come to light that could potentially question the protectiveness of the remedy.

Technical Assessment Summary

A review of the data and the site inspection indicate that the remedy is functioning as intended by the ROD and ESD and that there have been no changes in the physical conditions of the Galen Myers site property that would affect the protectiveness of the remedy. The results of samples collected during the last 5 years indicate that the overall levels of TCE in the plume are declining. There are no changes to the ARARs or cleanup levels that would affect protectiveness.

Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs. Compliance with effective ICs will be ensured through LTS by implementing, maintaining, and monitoring ICs. The November 2008 Galen Myers IC Plan will ensure LTS and confirm that the remedy continues to function as designed. Additional LTS mechanisms may be required in the form of deed notifications, where prospective purchasers of properties within the ACA that are not connected to municipal water are notified of groundwater contamination and the requirement for a permit from SJCHD to install new wells within the ACA.

In response to potential VI exposure issues, EPA plans to undertake a limited soil vapor investigation in 2015-2016. Once that sampling is completed, EPA will take appropriate action, which may include no further action or initiating indoor-air and/or sub-slab VI sampling events.

V. ISSUES/RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Table 7: Site-wide Issues/Recommendations and Follow-up Actions

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness? (Y/N)	
					Current	Future
VI is a potential pathway of concern based on elevated concentrations of VOCs in shallow groundwater and proximity to residential structures.	Complete a VI investigation. Based on the results, take additional actions as needed to further investigate and/or mitigate exposure to impacted residents.	EPA	EPA/State	12/31/2016	No	Yes

In addition the following are action items that do not affect current or future protectiveness but will improve management of O&M and the effectiveness of the remedy:

- The IC Plan must be reviewed during each FYR period to determine if additional mechanisms are needed. Those mechanisms could include, but are not limited to, expansion of the SJCHD Well Drilling and Water Supply System Ordinance ACA, implementing additional ICs at the residences that have not been connected to municipal water, and placing an IC on the former Galen Myer property.
- EPA recommends that SJCHD confirm annually that residents within the ACA that declined connection to municipal water are proceeding accordingly under its ordinance and that IDEM continues to send biennial notification letters to residences that declined municipal water connections. Also, determine appropriate and reasonable means of notice, if any, to prospective purchasers of properties subject to groundwater-use restrictions within the SJCHD ACA.

VI. PROTECTIVENESS STATEMENT

01/Sitewide Protectiveness Statement	
<i>Protectiveness Determination:</i> Protectiveness Deferred	<i>Addendum Due Date:</i> 12/31/2017
<i>Protectiveness Statement:</i> A protectiveness determination of the remedy cannot be made until EPA obtains further information regarding the soil VI pathway. EPA shall undertake two deep soil gas sampling events with results estimated to be available by December 30, 2016. If the deep soil gas samples show conclusive results, EPA will make a protectiveness determination in an addendum to this FYR report. If the deep soil gas sampling data is inconclusive, further VI sampling, including sub-slab and/or indoor air sampling at select residences, may be required.	

VII. NEXT REVIEW

The next FYR report for the Galen Myers site is required five years from the completion date of this review.

APPENDIX A – EXISTING SITE INFORMATION

A. SITE CHRONOLOGY

Date	Event
1981	SJCHD investigates Galen Myer's property in response to nearby residents' allegations of dumping and unauthorized storage of potentially hazardous materials and files a complaint with the Indiana State Board of Health (ISBH).
1983	ISBH inspects the property, and EPA Region 5's Technical Assistance Team (TAT) conducts a site assessment.
1984	ISBH, EPA, and TAT re-inspect the property. EPA authorizes a removal action at the site.
February 1985 to April 1985	EPA conducts a removal action and disposed of flammable solids, crushed drums and non-hazardous soils in off-site facilities.
November 1986	An IDEM (previously ISBH) investigation determines that site property soils were contaminated with organic compounds, and some residential wells were contaminated with TCE.
1987	EPA and IDEM conduct a joint sampling program to delineate the groundwater plume and provide an alternative drinking water supply for affected residents.
June 1988	Site proposed for the National Priorities List (NPL).
March 31, 1989	Site placed on the NPL.
January 1991 to February 1994	IDEM conducts residential well sampling as part of the routine O&M program for 29 residential water filtration systems. Additional residential wells were found to be impacted by TCE. In May 1993, IDEM requests EPA conduct a removal action to install an alternate water supply.
June 1993 to July 1995	IDEM completes a Remedial Investigation (RI) and Feasibility Study (FS)
September 29, 1995	Record of Decision issued.
June 1996	EPA provides Mishawaka Utilities' water to approximately 180 homes that responded to offer for city water hookup.
September 30, 1998	IDEM prepares ESD and Preliminary Closeout Report.
October 1998	IDEM completes Remedial Design Field Investigation (RDFI).
January 1, 1999	SJCHD Well Drilling and Water Supply Systems Ordinance becomes effective.
September 28, 2000	First FYR report is completed.
June 2003	Operational and Functional date for the groundwater component of remedy.
April 12, 2005	St. Joseph County Council adopts new Well Drilling and Water Supply Systems Ordinance amending Title 24.20 (effective in August 2005).
September 21, 2005	Second FYR report is completed.
October 15, 2007	Second FYR report addendum is completed.
November 2008	IC Plan is completed.
May 20, 2010	VI potential confirmed via Technical Memorandum. Third FYR report is completed.
June 11, 2012	EPA declares site is "site-wide ready for reuse"
September - November 2013	New monitoring wells installed.
February 2015	EPA begins VI study.
Ongoing	Groundwater and surface water monitoring.

B. BACKGROUND

Physical Characteristics

The 5-acre Galen Myers site is located in a mostly residential area at 11303 Edison Road in Penn Township, Osceola, St. Joseph County, Indiana (see Figure 1 (Appendix B)). Current site features (2014) include a residential house, two large storage buildings, manmade depressions, parked vehicles, several mounded wood-chip piles, and a heavily vegetated area. The St. Joseph River is located approximately 1.25 miles south of the site property.

Hydrogeology

Unconsolidated Pleistocene-aged glacial deposits of the Atherton Formation underlie the site. Well drilling logs indicate the unconsolidated materials generally consist of sand and gravel deposits with many silty clay layers at various depths. Extensive clay or silty clay layers, where present, can act as aquitards, dividing the outwash deposits into what may be considered separate aquifers. This can result in semi-confined conditions within the lower portions of the aquifer. Stratigraphic information from various soil borings indicates that this semi-confining layer pinches out to the south, east, and west. Therefore, its presence does separate the outwash deposits into two separate aquifers in the immediate vicinity of the site, limiting the potential downward migration of site contaminants. Groundwater was encountered at a depth of approximately 8 feet below ground surface at the site property, but downgradient of the site it was encountered at 20 to 30 feet below ground surface. Flow direction is south towards the St. Joseph River then southwestward as it approaches the river. The flow rate is estimated to be between 1 and 5 feet per day (365 ft/yr to 1,825 ft/yr).

Land and Resource Use

According to aerial photographs (circa 1965 to 1971), wooded property located to the north of the site was once an orchard and a portion of the Galen Myers site may have also once been an orchard. Current on-site structures include a single-family residence and two unattached buildings used to store tree-trimming equipment. Land use in the area is residential, agricultural, and commercial.

History of Contamination

Galen Myers operated a drum reclamation business at the site from about 1970 to 1983. Drums from local industries were stored and then recycled by removing the tops of drums and dumping their contents into unlined pits and onto the ground surface. A comprehensive list of materials disposed at the site could not be compiled since site records identifying accepted waste streams were not discovered during site inspections. VOCs and SVOCs were released into the environment when drum contents were dumped. The empty drums were sold as trash containers.

Initial Response

In 1981, SJCHD investigated the Galen Myers property in response to nearby residents'

allegations of dumping and unauthorized storage of potentially hazardous materials. The SJCHD inspectors observed dumping and storage activities at the site property and requested Myers to cease such operations and filed a complaint with the ISBH Land Pollution Control Division.

ISBH inspected the site in April 1983 and observed drummed solid and liquid wastes scattered throughout the property and then requested that EPA conduct a site inspection. EPA conducted a site investigation in June 1983. Although Galen Myers passed away before EPA could question him further regarding the contents of the drums and his disposal methodologies, the Myers family indicated that the drum disposal business was no longer in operation and they intended to dispose of the drums and other debris. However, this did not occur. ISBH conducted another site inspection in April 1984. The site property appeared to be abandoned, and due to the condition of the drums on the property, ISBH requested EPA reevaluate the site for a potential removal action. Based upon results from a second site investigation conducted in June 1984, EPA determined that the site posed a direct and indirect threat to human health and the environment and warranted a removal action.

In November 1984, EPA authorized a removal action at the site and conducted it from February to April 1985. Wastes disposed under this removal action included 1,800 pounds of flammable solids, 30 cubic yards of nonhazardous crushed drums, and 56 cubic yards of nonhazardous soils. Drums claimed by potentially responsible parties were removed by May 1985. Residential well samples collected from the site property and adjacent wells indicated traces of VOCs at concentrations that were below EPA Removal Action Levels. Therefore, groundwater was not addressed during the 1985 removal action.

In late 1986 to 1987, IDEM collected soil samples from the site property and residential well samples. In February 1987, IDEM notified EPA that the analytical results indicated that site soils were still significantly contaminated with organic chemicals and downgradient residential wells were contaminated with TCE at unsafe levels. IDEM requested that EPA participate in a joint sampling program to delineate the groundwater plume and provide an alternative drinking water supply for the affected residents.

During the confirmation sampling event, EPA provided bottled drinking water to affected residents. In spring 1987, IDEM sampled 15 residential wells and EPA sampled 13 residential wells. Results of the joint residential well sampling program delineated a plume of contamination that was about 148 feet wide and 2,638 feet long. The affected wells were located in the direction of groundwater flow directly south of the site property along the west side of Birch Road. To mitigate the threat of TCE contamination to the affected residents, EPA installed air stripper/granulated activated carbon filter units at two residences, whole house carbon filtration units at three residences, and point-of-use carbon filters at three residences.

EPA placed the Galen Myers site on the NPL in March 1989.

From January 1991 to February 1994, IDEM conducted residential well sampling to monitor TCE levels. The maximum TCE concentration found was 10,932 µg/L. During this time period an additional 21 residential wells were found to be contaminated with TCE. IDEM installed six point-of-use filter systems and 15 whole-house filter systems at the affected residences. At this

time, IDEM was monitoring a total of 29 residential water filtration units. In May 1993, IDEM requested that EPA consider the Galen Myers site for an emergency removal action to expedite a permanent solution for the residents who had water filtration units and others that could be potentially exposed through migration of TCE in groundwater. In January 1994, EPA approved a second removal action to construct a waterline extension from Mishawaka Utilities to the affected area. By June 1996, EPA had provided municipal water to approximately 180 residences that responded to the offer to be supplied with city water.

Initially, 24 homeowners declined to be hooked up to the municipal water supply (see Figure 2); however, five of these residences are now connected to municipal water.

Contaminants of Concern

IDEM initiated the RI/FS field investigation in June 1993. Field activities included: a ground control survey; electromagnetic survey; test pit excavations; a soil gas survey; and groundwater sampling from 21 monitoring wells and 65 residential wells. IDEM completed the RI/FS in July 1995 and identified TCE and its breakdown products as COCs in site area groundwater and TCE in site soil.

Human Health and Ecological Risk Assessments

In April 1995, IDEM completed a screening level ecological risk assessment and a baseline human health risk assessment as part of the RI. IDEM determined that the potential for adverse impacts due to exposure to site contaminants by terrestrial and aquatic wildlife species was limited.

IDEM's baseline human health risk assessment evaluated the potential risks posed by the site soils under a residential use scenario and to construction workers. Estimated health risks under these scenarios were found to be within EPA's target risk range (1×10^{-6} to 1×10^{-4} excess lifetime cancer risk (ELCR)).

IDEM also calculated estimated risks due to residential exposure to groundwater contaminated with VOCs, SVOCs, pesticides and inorganics. Of the 65 residential wells sampled, the risk assessment determined that:

- a) 34 residences were below a 1×10^{-6} ELCR;
- b) 22 residences were within the target risk range; and
- c) 9 residences exceeded a 1×10^{-4} ELCR.

Six of the nine residences that exceeded the 1×10^{-4} ELCR had water filters installed and maintained by IDEM. Because filters were properly used and maintained, receptors at these six homes were not exposed to contaminants at the levels detected in the unfiltered groundwater samples. For the remaining three residences, the total ELCR was due to exposure to arsenic, which may be naturally occurring.

Cleanup Goals

Even though the human health risk assessment determined that there were no COCs in soil above adverse risk levels, a soil cleanup goal of 0.11 mg/kg was calculated for TCE based on leaching to the groundwater.

For groundwater, SDWA MCLs were established as cleanup goals, including:

TCE	5 µg/L
1,1-DCE	7 µg/L
<i>trans</i> -1,2-DCE	100 µg/L
<i>cis</i> -1,2-dichloroethene	70 µg/L
Vinyl chloride	2 µg/L

Basis for Taking Action

IDEM determined that many area residential wells were contaminated with TCE and other VOCs above MCLs. Since the contaminated aquifer is the only source of drinking water in the area, unless action was taken, people would continue to be exposed to TCE in drinking water above health-based levels.

C. REMEDIAL ACTIONS

Remedy Selection

In September 1995, EPA signed a ROD that identified the following remedial action goals for the Galen Myers site:

- Protection of human health from exposure to TCE through groundwater;
- Compliance with ARARs; and
- Eliminate site property soil source areas that threaten contamination of groundwater.

To achieve these goals, the ROD called for:

- Excavation of site property soils exceeding 0.11 mg/kg TCE and disposal at a permitted facility (revised in the 1998 ESD);
- Completion of an EPA removal action providing an alternate water supply from Mishawaka Utilities to the affected residential area (completed June 1996);
- Natural attenuation of groundwater (ongoing);
- Installation of fifteen (15) additional monitoring wells (completed May 2002);
- Long-term monitoring of groundwater and the St. Joseph River (ongoing); and
- Implementation of ICs to prohibit installation of wells on the site property and in the residential area affected by the TCE plume (completed January 1999).

Natural attenuation relies on natural subsurface processes such as leaching, dilution, volatilization, biodegradation, adsorption, and chemical reactions with subsurface materials to

reduce contaminant concentrations. Based upon information gathered during the RI, it was estimated it would take approximately 160 years to achieve the TCE cleanup goal of 5 µg/L.

Remedy Implementation

IDEM completed remedial design activities in September 1998, including a Remedial Design Field Investigation (RDFI). The RDFI work included soil sampling to determine the horizontal extent of TCE contamination and groundwater screening sampling to determine long-term monitoring well locations. Of the 16 soil samples taken, only two showed traces of TCE and none were above the target cleanup level of 0.11 mg/kg. Based on these soil sampling results, IDEM and EPA concluded that further soil cleanup work was not required since the levels of contamination were below the soil cleanup goal. In September 1998, IDEM issued an ESD with EPA concurrence to modify the 1995 ROD to reflect this determination.

In 1998, IDEM sampled groundwater at almost 50 screening locations and at various depths to further delineate the contaminant plume. Additional monitoring wells were then installed at appropriate intervals. Data showed the TCE plume to be quite narrow, at about 200 feet wide and 5,700 feet long. TCE appeared to be spreading vertically as groundwater flowed south-southwest toward the St. Joseph River. IDEM also evaluated whether the TCE levels discharging to the river was of concern, but modeling showed it would be at non-detect levels under average flow rate to flood conditions.

IDEM completed the Preliminary Closeout Report in September 1998. In January 1999, the SJCHD Well Ordinance was enacted to restrict new well installations in the ACA.

APPENDIX B – FIGURES AND ATTACHMENTS

Figure 1: Site Location Overview Map

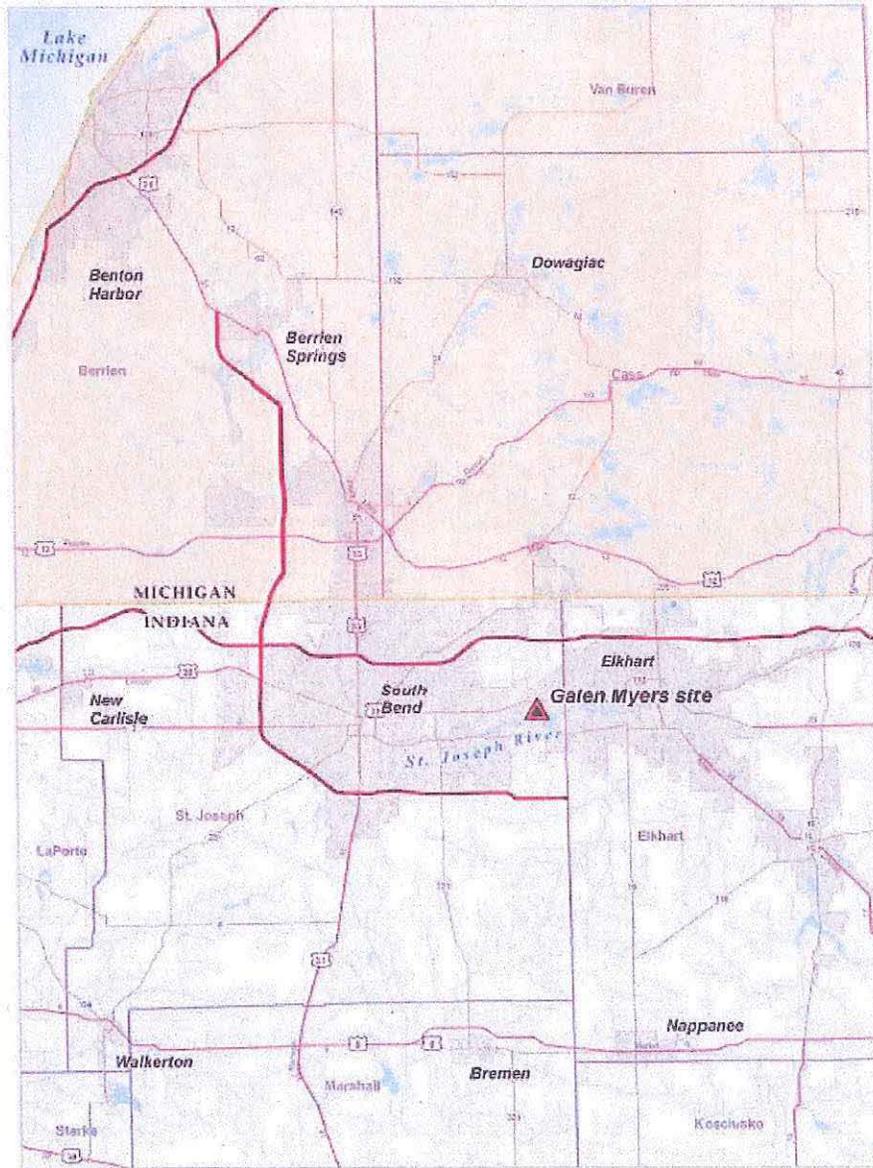
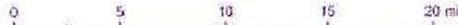
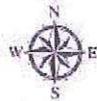
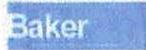
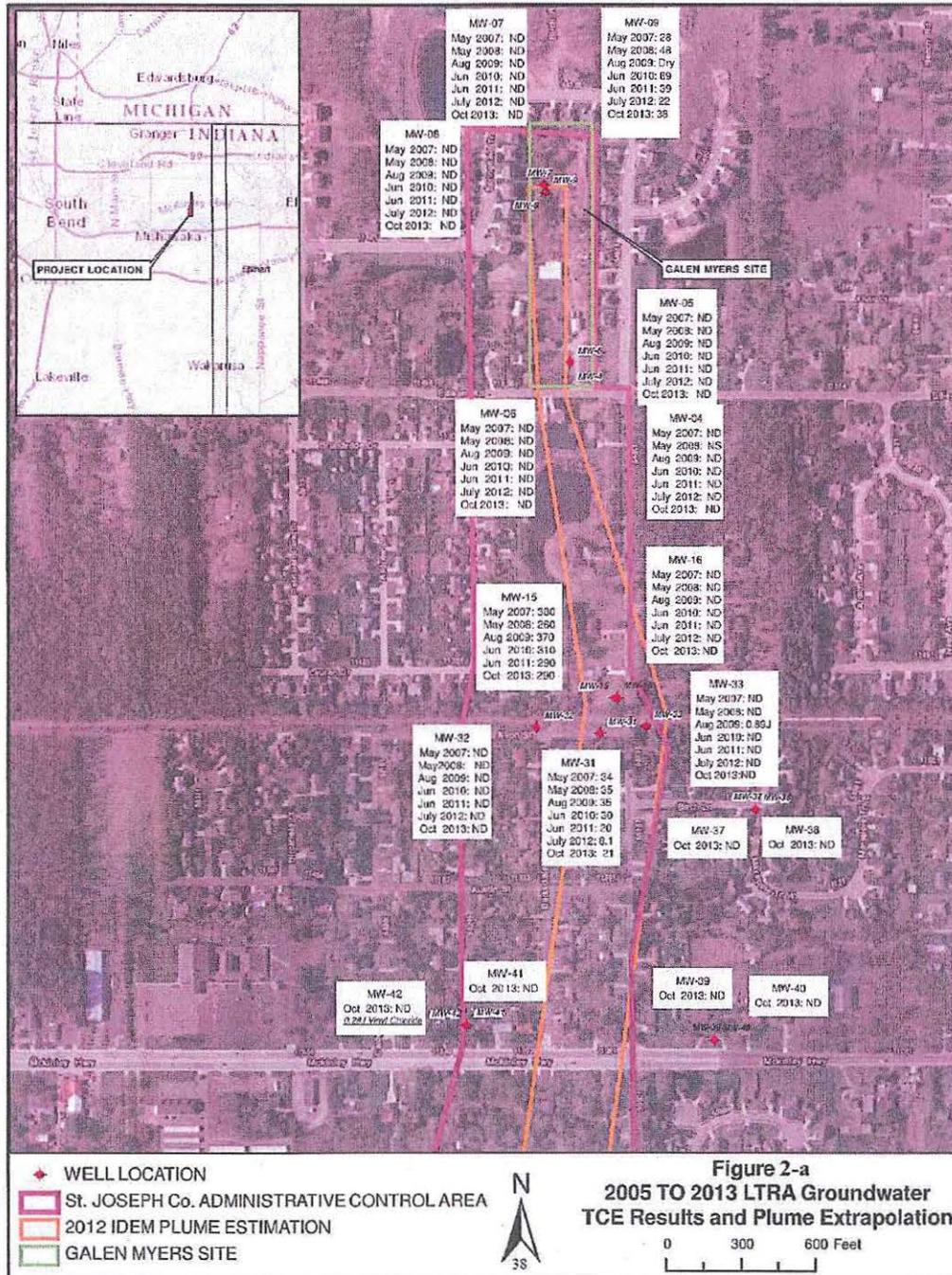


Figure 1 - Site Location Map
Galen Myers Dump & Drum
Salvage Site, Osceola, IN



Map scale - 1:250,000 Map created July 2007 by Michael Baker Jr., Inc.

Figures 2-a and 2-b: 2005-2013 LTRA GW TCE Results and Plume Extrapolation Map



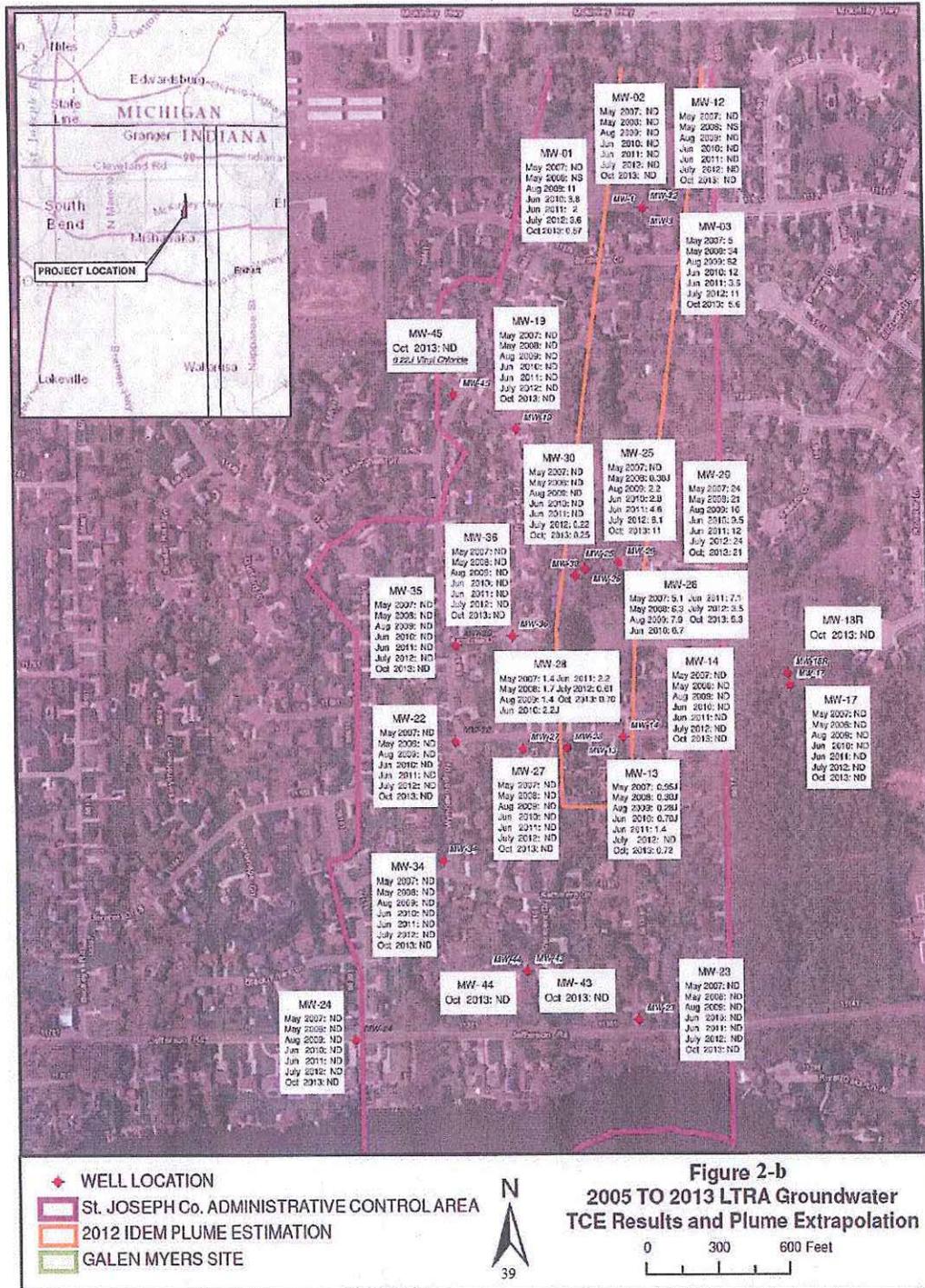
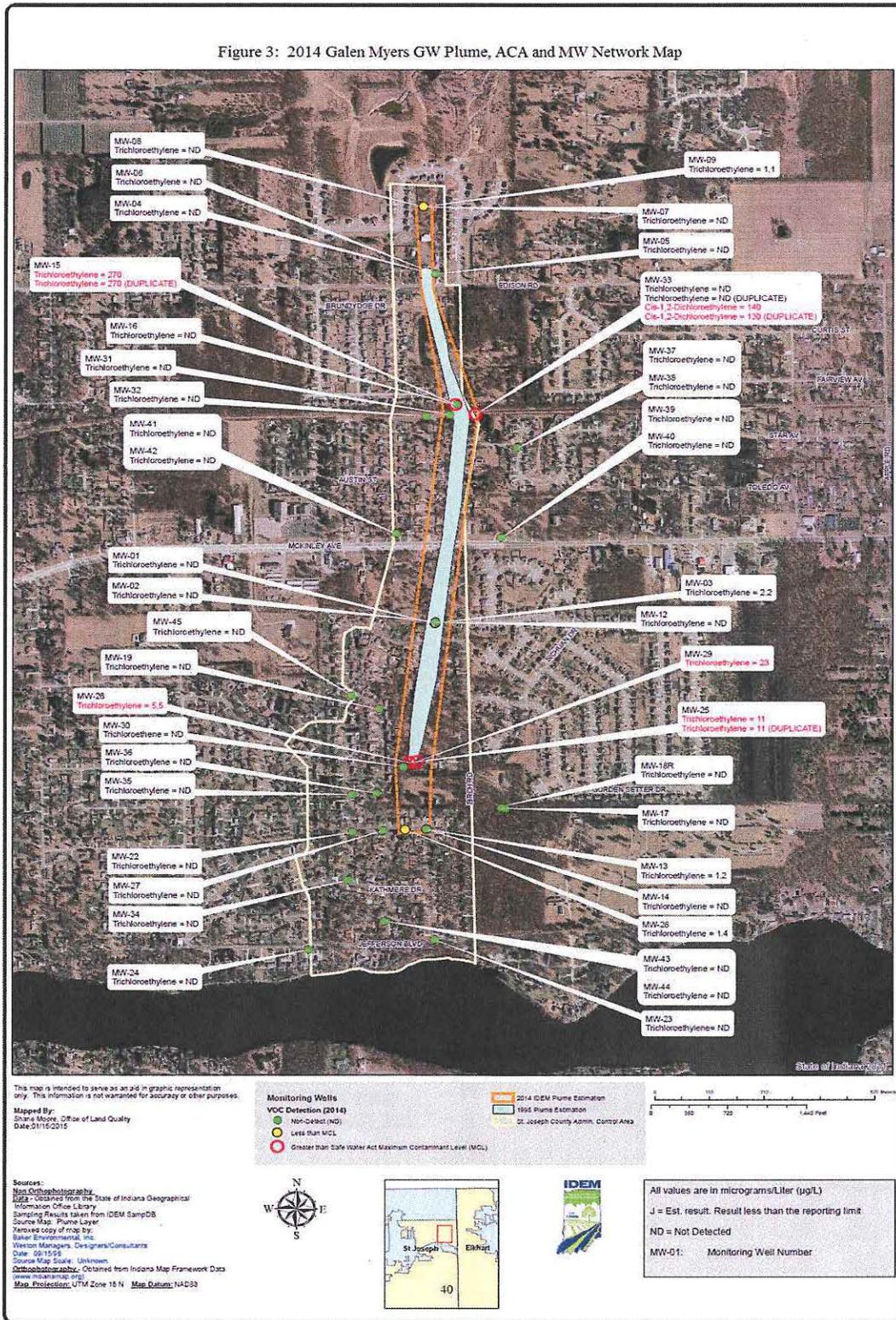


Figure 3: 2014 Groundwater Plume, Administrative Area of Control and Monitoring Well Network Map



Attachment 1: List of Documents Reviewed for Fourth Five-Year Review

Roy F. Weston, Inc., Ecological Assessment Report Galen Myers Dump/Drum Salvage Site. April 1995.

Roy F. Weston, Inc., Baseline Risk Assessment Report Galen Myers Dump/Drum Salvage Site. April 1995.

Roy F. Weston, Inc., Remedial Investigation Report Galen Myers Dump/Drum Salvage Site. June 1995.

Roy F. Weston, Inc., Supplemental Baseline Risk Assessment Report Galen Myers Dump/Drum Salvage Site. July 1995.

Roy F. Weston, Inc., Feasibility Study Report Galen Myers Dump/Drum Salvage Site. July 1995.

IDEM, Declaration for the Record of Decision for Galen Myers Dump/Drum Salvage. September 29, 1995.

St. Joseph County Health Department, Well Drilling and Water Supply Systems Ordinance. September 15, 1998.

Baker Environmental, Inc., Remedial Design Field Investigation Report for the Galen Myers Dump/Drum Salvage Site. September 25, 1998.

IDEM, Explanation of Significant Differences Galen Myers Dump/Drum Salvage. September 30, 1998.

EPA, Institutional Control Plan for Galen Myers Dump/Drum Salvage. November 2008.

St. Joseph County Health Department, 2009 Annual Review of Administrative Control Area ACA--0004, Galen Myers. February 2, 2010.

IDEM, Third Five-Year Review Report for Galen Myers Dump/Drum Salvage, Osceola, Indiana. May 10, 2010

Michael Baker Jr., Inc., Long-Term Response Action (LTRA) 2010 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site. Osceola, Indiana. October 2010.

Michael Baker Jr., Inc., Long-Term Response Action (LTRA) 2011 Semi-Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site. Osceola, Indiana. February 2011.

Michael Baker Jr., Inc., Long-Term Response Action (LTRA) 2012 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site. Osceola, Indiana. February 2012.

Michael Baker Jr., Inc., Long-Term Response Action (LTRA) 2012 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site, Osceola, Indiana (December 2012)

IDEM, Limited Groundwater Investigation Report, Galen Myers Dump/Drum Salvage Superfund Site, Osceola, St. Joseph County, Indiana (May 10, 2013)

Michael Baker Jr., Inc., Long-Term Response Action (LTRA) 2013 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site, Osceola, Indiana (January 2014)

Michael Baker Jr., Inc., Galen Myers LTRA Completion Report (February 2014)

IDEM, 2014 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site. Osceola, Indiana (February 2015)

Attachment 2: Biennial Residential Notification Letters



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603

Toll Free (800) 451-6027
www.idem.IN.gov

May 15, 2013

Mr. Marc Nelson
St. Joseph County Health Department
227 W. Jefferson Blvd
9th Floor, City-County Building
South Bend, IN 46601

Dear Mr. Nelson:

Re: Galen Myers Dump/Drum
Salvage Superfund Site
Groundwater Plume - Biennial
Notification Letters

An Institutional Control (IC) Plan for the Galen Myers Dump/Drum Salvage Superfund site was prepared by the U.S. Environmental Protection Agency (US EPA) and Indiana Department of Environmental Management (IDEM) in 2008. According to the IC Plan, residents that declined hookup to municipal water during the US EPA's 1996 removal action will receive biennial notification letters from IDEM. I have enclosed one copy of the site figure and one example of each style of letter mailed to twenty-two (22) residences. The following is an explanation of the five letter styles that were mailed on May 14, 2013.

- **Style 1:** Mailed to a residence (11388 Kathmere Drive) that has not had its private well sampled by IDEM or US EPA. During the preparation of the Third Five-Year Review Report it was discovered by the St. Joseph County Health Department that the property owner retracted their agreement with US EPA to be connected to municipal water.
- **Style 2:** Mailed to five residences that had their private well last sampled by IDEM in January 2002, with the analytical results indicating no detections of trichloroethene (TCE).
- **Style 3:** Mailed to ten residences that had their private well last sampled by US EPA in January 2009, with analytical results indicating no detections of Galen Myers volatile organic compound (VOC) contaminants of concern.
- **Style 4:** Mailed to five residences that had their private well last sampled by US EPA in January 2009, with analytical results indicating no detections of Galen Myers VOC contaminants of concern exceeding US EPA drinking water Maximum Contaminant Levels (MCLs). However, low levels of one or more Galen Myers VOC contaminants of concern were detected.

Mr. Marc Nelson
Page 2 of 2

- Style 5: Mailed to a residence (55428 Barksdale Street) that had its private well last sampled by US EPA in January 2009, with TCE analytical results exceeding the MCL. In addition, low levels detections of 1,1,1-trichloroethane, cis-1,2-dichloroethene, and trans-1,2-dichloroethene were detected.

All of the letters are available by going to www.idem.IN.gov to access the IDEM Virtual File Cabinet (VFC). Please use the enclosed table to assist you in locating a copy of all the letters.

If you have any questions, please contact me at (317) 234-0353. Thank you for your assistance.

Sincerely,



Resa L. Ramsey
Federal Programs Section
Office of Land Quality

RLR: bl

Enclosures

cc: Rex Osborn, IDEM
Margaret Gielniewski, US EPA
Sheri Bianchin, US EPA
Thomas Turner, US EPA
Barbara Wester, US EPA
John Lankowicz, St. Joseph County Health Department
Mike Mettler, Indiana State Department of Health

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IDEM mailed biennial notification letters regarding the Galen Myers Dump/Drum Salvage Superfund Site groundwater plume to the following addresses on May 14, 2013. The IDEM Virtual File Cabinet (VFC) is an electronic database that allows access to Agency public records through the Internet. The following letters are available by going to www.idem.IN.gov to access the IDEM VFC: 1) select the "Virtual File Cabinet" located inside the "Online Services" box (top right portion of the web page); 2) find the "Document #" on the right side of the top line; and 3) enter the appropriate VFC document number.

	Address	Letter Style	IDEM VFC Document Number (residents names redacted)
1.	11388 Kathmere Drive Osceola, IN 46561	1	VFC document #68128145
2.	55124 Birch Road Osceola, IN 46561	2	VFC document #68128946
3.	55705 Birch Road Osceola, IN 46561	2	VFC document #68128987
4.	10842 East Jefferson Road Osceola, IN 46561	2	VFC document #68129038
5.	55760 Raintree Drive Osceola, IN 46561	2	VFC document #68129069
6.	56182 Windemere Drive Osceola, IN 46561	2	VFC document #68129090
7.	55190 Birch Road Osceola, IN 46561	3	VFC document #68129092
8.	55290 Birch Road Osceola, IN 46561	3	VFC document #68129093
9.	55675 Birch Road Osceola, IN 46561	3	VFC document #68129094
10.	55897 Birch Road Osceola, IN 46561	3	VFC document #68129095
11.	55915 Birch Road Osceola, IN 46561	3	VFC document #68129107
12.	56199 Birch Road Osceola, IN 46561	3	VFC document #68129124
13.	56081 Birchway Court Osceola, IN 46561	3	VFC document #68129131
14.	11438 East Jefferson Road Osceola, IN 46561	3	VFC document #68129132
15.	55810 Wynnewood Drive Osceola, IN 46561	3	VFC document #68129313
16.	56044 Wynnewood Drive Osceola, IN 46561	3	VFC document #68129695
17.	55130 Barksdale Street Osceola, IN 46561	4	VFC document #68129806
18.	55150 Barksdale Street Osceola, IN 46561	4	VFC document #68129807
19.	55120 Birch Road Osceola, IN 46561	4	VFC document #68129878
20.	11377 Birchtree Drive Osceola, IN 46561	4	VFC document #68129975
21.	11399 Birchtree Drive Osceola, IN 46561	4	VFC document #68130266
22.	55428 Barksdale Street Osceola, IN 46561	5	VFC document #68130467



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May 14, 2013

[REDACTED]
or Current Resident
11388 Kathmere Drive
Osceola, IN 46561

Dear [REDACTED]:

Re: Galen Myers Dump/Drum Salvage
Superfund Site Groundwater
Plume

You are receiving this letter as a reminder that your private water supply well is located in an area that either is, or could potentially be, impacted by a plume of contaminated groundwater coming from the property located at 11303 Edison Road, Osceola, Indiana. This property was formerly owned by Mr. Galen Myers. Mr. Myers operated a drum reclamation business from about 1970 to 1983. Drums from local industries were stored and recycled at the site property. The operation involved removing the tops of drums and dumping their contents into unlined pits and onto the ground surface at the site property. This property, as well as areas impacted by the groundwater plume, is known as the Galen Myers Dump/Drum Salvage Superfund site.

Due to the presence of residential groundwater users within the current and projected site groundwater plume migrational path, the following U.S. Environmental Protection Agency (EPA) drinking water Maximum Contaminant Level (MCLs) for groundwater contaminants of concern at the site were identified as cleanup levels in the September 29, 1995, EPA Record of Decision (ROD) for the Galen Myers Dump/Drum Salvage Superfund site. The groundwater plume is contaminated with trichloroethene (TCE), which is a volatile organic compound (VOC), and its breakdown products. The VOCs identified in the ROD for this site are listed below.

Contaminant of Concern	MCL Concentration micrograms per liter ($\mu\text{g/l}$)
Trichloroethene	5
1,1-dichloroethene	7
cis-1,2-dichloroethene	70
trans-1,2-dichloroethene	100
1,1,2-trichloroethane	5
1,2-dichloroethane	5
1,2-dichloroethene	70
vinyl chloride	2

In 1995 and 1996, the EPA provided Mishawaka Utilities water connections to the approximately 180 residences that accepted EPA's offer for city water hookup by the June 1996 deadline.

Our records indicate that you (or the owner in June 1996, if you purchased your home after that time), declined the opportunity to connect to a public water supply at that time.

Consequently, the future safety of the water supply well became the responsibility of the property owner. Indiana Department of Environmental Management (IDEM) staff will not be conducting future sampling and monitoring of your well. EPA may periodically sample your well.

For your own protection, you may want to connect to a municipal water supply or, if you choose to continue using your private water supply well, have your well water regularly tested by a private laboratory for VOCs.

The ROD required Institutional Controls (IC) be implemented to address groundwater impacts. The ICs at Galen Myers include the St. Joseph County Health Department (SJCHD) Well Drilling and Water Supply Systems Ordinance that restricts well installation in the plume area known as the Galen Myers Administrative Control Area (ACA). In addition, an IC Plan was prepared by EPA and IDEM in 2008 to ensure long-term stewardship and confirm that the remedy continues to function as designed. Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs.

The Third Five-Year Review Report was completed on May 20, 2010. The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The remedy at the Site is protective of human health and the environment in the short-term because the final remedy has been fully implemented except at the residences that declined hookup to municipal water. Steps have been taken by EPA and IDEM to inform those residents of the potential risks. Residents that declined hookup to municipal water will receive biennial notification letters from IDEM.

Monitoring well MW-33 is located along the eastern boundary of the Galen Myers ACA on the east side of Birch Road (near Avon Street just south of the railroad tracks), and is showing an increasing trend of cis-1,2-dichloroethene since August 2005. The MCL for cis-1,2-dichloroethene is 70 µg/L, and 140J µg/L cis-1,2-dichloroethene (estimated result, less than the analytical reporting limit) was detected in the MW-33 July 2012 sample. The SJCHD noted that the TCE daughter product cis-1,2-dichloroethene may have migrated beyond the boundaries of the Galen Myers ACA. The SJCHD will evaluate the need for expanding the Galen Myers ACA upon review of future sample results.

The enclosed table summarizes the analytical results for the contaminants of concern that have been detected in monitoring wells during the most recent sampling events. The locations of the Galen Myers Dump/Drum Salvage Superfund site monitoring wells are provided on the enclosed site figure. This information may help you decide the steps you should take to protect yourself from exposure to these contaminants.

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- December 2012, *Long-Term Response Action (LTRA) 2012 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site* (VFC document #67358759).

All Five-Year Review Reports are also available for review at the Mishawaka-Penn Public Library (Bittersweet Branch). Future sampling reports will be provided to the St. Joseph County Health Department (SJCHD), and made available in the IDEM VFC.

For your information, the SJCHD *Well Drilling and Water Supply System Ordinance* became effective on January 1, 1999, and was revised on August 1, 2005. The ordinance contains a number of provisions that may pertain to your property. For example, the ordinance gives the SJCHD the authority to deny a permit application to install a potable water well in an administrative control area (ACA), such as the Galen Myers ACA, where there is a known or potential groundwater contamination threat to public health and safety. The SJCHD also has authority to require installation of a water treatment system, sampling, and connection to a public water supply. Other provisions may apply if there is a municipal water line within 300 feet of your property.

Please be advised that if you choose to retain your water well and subsequently decide to sell your property, you may be required to disclose the presence of the contaminated groundwater as a "defect" pursuant to Indiana's Responsible Property Transfer Law (IC 13-25-3) and/or the Residential Real Estate Sales Disclosure Law (IC 32-21-5).

If you have any questions concerning this matter, please contact me at (317) 234-0353.

Sincerely,



Resa L. Ramsey
Federal Programs Section
Office of Land Quality

RLR: bl

Enclosures

cc: Rex Osborn, IDEM
Margaret Gielniewski, US EPA
Sheri Bianchin, US EPA
Thomas Turner, US EPA
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May 14, 2013

[Redacted]
or Current Resident
55124 Birch Road
Osceola, IN 46561

Dear [Redacted]:

Re: Galen Myers Dump/Drum Salvage
Superfund Site Groundwater
Plume

You are receiving this letter as a reminder that your private water supply well is located in an area that either is, or could potentially be, impacted by a plume of contaminated groundwater coming from the property located at 11303 Edison Road, Osceola, Indiana. This property was formerly owned by Mr. Galen Myers. Mr. Myers operated a drum reclamation business from about 1970 to 1983. Drums from local industries were stored and recycled at the site property. The operation involved removing the tops of drums and dumping their contents into unlined pits and onto the ground surface at the site property. This property, as well as areas impacted by the groundwater plume, is known as the Galen Myers Dump/Drum Salvage Superfund site.

Due to the presence of residential groundwater users within the current and projected site groundwater plume migrational path, the following EPA drinking water Maximum Contaminant Level (MCLs) for groundwater contaminants of concern at the site were identified as cleanup levels in the September 29, 1995, EPA Record of Decision (ROD) for the Galen Myers Dump/Drum Salvage Superfund site. The groundwater plume is contaminated with trichloroethene (TCE), which is a volatile organic compound (VOC), and its breakdown products. The VOCs identified in the ROD for this site are listed below.

Contaminant of Concern	MCL Concentration micrograms per liter (µg/l)
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1,1,2-trichloroethane	5
1,2-dichloroethane	5
1,2-dichlorethene	70
vinyl chloride	2

In 1995 and 1996, the U.S. Environmental Protection Agency (EPA) provided Mishawaka Utilities water connections to the approximately 180 residences that accepted EPA's offer for city water hookup by the June 1996 deadline.

Our records indicate that you (or the owner in June 1996, if you purchased your home after that time), declined the opportunity to connect to a public water supply at that time.

Consequently, the future safety of the water supply well became the responsibility of the property owner. No TCE was previously found in your well when your tap water was sampled by the Indiana Department of Environmental Management (IDEM) in January 2002. IDEM staff provided the results in a letter mailed to this address on February 28, 2002. Although the analytical results indicated your well was safe to use in January 2002, the quality of your well water may not remain safe in the future. As explained in prior correspondence from our agency, IDEM staff will not be conducting future sampling and monitoring of your well. EPA may periodically sample your well.

For your own protection, you may want to connect to a municipal water supply or, if you choose to continue using your private water supply well, have your well water regularly tested by a private laboratory for VOCs.

The ROD required Institutional Controls (IC) be implemented to address groundwater impacts. The ICs at Galen Myers include the St. Joseph County Health Department (SJCHD) Well Drilling and Water Supply Systems Ordinance that restricts well installation in the plume area known as the Galen Myers Administrative Control Area (ACA). In addition, an IC Plan was prepared by EPA and IDEM in 2008 to ensure long-term stewardship and confirm that the remedy continues to function as designed. Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs.

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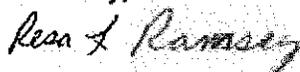
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For your information, the SJCHD *Well Drilling and Water Supply System Ordinance* became effective on January 1, 1999, and was revised on August 1, 2005. The ordinance contains a number of provisions that may pertain to your property. For example, the ordinance gives the SJCHD the authority to deny a permit application to install a potable water well in an administrative control area (ACA), such as the Galen Myers ACA, where there is a known or potential groundwater contamination threat to public health and safety. The SJCHD also has authority to require installation of a water treatment system, sampling, and connection to a public water supply. Other provisions may apply if there is a municipal water line within 300 feet of your property.

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If you have any questions concerning this matter, please contact me at (317) 234-0353.

Sincerely,



Resa L. Ramsey
Federal Programs Section
Office of Land Quality

RLR: bl

Enclosures

cc: Rex Osborn, IDEM
Margaret Gielniewski, US EPA
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May 14, 2013

[REDACTED]
or Current Resident
55190 Birch Road
Osceola, IN 46561

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Superfund Site Groundwater
Plume

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vinyl chloride	2

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Consequently, the future safety of the water supply well became the responsibility of the property owner. No TCE was previously found in your well when your tap water was sampled by the Indiana Department of Environmental Management (IDEM) in January 2002. As explained in prior correspondence from our agency, IDEM staff will not be conducting future sampling and monitoring of your well. EPA may periodically sample your well.

EPA last sampled your water supply well in January 2009. EPA staff provided the results in a letter mailed to this address on May 8, 2009, and the results at that time showed no detections exceeding the MCLs for drinking water. Although the analytical results indicated your well was safe to use in January 2009, the quality of your well water may not remain safe in the future.

For your own protection, you may want to connect to a municipal water supply or, if you choose to continue using your private water supply well, have your well water regularly tested by a private laboratory for VOCs.

The ROD required Institutional Controls (IC) be implemented to address groundwater impacts. The ICs at Galen Myers include the St. Joseph County Health Department (SJCHD) Well Drilling and Water Supply Systems Ordinance that restricts well installation in the plume area known as the Galen Myers Administrative Control Area (ACA). In addition, an IC Plan was prepared by EPA and IDEM in 2008 to ensure long-term stewardship and confirm that the remedy continues to function as designed. Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs.

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If you have any questions concerning this matter, please contact me at (317) 234-0353.

Sincerely,



Resa L. Ramsey
Federal Programs Section
Office of Land Quality

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Enclosures

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

May 14, 2013

[Redacted]
or Current Resident
55130 Barksdale Street
Osceola, IN 46561

Dear [Redacted]:

Re: Galen Myers Dump/Drum Salvage
Superfund Site Groundwater
Plume

You are receiving this letter as a reminder that your private water supply well is located in an area that either is, or could potentially be, impacted by a plume of contaminated groundwater coming from the property located at 11303 Edison Road, Osceola, Indiana. This property was formerly owned by Mr. Galen Myers. Mr. Myers operated a drum reclamation business from about 1970 to 1983. Drums from local industries were stored and recycled at the site property. The operation involved removing the tops of drums and dumping their contents into unlined pits and onto the ground surface at the site property. This property, as well as areas impacted by the groundwater plume, is known as the Galen Myers Dump/Drum Salvage Superfund site.

Due to the presence of residential groundwater users within the current and projected site groundwater plume migrational path, the following EPA drinking water Maximum Contaminant Level (MCLs) for groundwater contaminants of concern at the site were identified as cleanup levels in the September 29, 1995, EPA Record of Decision (ROD) for the Galen Myers Dump/Drum Salvage Superfund site. The groundwater plume is contaminated with trichloroethene (TCE), which is a volatile organic compound (VOC), and its breakdown products. The VOCs identified in the ROD for this site are listed below.

Contaminant of Concern	MCL Concentration micrograms per liter (µg/l)
Trichloroethene	5
1,1-dichloroethene	7
cis-1,2-dichloroethene	70
trans-1,2-dichloroethene	100
1,1,2-trichloroethane	5
1,2-dichloroethane	5
1,2-dichloroethene	70
vinyl chloride	2

In 1995 and 1996, the U.S. Environmental Protection Agency (EPA) provided Mishawaka Utilities water connections to the approximately 180 residences that accepted EPA's offer for city water hookup by the June 1996 deadline.

Our records indicate that you (or the owner in June 1996, if you purchased your home after that time), declined the opportunity to connect to a public water supply at that time.

Consequently, the future safety of the water supply well became the responsibility of the property owner. No TCE was previously found in your well when your tap water was sampled by the Indiana Department of Environmental Management (IDEM) in January 2002. As explained in prior correspondence from our agency, IDEM staff will not be conducting future sampling and monitoring of your well. EPA may periodically sample your well.

EPA last sampled your water supply well in January 2009. EPA staff provided the results in a letter mailed to this address on May 8, 2009, and the results at that time showed no detections exceeding the MCLs for drinking water. However, low level detections of cis-1,2-dichloroethene (2 µg/l), trans-1,2-dichloroethene (0.3J µg/l; estimated because the laboratory result is less than the reporting limit), and vinyl chloride (0.48J µg/l) were detected in your well. Although the analytical results indicated your well was safe to use in January 2009, the quality of your well water may not remain safe in the future.

For your own protection, you may want to connect to a municipal water supply or, if you choose to continue using your private water supply well, have your well water regularly tested by a private laboratory for VOCs.

The ROD required Institutional Controls (IC) be implemented to address groundwater impacts. The ICs at Galen Myers include the St. Joseph County Health Department (SJCHD) Well Drilling and Water Supply Systems Ordinance that restricts well installation in the plume area known as the Galen Myers Administrative Control Area (ACA). In addition, an IC Plan was prepared by EPA and IDEM in 2008 to ensure long-term stewardship and confirm that the remedy continues to function as designed. Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs.

The Third Five-Year Review Report was completed on May 20, 2010. The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The remedy at the Site is protective of human health and the environment in the short-term because the final remedy has been fully implemented except at the residences that declined hookup to municipal water. Steps have been taken by EPA and IDEM to inform those residents of the potential risks. Residents that declined hookup to municipal water will receive biennial notification letters from IDEM.

Monitoring well MW-33 is located along the eastern boundary of the Galen Myers ACA on the east side of Birch Road (near Avon Street just south of the railroad tracks), and is showing an increasing trend of cis-1,2-dichlorethene since August 2005. The MCL for cis-1,2-dichlorethene is 70 µg/L, and 140J µg/L cis-1,2-dichlorethene (estimated result, less than the analytical reporting limit) was detected in the MW-33 July 2012 sample. The SJCHD noted that the TCE daughter product cis-1,2-dichlorethene may have migrated beyond the boundaries of the Galen Myers ACA. The SJCHD will evaluate the need for expanding the Galen Myers ACA upon review of future sample results.

The enclosed table summarizes the analytical results for the contaminants of concern that have been detected in monitoring wells during the most recent sampling events. The locations of the Galen Myers Dump/Drum Salvage Superfund site monitoring wells are provided on the enclosed site figure. This information may help you decide the steps you should take to protect yourself from exposure to these contaminants.

The IDEM Virtual File Cabinet (VFC) is an electronic database that allows access to Agency public records through the Internet. The following reports are available by going to www.idem.IN.gov to access the IDEM VFC: 1) select the "Virtual File Cabinet" located inside the

"Online Services" box (top right portion of the web page); 2) find the "Document #" on the right side of the top line; and 3) enter the appropriate VFC document number:

- May 2010, *Third Five-Year Review Report* (VFC document #55995063).
- December 2012, *Long-Term Response Action (LTRA) 2012 Annual Sampling Event for Galen Myers Dump/Drum Salvage Superfund Site* (VFC document #67358759).

All Five-Year Review Reports are also available for review at the Mishawaka-Penn Public Library (Bittersweet Branch). Future sampling reports will be provided to the St. Joseph County Health Department (SJCHD), and made available in the IDEM VFC.

For your information, the SJCHD *Well Drilling and Water Supply System Ordinance* became effective on January 1, 1999, and was revised on August 1, 2005. The ordinance contains a number of provisions that may pertain to your property. For example, the ordinance gives the SJCHD the authority to deny a permit application to install a potable water well in an administrative control area (ACA), such as the Galen Myers ACA, where there is a known or potential groundwater contamination threat to public health and safety. The SJCHD also has authority to require installation of a water treatment system, sampling, and connection to a public water supply. Other provisions may apply if there is a municipal water line within 300 feet of your property.

Please be advised that if you choose to retain your water well and subsequently decide to sell your property, you may be required to disclose the presence of the contaminated groundwater as a "defect" pursuant to Indiana's Responsible Property Transfer Law (IC 13-25-3) and/or the Residential Real Estate Sales Disclosure Law (IC 32-21-5).

If you have any questions concerning this matter, please contact me at (317) 234-0353.

Sincerely,



Resa L. Ramsey
Federal Programs Section
Office of Land Quality

RLR: bl

Enclosures

cc: Rex Osborn, IDEM
Margaret Gielniewski, US EPA
Sheri Bianchin, US EPA
Thomas Turner, US EPA
Barbara Wester, US EPA
Marc Nelson, St. Joseph County Health Department
Mike Mettler, Indiana State Department of Health

If you would like to provide IDEM with feedback on our job performance, please go to <http://www.in.gov/idem/5681.htm> and complete our "Remediation Program Customer Satisfaction Survey". Your responses are anonymous and we appreciate the feedback on what we are doing well, and what we need to improve.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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May 14, 2013

[REDACTED]
or Current Resident
55428 Barksdale Street
Osceola, IN 46561

Dear [REDACTED]:

Re: Galen Myers Dump/Drum Salvage
Superfund Site Groundwater
Plume

The St. Joseph County Health Department (SJCHD) recently provided Indiana Department of Environmental Management (IDEM) information indicating your residence is now connected to municipal water. It is my understanding that you have been directed to have your private well appropriately abandoned in accordance with St. Joseph County Code 52. Please notify IDEM of the status of your private well. In case your private well has not yet been abandoned, you are receiving this letter as a reminder that your private water supply well is located in an area that either is, or could potentially be, impacted by a plume of contaminated groundwater coming from the property located at 11303 Edison Road, Osceola, Indiana. This property was formerly owned by Mr. Galen Myers. Mr. Myers operated a drum reclamation business from about 1970 to 1983. Drums from local industries were stored and recycled at the site property. The operation involved removing the tops of drums and dumping their contents into unlined pits and onto the ground surface at the site property. This property, as well as areas impacted by the groundwater plume, is known as the Galen Myers Dump/Drum Salvage Superfund site.

Due to the presence of residential groundwater users within the current and projected site groundwater plume migrational path, the following EPA drinking water Maximum Contaminant Level (MCLs) for groundwater contaminants of concern at the site were identified as cleanup levels in the September 29, 1995, EPA Record of Decision (ROD) for the Galen Myers Dump/Drum Salvage Superfund site. The groundwater plume is contaminated with trichloroethene (TCE), which is a volatile organic compound (VOC), and its breakdown products. The VOCs identified in the ROD for this site are listed below.

Contaminant of Concern	MCL Concentration micrograms per liter ($\mu\text{g/l}$)
Trichloroethene	5
1,1-dichloroethene	7
cis-1,2-dichloroethene	70
trans-1,2-dichloroethene	100
1,1,2-trichloroethane	5
1,2-dichloroethane	5
1,2-dichloroethene	70
vinyl chloride	2

In 1995 and 1996, the U.S. Environmental Protection Agency (EPA) provided Mishawaka Utilities water connections to the approximately 180 residences that accepted EPA's offer for city water hookup by the June 1996 deadline.

Our records indicate that you (or the owner in June 1996, if you purchased your home after that time), declined the opportunity to connect to a public water supply at that time. Consequently, the future safety of the water supply well became the responsibility of the property owner. The MCL for drinking water for TCE acceptable in a public water supply is 5 micrograms per liter ($\mu\text{g/l}$). Elevated levels of TCE ($61 \mu\text{g/l}$) were previously found in your well when your tap water was sampled by the IDEM in January 2002. As explained in prior correspondence from our agency, IDEM staff will not be conducting future sampling and monitoring of your well. EPA may periodically sample your well.

EPA last sampled your water supply well in January 2009, and the results at that time showed high levels of TCE contamination. EPA staff provided the results in a letter mailed to this address on May 8, 2009. The amount of TCE detected in your well in January 2009 was $46\text{J} \mu\text{g/l}$ (estimated because the laboratory result is less than the reporting limit). In addition, low levels detections of 1,1,1-trichloroethane ($0.39\text{J} \mu\text{g/l}$), cis-1,2-dichloroethene ($18 \mu\text{g/l}$), and trans-1,2-dichloroethene ($0.19\text{J} \mu\text{g/l}$) were detected in your well. These levels are above the limit that EPA considers safe for drinking water.

For your own protection, you may want to connect to a municipal water supply. If you choose to continue using your private water supply well, a) you should maintain a water treatment system, and b) have your well water regularly tested by a private laboratory for volatile organic compounds (VOCs).

The ROD required Institutional Controls (IC) be implemented to address groundwater impacts. The ICs at Galen Myers include the St. Joseph County Health Department (SJCHD) Well Drilling and Water Supply Systems Ordinance that restricts well installation in the plume area known as the Galen Myers Administrative Control Area (ACA). In addition, an IC Plan was prepared by EPA and IDEM in 2008 to ensure long-term stewardship and confirm that the remedy continues to function as designed. Long-term protectiveness will be ensured through continued groundwater monitoring to assess the movement and biodegradation of the TCE plume, and through compliance with effective ICs.

The Third Five-Year Review Report was completed on May 20, 2010. The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The remedy at the Site is protective of human health and the environment in the short-term because the final remedy has been fully implemented except at the residences that declined hookup to municipal water. Steps have been taken by EPA and IDEM to inform those residents of the potential risks. Residents that declined hookup to municipal water will receive biennial notification letters from IDEM.

Monitoring well MW-33 is located along the eastern boundary of the Galen Myers ACA on the east side of Birch Road (near Avon Street just south of the railroad tracks), and is showing an increasing trend of cis-1,2-dichloroethene since August 2005. The MCL for cis-1,2-dichloroethene is $70 \mu\text{g/L}$, and $140\text{J} \mu\text{g/L}$ cis-1,2-dichloroethene (estimated result, less than the analytical reporting limit) was detected in the MW-33 July 2012 sample. The SJCHD noted that the TCE daughter product cis-1,2-dichloroethene may have migrated beyond the boundaries of the Galen Myers ACA. The SJCHD will evaluate the need for expanding the Galen Myers ACA upon review of future sample results.

The enclosed table summarizes the analytical results for the contaminants of concern that have been detected in monitoring wells during the most recent sampling events. The locations of the Galen Myers Dump/Drum Salvage Superfund site monitoring wells are provided on the

enclosed site figure. This information may help you decide the steps you should take to protect yourself from exposure to these contaminants.

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Please be advised that if you choose to retain your water well and subsequently decide to sell your property, you may be required to disclose the presence of the contaminated groundwater as a "defect" pursuant to Indiana's Responsible Property Transfer Law (IC 13-25-3) and/or the Residential Real Estate Sales Disclosure Law (IC 32-21-5).

If you have any questions concerning this matter, please contact me at (317) 234-0353.

Sincerely,



Resa L. Ramsey
Federal Programs Section
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Enclosures

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Thomas Turner, US EPA
Barbara Wester, US EPA
Marc Nelson, St. Joseph County Health Department
Mike Mettler, Indiana State Department of Health

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The following table summarizes Galen Myers groundwater plume contaminants of concern detected during the July 2012 Long-Term Response Action (LTRA) 2012 Annual Sampling Event.

	MCL	MW-01	MW-03	MW-07	MW-09	MW-13	MW-14	MW-15	MW-17	MW-25	MW-26	MW-28	MW-29	MW-30	MW-31	MW-32	MW-33
Trichloroethene July 2012 sample	5	3.6	11	ND	22	ND	ND	270	ND	8.1	5.5	0.61 J	24	0.22 J	8.1	ND	ND
Highest Detection (sample date)		11 (08/2009)	190 (05/1994)	1.6 µg/l (12/2002)	1,000 (05/1994)	1.4 (06/2011)	1 J µg/l (08/2005)	4,800 (05/1994)	1 J (08/2005)	8.1 (07/2012)	8 (12/2010)	2.7 (11/2007)	40 (12/2002)	0.22 J (07/2012)	42 (12/2002)	0.31 J (12/2010)	0.89 J (08/2009)
Cis-1,2-Dichloroethene July 2012 sample	70	0.32 J	17	ND	0.25 J	ND	ND	6.4 J	ND	2.5	3.5	ND	6.1	ND	3.8	0.24 J µg/l	140 J
Highest Detection (sample date)		0.71 J (08/2009)	32 (05/2008)	ND	2.8 (05/2008)	ND	ND	19 (12/2002)	ND	2.5 (07/2012)	5.4 (06/2011)	0.91 J (06/2011)	18 (06/2011)	ND	4.7 (08/2009)	0.26 J (06/2010) (12/2010)	140 J (07/2012)
trans-1,2-dichloroethene July 2012 sample	100	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J
Highest Detection (sample date)		ND	0.61 J (05/2008)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J (08/2009)	ND	1.8 J (08/2009) (07/2012)
1,1,1-Trichloroethane July 2012 sample	200	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Highest Detection (sample date)		ND	0.51 (05/2008)	ND	9.4 (12/2002)	ND	ND	11 (12/2001)	ND	ND	ND	ND	ND	ND	1.3 (06/2002)	ND	ND
Vinyl Chloride July 2012 sample	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Highest Detection (sample date)		ND	ND	ND	ND	ND	ND	2 (12/2002)	ND	ND	ND	ND	ND	ND	1.4 (06/2002)	ND	1 J (08/2005)

Sample results reported in micrograms per liter (µg/l).

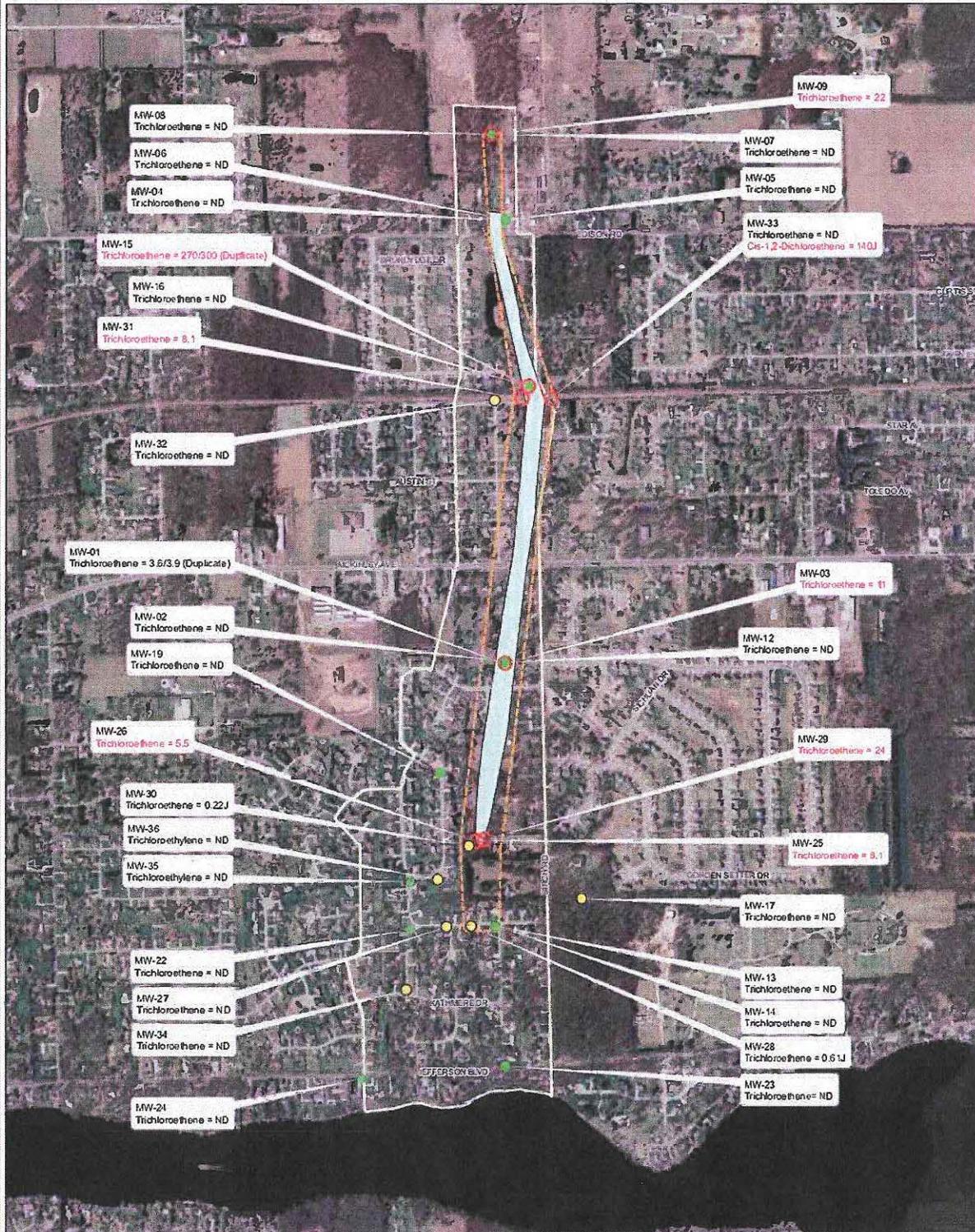
MCL - U.S. Environmental Protection Agency (EPA) drinking water Maximum Contaminant Level.

Bold font indicates result is greater than the MCL.

ND - Result is nondetect.

J - Result qualified as estimated because it is less than the reporting limit, but greater than or equal to the method detection limit.

Galen Myers Dump/Drum Salvage Superfund Site



This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

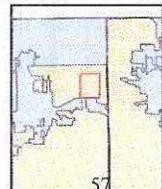
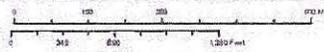
Mapped By: Shane Moore, Office of Land Quality
Date: 05/07/2013

Source: Non-Orthographic
Data: Obtained from the State of Indiana Geographical Information Office Library
Source Map: Pione Layer
Xeroxed copy of map by: Baker Environmental, Inc., Western Managers, Designers/Consultants
Date: 09/15/98
Source Map Scale: Unknown
Orthographic by: Obtained from Indiana Map Framework Data
Map Projection: UTM Zone 18 N
Map Datum: NAD83

VOC Detection

- Non-Detect (ND)
- Less than MCL
- Greater than Safe Water Act Maximum Contaminant Level (MCL)

- 2012 IDEM Plume Estimation
- 1995 Plume Estimation
- St. Joseph County Admin. Control Area



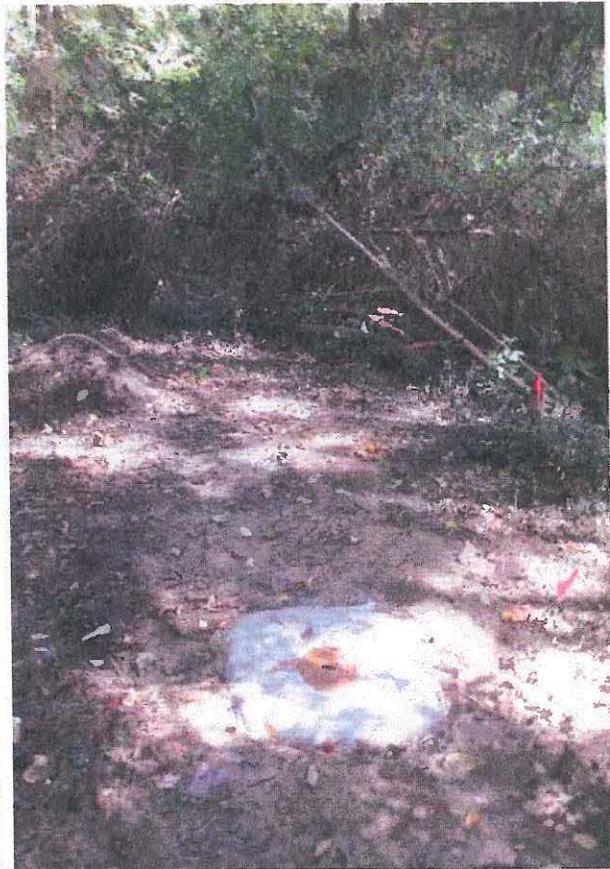
All values are in micrograms/Liter (µg/L)
J = Est. result. Result less than the reporting limit
ND = Not Detected
MW-01: Monitoring Well Number

Attachment 3: 2013-2014 Photograph Log

Photograph Log: Photos courtesy of IDEM Staff



Flush mount concrete pad for MW-18R (view north)



Flush mount concrete pad for MW-18R (view east)



IDEM repaired ruts at 55755 Raintree Drive (view west)



Flush mount concrete pad for MW-45 (view east)



(view southwest)



(view northwest)

Flush mount concrete pads for MW-37 and MW-38



(view north)

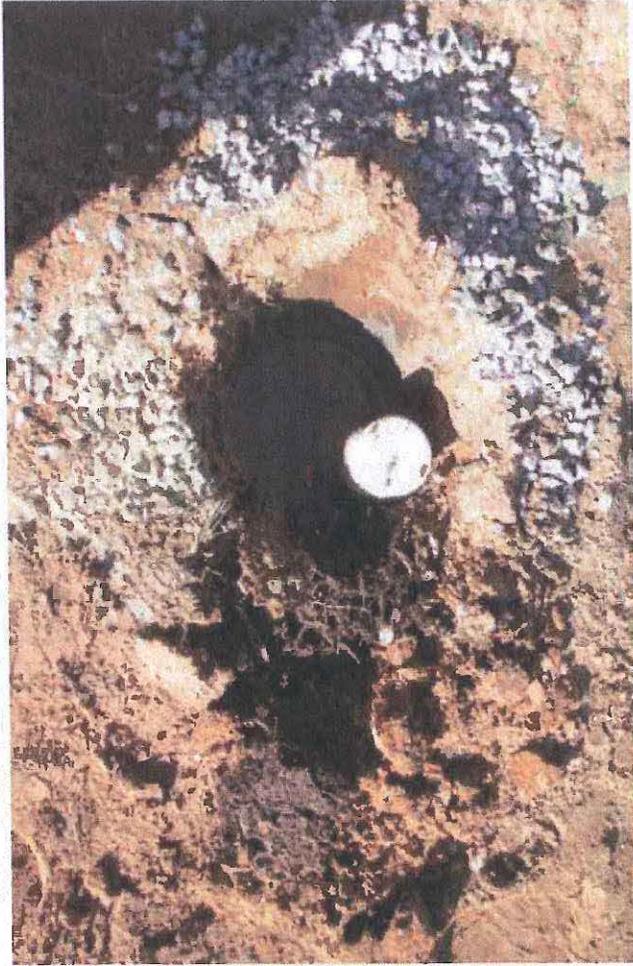


(view east)

Flush mount concrete pads for MW-41 and MW-42



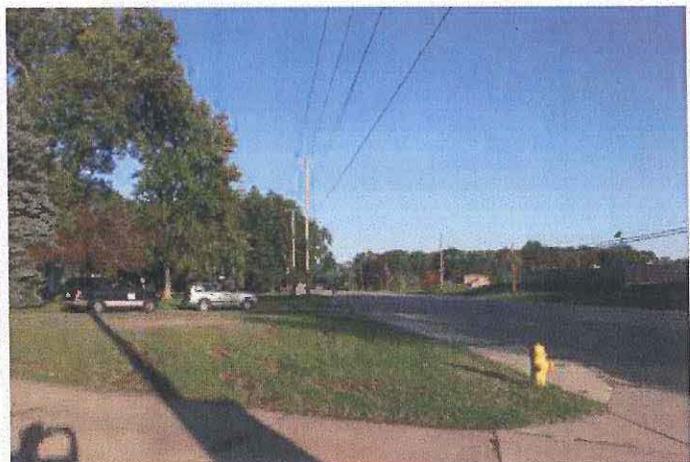
10/07/2013: Drilling MW-39 (view southeast).



10/07/2013: MW-40.



10/07/2013 MW-39



Repaired ruts at 11195 McKinley Hwy (view east)

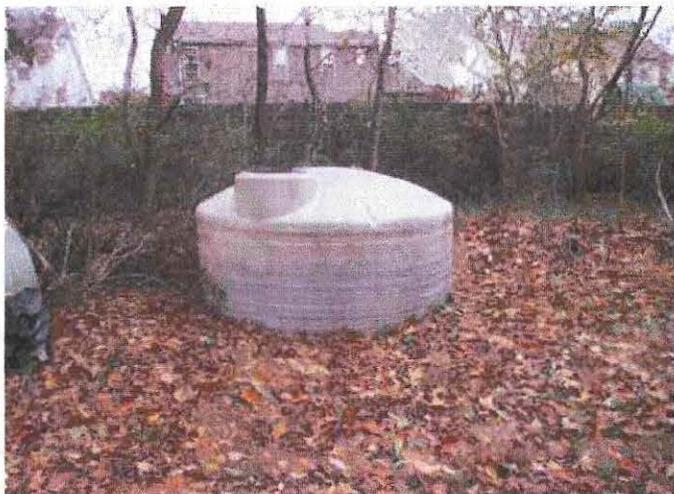


(view west)



(view east)

Flush mount concrete pads for MW-43 and MW-44



Purged ground water stored at 11303 Edison Rd.



10/14/2013: Deploying passive diffusion sampler in MW-17.



10/14/2013: Deploying passive diffusion samplers in MW-01.



10/28/2013: Retrieved passive diffusion samplers in MW-01.
Two passive diffusion samplers deployed to ensure there was enough collected for a duplicate sample.



11/07/2013: Maintenance to flush mount pad for MW-16.



(view west)



11/07/2013 Maintenance to flush mount pad for MW-27 and MW-28



Concrete pad replacement for MW-34

Attachment 4: Public Notice Announcing Fourth Five-Year Review

Land From Page A1

work before re-selling it. Sharon Fedderson worries the city, if it buys the land, would be stuck with a piece of property it can't re-sell, but is obliged to maintain. "I think it's going to be one more lot to mow," she said.

Steve Eldridge, president of the Elkhart Redevelopment Commission, said just because the projects are identified on a list doesn't mean they'll be done. "It's flexible. It's not set in stone," he said.

That said, the most concrete means to stall the project would seemingly be for the Elkhart City Council to reject the proposal to issue \$6 million in bonds for the varied plans, according to Eldridge. The council is to take up the \$6 million bond question at its meeting on March 16, following the decision Tuesday by redevelopment officials to green-light the bonding.

If the council approves the bond issue, funding becomes available to buy the Jackson Boulevard land and the city would be required to follow through with the deal, per terms of the \$600,000 purchase agreement, according to Gary Boyen, the redevelopment commission legal counsel. The old Allick's Home Medical Equipment building sits on the Jackson Boulevard land in question.

The Jackson Boulevard proposal is one of several aimed at beautifying the area in and around the city center and augmenting its drawing power. Other elements call for improvements to the sidewalks along Main Street north and south of the downtown area, upgrades to the New York Central Railroad Museum and improvements to the Civic Plaza off Main Street.

Funds to pay for the bonds would come from money generated by the Downtown Tax Increment Finance district.

Follow reporter Tim Vandenaar on Twitter at @timvandenaar or visit him on Facebook.



Bill Van Patten Jr. adjusts his Geiger counter, an instrument used to measure radiation, Tuesday, March 10, at his home in east Elkhart.

Fallout From Page A1

The shelter makes up the entire basement of the museum, from the front stairs to the boiler room in the back. Concrete ceilings top the narrow corridors that wind through the windowless rooms in the shelter, which Burns said would have protected occupants against nuclear radiation.

The basement is also stocked with simple amenities, such as heat, water and bathrooms. There's also a kitchenette at the corner of the shelter, complete with stovetops, an oven and a mini fridge.

Burns said there are still boxes of rations still unopened and stacked in a small room at the back of the building.

The sides of the brown cardboard boxes dated 1962 read "survival ration biscuits." When Burns first opened up these boxes with a knife, she found that each contained two large silver tins and a can opener.

"So we opened up one of the tins, and I'm talking at least a gallon, a gallon-and-a-half-sized tin," she said. "They called them biscuits, but they were nothing more than, like, saline crackers. Lots of them."

Burns gave the biscuits a try. They tasted like "old stale crackers" but were still edible, she said.

There were also 17½ gallon barrels for storing water, buckets to be used as portable toilets and plastic sheets for people to sleep on.

The building was first built in 1921 and opened as the St. Joseph Valley Bank a year later. The Midwest Museum of American Art opened in the building in 1979.

With Cold War fears waning in the decades since the '50s, the shelter is now a storage space for paintings and sculptures to be used for future exhibitions at the museum. Canvases are stacked on shelves and propped against walls behind the vault doors that once held the bank's valuables.

CIVIL DEFENSE

It's been decades since Bill Van Patten Jr. was the public relations officer for the Elkhart Civil Defense Department, but his Geiger counter still clicks with life at his home in east Elkhart.

In his personal study, he picks through a number of objects that contain radioactive material and tests them using a silver, metal rod. Some barely register a few clicks per second, while others create a wall of noise.

"That's hot," he said, testing a flight approach indicator made during World War II.

He was the city's go-to person for information about how to protect against a nuclear fallout if there was an attack in northern Indiana or surrounding states.

While Van Patten can't say for certain how many shelters there are in Elkhart, he helped engineers at least a dozen for businesses and the public in the city. One of those shelters is between the Elkhart Public Library and the Elkhart County Prosecutors Office, which used to be the First National Bank, along High Street.

In case of an attack, 220 bank employees and their families could hide underground and wait until it was safe to re-emerge, according to a 1961 article in the Mid-Continent Banker. That wait could last from a few weeks to a

month, Van Patten said. One-foot-thick steel-reinforced concrete walls, ceilings and floors would have protected the occupants from the radiation. Added halite walls were going to be installed at the time the article in the Mid-Continent Banker was published.

Fresh water could be drawn from a shallow well in the shelter using a hand pump, according to the Mid-Continent Banker. If the power went out, there was an electrical generator to keep air ventilation and the lights going. The shelter also had sleeping cots, recreational equipment, first-aid facilities and emergency rations.

Van Patten also helped to build shelters for private individuals, which would have been much smaller in scale. These rooms would have been 10-by-12 feet with walls and a cap made out of cement blocks or poured concrete, he said.

Since the shelters were built in the basement, the surrounding earth also helped protect against radiation.

"You'd try to stock enough food to last either two weeks or a month," Van Patten said. "And your water, water should have been changed every 90 days. Put fresh water on board."

The threat of a nuclear attack was very real for many residents then, said Van Patten. But, of course, there were still some who thought that it couldn't happen. Not in Elkhart.

"There were a percentage who thought it was poo-poo," he said. "They thought nothing would happen. I think that even today, not everybody would know that perhaps ISIS is a threat. There would be a group of people who would say, 'Nonsense, nothing would happen.' I think that's normal."

Demoted From Page A1

hearing has been postponed indefinitely because he is in the process of applying for retirement on a disability pension.

At Snider's hearing Thursday morning, several members of the board voiced their support and respect for the Elkhart Police Department.

"You won't find a better group of officers anywhere, and

that includes officer Snider" said board member Tom Jones. "I'm very pleased we have come to an agreement."

The Elkhart Truth has requested copies of Snider's emails through the Indiana Access to Public Information Act. City attorney Maggie Marmocho said the emails will be made available by Friday, March 13.

The Elkhart Truth

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Stories should be fair, accurate and balanced. If you do not feel we have met that standard, please call and we'll address your concerns. We try to publish corrections in the next edition. To report an error of substance or request a clarification, call 294-1661, and ask for the person who wrote the story. If you do not know who wrote the story, or you leave a message for them and do not get a response within 24 hours, please call Dan Spalding, assistant managing editor, at 296-5813.

Fair Play

A story in the Wednesday, March 11, edition of The Elkhart Truth incorrectly listed an address of one of Tim Neese's town hall events. Julie's Cafe is at 102 Middlebury Street. The Elkhart Truth regrets the error.

Chassis From Page A1

Those production delays forced the company to pay premium fees to deliver their parts to automakers on time, in some cases by air and even helicopter.

Because of the production problems and missed delivery deadlines, the automakers insisted Chassis bring in outside consultants to oversee production lines. By September, the third-party advisor fees and expenses alone cost more than \$2 million a month.

As news of Chassis' troubles spread through the industry, Chassis suppliers started demanding changes in payment and credit terms, including that Chassis start paying cash in advance for materials and services. Those demands cost the company more than \$40 million in cash in recent months.

Under the Chapter 11 plans filed Thursday, the Southfield, Mich.-based company will receive \$250 million in new capital — \$150 million in an asset-based loan from PNC Bank and another \$100 million in loans from unnamed bondholders. In addition, some bondholders have agreed to lend an additional \$50 million once the company emerges from Chapter 11.

Chapter 11 bankruptcy, also known as "rehabilitation" bankruptcy, differs from Chapter 7 or "liquidation" bankruptcy, in which a company ceases operation and sells off its assets to pay off creditors.

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EPA Begins Review
of Galen Myers Dump/Drum Salvage Superfund Site
Osceola, Indiana

U.S. Environmental Protection Agency is conducting a five-year review of the Galen Myers Dump/Drum Salvage Superfund site at 11303 Edison Road, St. Joseph County, Osceola. The Superfund law requires regular checkups of sites that have been cleaned up — with waste managed on-site — to make sure the cleanup continues to protect people and the environment.

EPA's cleanup of contamination at the site included excavation and off-site disposal of contaminated soil and drums, provision of an alternate/public water supply to residents with contaminated wells, monitored natural attenuation (MNA) of the groundwater, long-term monitoring and limits on use of groundwater.

More information is available at the Mishawaka-Penn-Harris Public Library Reference Section, 209 Lincolnway East, Mishawaka, and at: <http://www.epa.gov/R5Superfund/indiana/INDR80999635.html>. The review should be completed by the end of May 2015.

The five-year review is an opportunity for you to tell EPA about site conditions and any concerns you have. Contact:

Margaret Gielniewski Remedial Project Manager
312-886-6244
gielniewskimargaret@epa.gov

Heriberto León Community Involvement Coordinator
312-886-6163
leon.heriberto@epa.gov

You may also call EPA toll-free, 800-621-8431, 9:30 a.m. to 5:30 p.m., weekdays.

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Attachment 5 – Community Interviews

Interviews Conducted for the 2015 Five-Year Review

Interview 1: Resident/current Galen Myers property owner, 11/17/14

Questions (EPA): Do you know what the Galen Myers site is? Do you know why IDEM and EPA sample these (points to monitoring wells) wells? Is there any additional information that you would like receive from IDEM or EPA regarding this site? Do you have any thoughts regarding remedy functionality or improvement? Do you have any questions for EPA or IDEM?

Response: The property owner feels aware and informed of the site issues. He is continuing to allow EPA and IDEM access to his property for sampling the monitoring wells and to store investigation-derived waste water in a tank in the back of his property. The property owner is satisfied with the frequency of IDEM's and EPA's communication with him. He has no other ideas regarding the sampling style or frequency. His residence has public water so he is not impacted with dirty groundwater.

Interview 2: Birch Rd. Resident 11/17/14

Questions (EPA): Do you know what the Galen Myers site is? Do you know why IDEM and EPA sample monitoring wells around this area? Is there any additional information that you would like receive from IDEM or EPA regarding groundwater cleanup? Do you have any thoughts regarding remedy functionality or improvement? Do you have any questions for EPA or IDEM?

Response: The resident is aware of the site history and issues and that IDEM and EPA will continue to sample the wells out in the back of his property into perpetuity to track the progress of (ground)water cleanup. He appreciates that our new sampling technique (passive bag diffusers) is quieter than the active pumping technique, and that it is faster. He has no other thoughts regarding remedy functionality or improvement. He is happy that we mostly stay out of his way and don't tear up his yard with our vehicles. He does not have any questions at this time.

Interview 3: Birchtree Dr. Resident, 11/17/14

Questions (EPA): Do you know what the Galen Myers site is? Do you know why IDEM and EPA sample monitoring wells around this area? Is there any additional information that you would like receive from IDEM or EPA regarding groundwater cleanup? Do you have any thoughts regarding remedy functionality or improvement? Do you have any questions for EPA or IDEM?

Response: The property owner was here for the connection to public water in the 1990's. The property owner does not like having monitoring wells in the right-of-way in front of their driveway. They want to know when EPA and IDEM will be done with sampling altogether.

Interview 4: Raintree Dr. Resident, 11/17/14

Questions (EPA): Do you know what the Galen Myers site is? Do you know why IDEM and EPA sample monitoring wells around this area? Is there any additional information that you would like receive from IDEM or EPA regarding groundwater cleanup? Do you have any questions for EPA or IDEM?

Response: Resident sees that IDEM and EPA come to sample just about every year and wants to know if it is for the same reason. (EPA confirms that it is to sample groundwater contaminants that originated from the Galen Myers site, north of her property, and to make sure that it is getting cleaned up through natural processes.) Resident does not want information regarding groundwater sample results and does not have any questions at this time.

Email interview: SJCHD John Lankowicz; various dates from 2009-2014

1. What actions have been taken since the 2009 Annual Review of the Galen Myers ACA-004?
 - a. I (SJCHD) delivered notification letters to the residents in the Galen Myers ACA in October 2013. See the email for the specifics of the letters.
 - b. The following wells have been approved for installation by the SJCHD:
 - i. 55950 Erhart Dr.—well replacement in 2010 (EPA did not find this address to be within the GM ACA)
 - ii. 55705 Birch Rd.—well replacement in 2012
 - iii. 11520 Workingham—well replacement in fall 2012
 - iv. 55150 BelAir—well replacement in fall 2013
 - c. The following wells have been denied:
 - i. 11334 Jefferson—resident requested permit to install geothermal wells on their property. SJCHD denied installation at this residence.
 - ii. 11360 McKinley Hwy—resident requested permit on June 24, 2014 for a replacement drinking water well. SJCHD denied the application. The resident is expected to connect to city water.
 - iii. 55428 Barksdale Rd. and 55190 Birch Rd—well abandonment is required in November 2013—SJCHD issued an Abatement Order

Phone interview: SJCHD Mark Espich 03/09/15

2. Are you the best contact person regarding the Galen Myers ACA and well-drilling permits?
 - a. John (Lankowicz) left the department (SJCHD) and Marc (Nelson) is expected to return on April 1 (2015). I am the best contact person around.
3. An Abatement Order was issued in November 2013 to 55428 Barksdale Road property within the Galen Myers ACA. It was when the property transferred ownership. Can you please tell me whether the new owners are maintaining the filtration system or if they connected to public water?
 - a. I will have to follow-up with you on the matter.
4. Are there any ways to strengthen the effectiveness and implementation of the Galen Myers ACA-004 Ordinance?

- a. The SJCHD reviews the well permits that come in and has been systematically rejecting well installation in the ACA, unless groundwater flow is away from the property or the well will be drilled to below the confining layer(s). For example, at another ACA in the County, the plume was in the 60-80 ft. range; we had the driller go 20 feet below the confining layer where no contamination was ever detected. We require residents to get water samples first before we make the decision to move forward with a well permit.
2. How effective is the awareness of which property parcels are in an ACA?
 - a. The County has a robust GIS system that flags all parcels in the ACAs. When a permit comes in, there are 2-3 places in the system that are flagged. It is difficult NOT to know that a property is within an ACA. The flags trigger a thorough review of the application and may require water samples or a mandatory connection (to public water). The county has well-logs on file of the ACA's vicinity; we review the logs to find the confining or clay layers—again, 20 feet below contamination plumes—if we allow wells to be drilled.
3. What is the best way to communicate with you or the County Health Department?
 - a. You can call or email me directly for questions or if you have information to share.