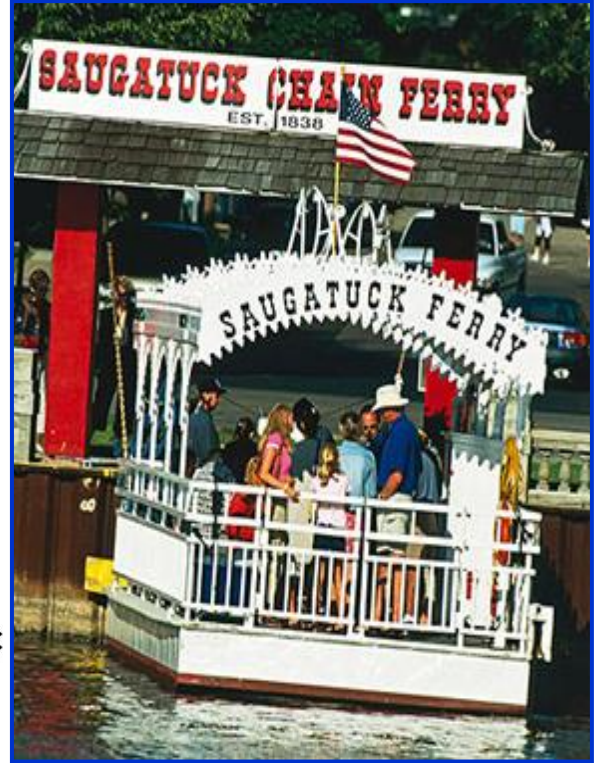


# Saugatuck/Douglas

The Art Coast of Michigan™



**SMALL TOWNS  
BIG FUN**  
Have some BIG FUN in  
Saugatuck Douglas, Michigan



**Kalamazoo-Lake Sewer & Water Authority**  
**Wellhead Protection Plan - Update**  
**September 2017**

# **Wellhead Protection Plan Table of Contents**



## TABLE OF CONTENTS

<b>SECTION 1</b>	<b>General Program Description .....</b>	<b>4</b>
1.1	Overview of the Michigan Wellhead Protection Source Program .....	4
<b>SECTION 2</b>	<b>Community Background.....</b>	<b>6</b>
2.1	Community Overview .....	6
2.2	Community History .....	6
2.3	Well Supply Information .....	7
2.4	Water Treatment Overview .....	10
<b>SECTION 3</b>	<b>Roles and Responsibilities.....</b>	<b>12</b>
3.1	Wellhead Protection Team .....	12
3.2	Local Agencies .....	12
3.3	State Agencies .....	13
3.4	Interagency Coordination and Communication.....	13
<b>SECTION 4</b>	<b>Wellhead Protection Area Delineations.....</b>	<b>14</b>
4.1	Wellhead Protection Areas .....	14
<b>SECTION 5</b>	<b>Potential Sources of Contamination.....</b>	<b>16</b>
5.1	Introduction.....	16
5.1.1	Point Source Pollution .....	17
5.1.2	Non-Point Source Pollution.....	18
5.1.3	Contaminants of Concern .....	18
5.1.4	Contaminant Pathways .....	19
5.1.4.a	Septic Systems .....	19
5.1.4.b	Floor Drains .....	19
5.1.4.c	Underground Storage Tanks (UST).....	20
5.1.4.d	Bare Soils.....	20
5.1.4.e	Storm Water Drainage .....	20
5.1.4.f	Dry Wells.....	20
5.1.4.g	Abandoned Wells, Monitoring Wells, Foundation borings, etc. ....	20
5.2	Types of Potential Contaminants Listed by Land Use .....	21
5.2.1	Residential .....	21
5.2.1.a	Household Hazardous Waste Collection Program .....	21
5.2.1.b	On-Lot Septic Systems – Outreach.....	22

5.2.2	Agricultural Land Use .....	22
5.2.2.a	CREP Wellhead Protection.....	23
5.2.2.b	CRP Wellhead Protection.....	23
5.2.2.c	Soil Erosion .....	23
5.2.2.d	Nutrients .....	23
5.2.2.e	Application of Pesticides .....	24
5.2.3	Urban Impact .....	25
5.2.4	Industrial Impact.....	25
5.2.5	Commercial Impact .....	25
5.2.6	Above-Ground Storage Tanks & Underground Storage Tanks.....	25
5.2.7	Storm Water Drainage & Management .....	26
5.2.8	NPDES Permits .....	27
5.2.9	Waste Management (Waste Data System) .....	27
5.2.10	Transportation Routes.....	27
5.3	Contaminant Source Inventory .....	27
5.4	KLSWA Susceptibility .....	28
<b>SECTION 6 Management Approaches for Controlling Potential Sources of Contamination within the Wellhead Protection Area.....</b>		<b>30</b>
6.1	Overall Goals and Objectives .....	30
6.2	Introduction.....	31
6.3	Management Tools and Options.....	31
<b>SECTION 7 Wellhead Protection Contingency Plan .....</b>		<b>32</b>
<b>SECTION 8 Alternative Water Sources.....</b>		<b>32</b>
8.1	Introduction.....	32
8.2	Planning for New Groundwater.....	32
8.3	Regional Alternative.....	32
8.4	Public Participation.....	32
8.5	Efforts to Date.....	33
<b>SECTION 9 Public Education.....</b>		<b>33</b>
9.1	Introduction.....	33
<b>SECTION 10 Plan Updates.....</b>		<b>34</b>
<b>SECTION 11 Glossary of Source Water Terms .....</b>		<b>34</b>
<b>SECTION 12 Selected References.....</b>		<b>34</b>



**FIGURES:**

- Figure 1** KLSWA Water Supply Service Area (in text)  
**Figure 2** KLSWA Water Treatment Plant (in text)  
**Figure 3** KLSWA Wellhead Protection Areas (in text)

**TABLES:**

- Table 1a** Well Summary (in text)  
**Table 1b** Well Specifications (in text)  
**Table 2** KLSWA Water System Customers (in text)  
**Table 3** 2017 Wellhead Protection Team (in text)

**APPENDICES:**

- Appendix A** Wellhead Delineation Report for Wells 6 and 7 (September 2016)  
**Appendix B** Contaminant Source Inventory  
**Appendix C** Management Strategies  
**Appendix D** Wellhead Protection Contingency Plan  
**Appendix E** Report titled Evaluation of Potential Water Supply Sites, September 2015  
**Appendix F** Public Participation, Outreach and Education Schedule  
**Appendix G** Plan Updates  
**Appendix H** Glossary of Source Water Terms

## ***SECTION 1 GENERAL PROGRAM DESCRIPTION***

### **1.1 Overview of the Michigan Wellhead Protection Program**

The 1986 Federal Safe Drinking Water Act Amendments (section 1428, P.L. 93-523, 42 USC 300 et. Seq.) direct all states to develop a Wellhead Protection (WHP) Program for both public community and public non-community water-supply wells. The U.S. Environmental Protection Agency (USEPA) approved Michigan's Wellhead Protection Program in (April 1994). The goal of the program is to prevent contamination of groundwater resources, which provide drinking water to roughly half of Michigan's population.

The Michigan Wellhead Protection Program is a voluntary effort encouraged by the USEPA, USDA and Department of Environmental Quality (MDEQ). Its purpose is to utilize the information provided by the mandatory source water assessment program in order to allow regional participation of communities to protect their drinking water sources.

Although the Michigan Wellhead Protection Program is voluntary, MDEQ does require some basic wellhead protection measures for public water systems across the state and encouraged them to take the necessary steps in protecting all water sources. In addition, MDEQ has issued a set of guidelines that outline the minimum elements necessary for a local Wellhead Protection Program to obtain MDEQ approval. MDEQ approval of local WHP programs will allow proper tracking and coordination so that local WHP efforts will be supported and recognized.

The MDEQ has established guidelines or "elements" for a local Wellhead Protection Program. These elements are:

1. **Roles and Responsibilities**—identify individuals responsible for the development, implementation, and long-term maintenance of the local WHPP.
2. **Wellhead Protection Area Delineation**—determine that area which contributes groundwater to a PWSS well.
3. **Potential Sources of Contamination**—identify known and potential sites of contamination within the Wellhead Protection Area (WHPA) and include in a contaminant inventory list.
4. **Wellhead Protection Area Management**—provide mechanisms which will reduce the risk of existing and potential sources of contamination from reaching the public water supply well or wellfield.
5. **Contingency Plan**—develop an effective contingency plan in case of a water supply emergency.
6. **New Wells**—provide information on existing groundwater availability, the ability of the PWSS to meet present and future demands, and the vulnerability of the existing wells to contamination.
7. **Public Education and Outreach**—generate community awareness in wellhead protection by focusing on public education and the dissemination of wellhead protection information.

This document presents the KLSWA Wellhead Protection Plan (WHPP) and details the above-mentioned seven elements. This document was developed with the input of members of the KLSWA Wellhead Protection Team for approval by the MDEQ. KLSWA completed a WHPP in 2000 with the assistance of Fleis & VandenBrink (F&V). The WHPP was updated in 2011 by Michigan Rural Water Association.

The primary purpose of the WHPP is to guide efforts to protect the long-term viability of KLSWA's drinking water supply by reducing the potential risk of subsurface contamination from affecting the WHPAs.

This KLSWA WHP program was developed in partnership with the KLSWA, City of Saugatuck and City of Douglas, Saugatuck Township, Allegan County District Health Department, the Department of Environmental Quality, Fleis & VandenBrink (F&V), and the Michigan Rural Water Association.

**The following is a Mission Statement that was developed by KLSWA...**

### **Mission Statement**

KLSWA will work to provide a safe drinking water source for residents by identifying historical, existing, and future threats; by formulating appropriate strategies to those threats, by educating residents by encouraging support and participation in the creation and implementation of the program; and by promoting intergovernmental cooperation to assure protection of water resources.

## **SECTION 2 COMMUNITY BACKGROUND**

### **2.1 Community Overview**

The City of Saugatuck and City of the Village of Douglas are located in Allegan County, Michigan. Their combined population was 2,139 at the 2010 census. Originally a lumber town and port, Saugatuck, along with the adjacent City of Douglas became a noted art colony and tourist destination in the arts and crafts movement of the late 19th century. Their primary source of revenue stems from tourism. Though only 2,000 individuals call Saugatuck their year-round home, the population of the town swells to nearly 4,000 in the summer. Today, tourists are drawn to the art galleries, harbor, marinas, scenery, unusual stores, and tourist attractions on Lake Michigan. Nearby are Saugatuck Dunes State Park and Allegan State Game Area as is the city of Holland.

### **2.2 Community History**

Key to the area's history and popularity is its natural environment. Saugatuck and Douglas are located on the shores of Lake Michigan and the Kalamazoo River and are defined by steep, rolling dunes to the west and orchard country and farmland to the east and have a moderating climate from Lake Michigan.

The Saugatuck/Douglas area is unusual among Midwest frontier towns in that it did not experience either the destruction of the fires that hit most towns in the mid-to-late 19th century or the railroad that brought modernization and urban growth. Because of this, the cities of Saugatuck and Douglas provide a rare opportunity to observe pre- and post-Civil War Greek Revival and Italianate architecture, Arts and crafts and Colonial Revival styles. Both cities retain their essential traditional character having been spared the suburbanization that makes most other places look almost identical to each other.



**Chain Ferry across  
Kalamazoo River**

For many years the cities supported a thriving mix of sawmills, barrel factories, and other wood product firms. The area contributed much of the lumber used to rebuild Chicago after the Great Fire of 1871. When the trees were gone, so were the lumbermen. But Saugatuck and Douglas thrived, turning to shipping and fruit growing as a source of income in the latter part of the 19th century. Peaches from the area were called "Michigan Gold" and were shipped by large steamships to the Chicago market. Hundreds of ships of various types were built in Saugatuck shipyards and the town was a haven for ship captains.

A resort and tourist culture emerged in 1910 when a group of Chicago artists established the Summer School of Paintings on Ox-Bow Lagoon. The resulting influx of well-known artists and big name Chicago architects resulted in a wave of building. The seed planted at Ox-Bow has continued to flourish over the years, with the area is now known as the Art Coast of Michigan. Today, Ox-Bow School of Art and Artists' Residency continues to be affiliated with the School of the Art Institute of Chicago. The area's many historical buildings, fine art galleries, and famous chain ferry, together with the art of



recreation, the art of learning, and the art of nature, are all aspects of the area's history that are part of the art of being Saugatuck and Douglas.

## 2.3 Well Supply Information

### 1. Wells

KLSWA’s water supply system currently consists of six wells. These wells are designated as wells No. 1, 2, 4, 5, 6, and 7.

- a. Wells #1 and #2 are located in separate buildings in the Authority of Douglas near Bayou Street. These wells both pump to an iron removal plant with chlorine and phosphate addition. These pumps are typically run in combination, and they are not operating at the rated capacities.
- b. Wells #4 and #5 are located in separate buildings in the City of Saugatuck off of Maple Street. These wells both have on-site phosphate and chlorine addition.
- c. Wells #6 and #7 are located in one building off of Blue Star Highway in the City of Saugatuck. KLSWA is planning to add phosphate addition capabilities in this well house.

The capacity and total dynamic head (TDH) information was obtained from the 2010 well tests conducted by Peerless Midwest. The firm well capacity of the wells (Well No. 7 out of service) is 1,871 gpm. Table 1a and 1b summarizes selected data for the wells and pumps.

**Table 1a Well Summary**

Well #	Year Drilled	Diameter (inches)	Depth (feet)	Current Capacity (gpm)	TDH (feet)
1	1963	16	94	325	69
2	1963	12	108	370	117
4	1966	12	205	465	260
5	1974	12	157	301	286
6	1997	8x6	216	410	221
7	1997	12	181	1,020	259

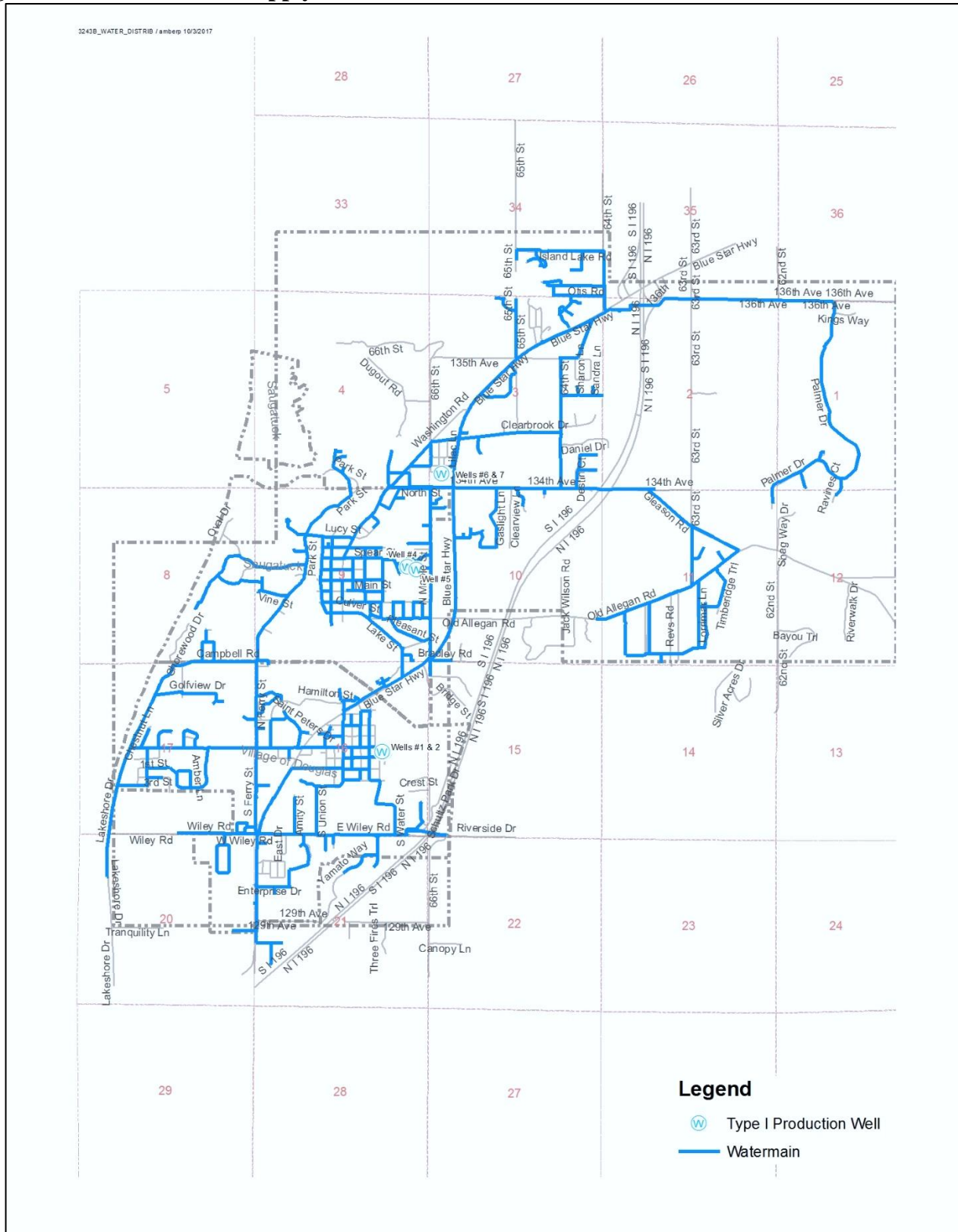
**Table 1b Well Specifications**

	<b>Douglas 1</b>	<b>Douglas 2</b>	<b>Saugatuck 4</b>	<b>Saugatuck 5</b>	<b>Well 6</b>	<b>Well 7</b>
Well Casing Diameter (in)	12	12	12	12	8	12
Casing Depth (ft)	79	93	185	148	148	181
Screen Diameter (in)	12	12	12	12	6	12
Screen Length (ft)	15	15	20	20	30	30
Total Well Depth (ft)	94	108	205	168	217	211
Year Drilled	1963	1963	1966	1974	1997	1997
Pump Supplier	Peerless- Midwest	Peerless- Midwest	Peerless- Midwest	Peerless- Midwest	Peerless- Midwest	Peerless- Midwest
Specific Capacity (gpm/ft)	10.5	6.2	8.7	2.9		
Rated Capacity (gpm)	450	400	350	250	410	1,020
Location	Center Street at Kalamazoo River in Douglas.	Center Street at Kalamazoo River in Douglas.	Northwest corner of Maple Street and Mason Street in Saugatuck.	Northwest corner of Maple Street and Mason Street in Saugatuck.		

The KLSWA Water System is a Type I public supply the service area includes customers in the City of Saugatuck, Village of Douglas, Saugatuck and Laketown Townships. A regional location map showing the water supply service area is shown in Figure 1.

KALAMAZOO LAKE SEWER AND WATER AUTHORITY  
 WELLHEAD PROTECTION PLAN RENEWAL 2017

Figure 1: KLSWA Water Supply Service Area



KLWSA Water System currently serves a population of approximately 3,050 in Allegan County. Table 2 provides a breakdown of the customers by service area.

**Table 2 KLSWA Water System Customers**

Service Area	Customer Type	Estimated Population
City of Saugatuck	Retail	1,100
Village of Douglas	Retail	1,300
Laketown Township	Retail	100
Saugatuck Township	Retail	800

## 2.4 Water Treatment Overview

KLSWA Water Treatment Plant employs a US Filter Induced Aeration (AERALATER) Iron Removal System for the Douglas Wellfield. This package system (designed to treat a daily average flow of 0.8 MGD and a maximum flow of 1.3 MGD) combines three processes – aeration, oxidation detention, and granular media filtration in a single unit for the removal of iron and manganese from the groundwater supply.

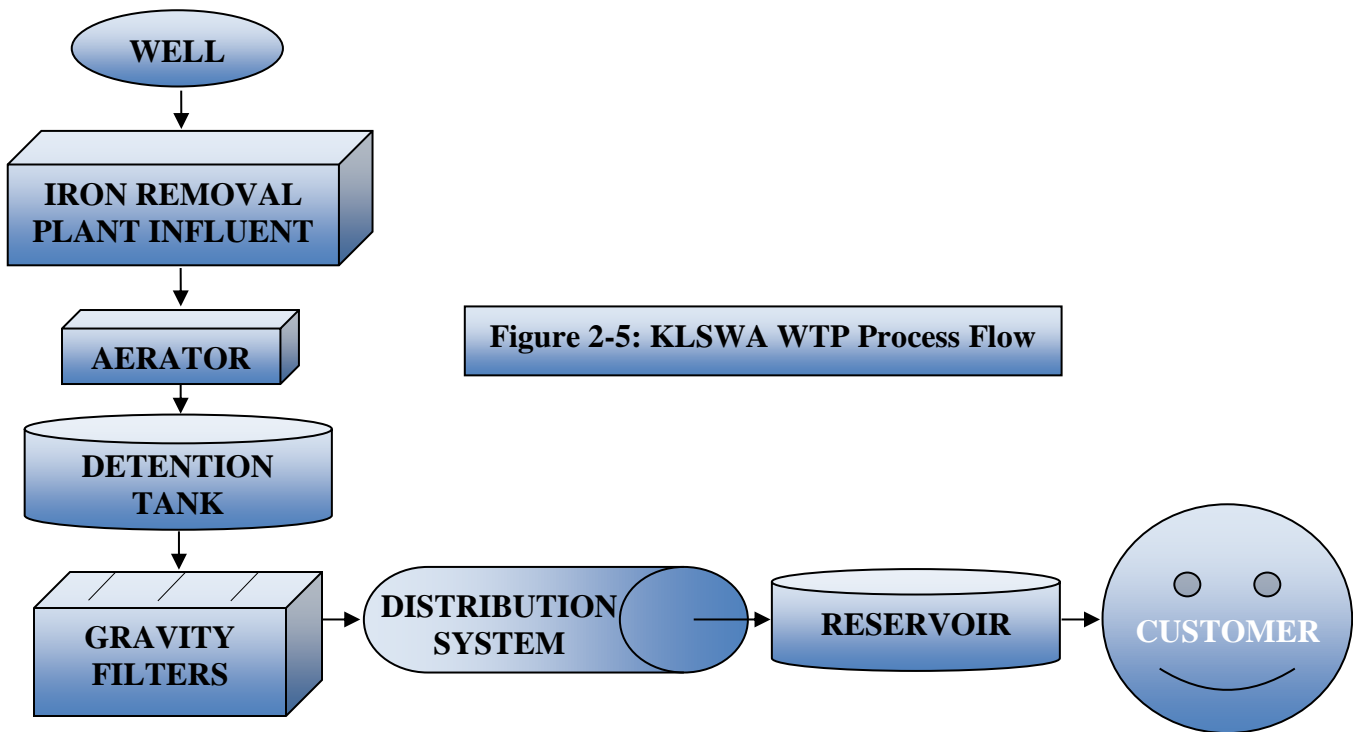
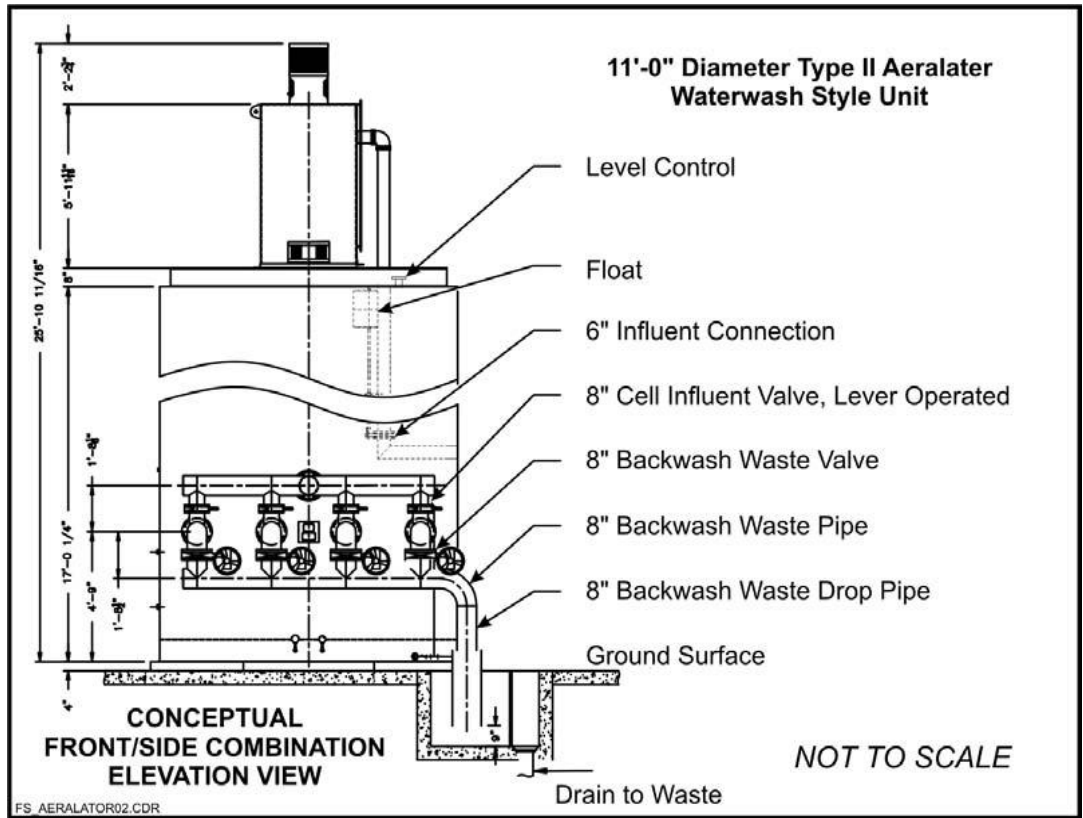
Water from two municipal wells in the Douglas Wellfield is pumped at the rate of 450 gallons per minute to the top of the AERALATER unit into the aeration section. Here it is deflected by a splash plate and falls through the trays in a finely divided state. The small particles of water are met by and mixed with a rising flow of air. The oxygen from this air oxidizes the soluble iron compounds in the water to an insoluble state. Any undesirable gases may also be eliminated by this up-flowing air. From the aeration section, the water drops into the detention section where the oxidation process is completed. Water then flows into the filter section by gravity and the insoluble iron compounds are substantially removed. Following filtration, the water is chlorinated and pumped to the distribution system through 3 high service pumps rated at 0.5 MGD each. A total of 1.0 million gallons of storage is available at a ground storage reservoir. The plant's treatment processes are continuously monitored by licensed water treatment personnel.



KLSWA utilizes Sodium Hypo-Chlorite and an ortho/polyphosphate blend to treat the groundwater at the Municipal Wells 4 and 5 located in the Saugatuck Wellfield. These products work together to stabilize the groundwater quality and minimizing color, scale, deposits, corrosion in the distribution system.



Figure 2: KLSWA Water Treatment Plant



## **SECTION 3 ROLES AND RESPONSIBILITIES**

### **3.1 Wellhead Protection Team**

The KLSWA WHP Team consists of several key individuals possessing a wide variety of background, education and experience. Individuals who are community residents, educators, local business owners and local government officials are encouraged to volunteer their time and efforts as members of the WHP Team. Planning for the protection of the KLSWA’s well field began in the winter of 1997 and the program has continued until present.

The initial step in the planning process was the selection of WHP Team to provide direction and leadership in the planning process. Individuals from a wide spectrum were invited to join the Team. The Team members that were responsible for the early plan development were identified in previous plan updates. Current Team members are identified below in Table 4.

**Table 3: 2017 Wellhead Protection Team**

<b>Name</b>	<b>Title</b>	<b>Representing</b>
Daryl VanDyke	Manager, KLSWA	PWSS Superintendent
Aaron Sheridan	Manager, Saugatuck Township	Municipality
Ray Visscher	Sanitarian, Allegan Co. Health Dept.	Local Health Department
Chief Greg Janik, Chris Mantels	Inspector, Saugatuck Twp. Fire Dept.	Local Fire Department
Lisa Imus	Zoning Administrator, Douglas	Planning
Mark Bekken	Council Member, Saugatuck	Adjacent Municipality

### **3.2 Local Agencies**

KLSWA, Saugatuck, Douglas, Saugatuck Township and Allegan County are the agencies with the primary responsibility for overseeing the development and implementation of the Wellhead Protection program. The KLSWA will be the local agency responsible for updating the WHPP.

**Local Planning and Zoning Committees** are responsible for administering the zoning within the WHPAs. When updating the master plan and zoning ordinances, the committees will incorporate appropriate Wellhead Protection language.

**KLSWA Water System Manager** will provide guidance and oversight throughout the program development and implementation. The KLSWA Manager will work with staff, consultants and local stakeholders to institute required management activities.

**City, Township & County Boards** will be responsible for allocating resources to implement the program and to provide needed match for state grants. These entities are will assist in public education/awareness and are also responsible for adopting proposed amendments to the zoning ordinance.

**Saugatuck and Douglas Streets Department and Allegan County Road Commission** will notify the proper authority of any highway related hazardous waste spills within the WHPAs. Both agencies will best management practices towards minimizing road salt applications within the WHPAs.

**Allegan County Health Department** will administer sewage permits, administer drinking water well permits and well abandonment.

**County Emergency Services Coordinator** and Fire Department are responsible for administering emergency responses. The Coordinator/fire department representative will notify the City/water Department of fires and potential spills that may result in source water contamination. The City\will be provided with an up-to-date list of hazardous chemicals identified during site inspections.

**Allegan County Conservation District** will continue to work with agricultural landowners to inventory of potential sources of groundwater contamination and education on Wellhead Protection.

### **3.3 State Agencies**

**Michigan Department of Transportation** will notify the proper authority of any highway related hazardous waste spills and will work towards minimizing road salt applications within the WHPAs.

**MDEQ - Drinking Water and Municipal Assistance Division** will provide guidance, review, approval and assistance with siting, permitting, monitoring and regulating public water supply systems.

**MDEQ Department of Licensing and Regulatory Affairs** will regulate underground and above ground storage tank systems.

**MDEQ Remediation and Redevelopment Division** will work with emergency response team on reported spills within the WHPAs.

**Michigan Department of Agriculture** will regulate pesticide and fertilizer storage and use practices.

### **3.4 Interagency Coordination and Communication**

Effective implementation of a WHPP requires coordination between City/departments as well as adjacent jurisdictions, local agencies and state agencies.

This KLSWA WHP program was developed in partnership with the KLSWA, City of Saugatuck and City of Douglas, Saugatuck Township, Allegan County District Health Department, the Department of Environmental Quality, Fleis &VandenBrink (F&V), and the Michigan Rural Water Association.

## ***SECTION 4 WELLHEAD PROTECTION AREA DELINEATIONS***

### **4.1 Wellhead Protection Areas**

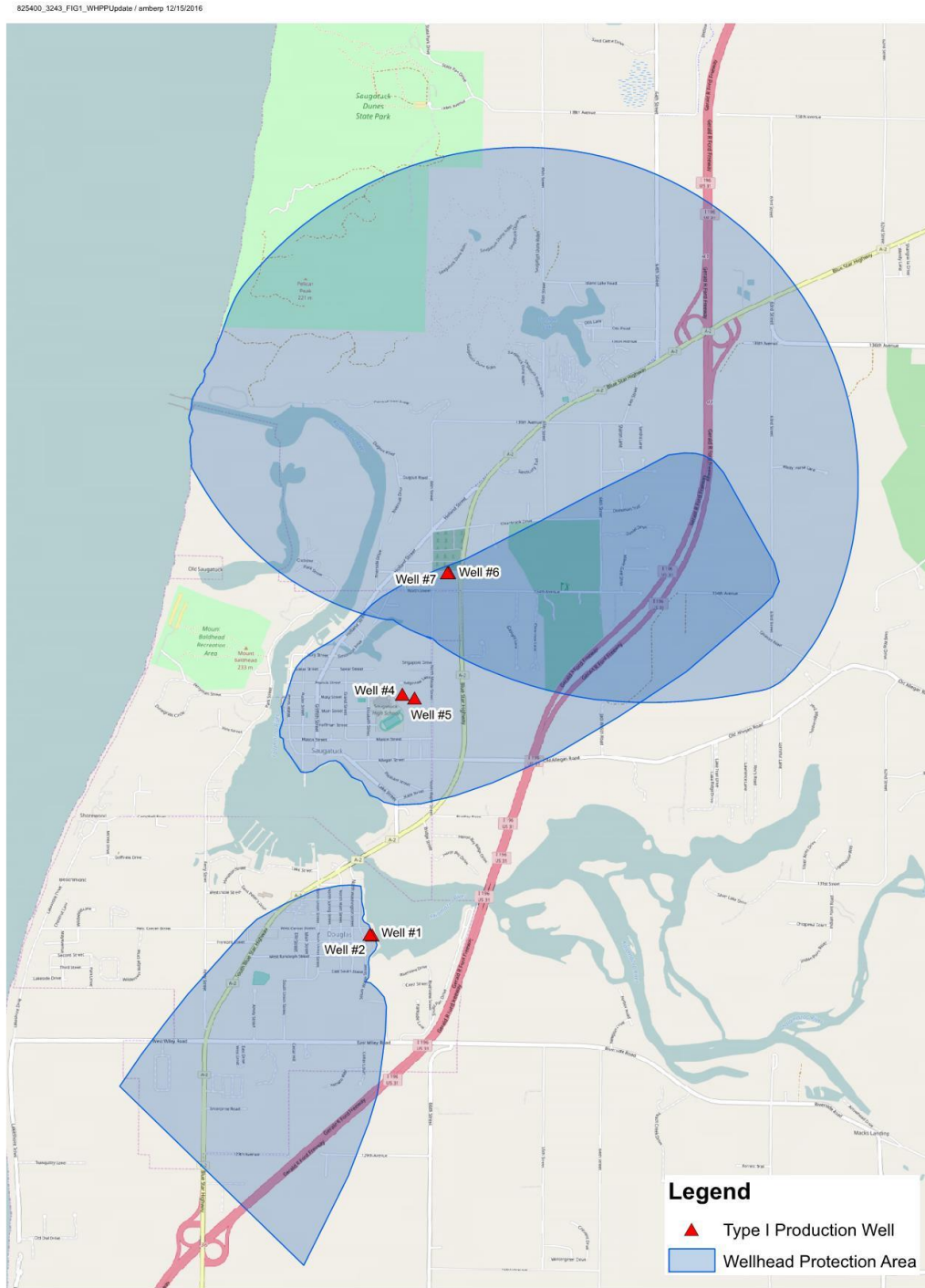
The federal SDWA defines a WHPA as "... the surface and subsurface area surrounding a water well or well field, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or well field." In simpler terms, it is that area which contributes ground water to a PWSS well. Michigan's WHPP requires a hydrogeologic study to identify the contributing area. The area contributing ground water to a well may extend for miles therefore, Michigan's WHPP is based upon a ground water time-of-travel (TOT) of 10 years. The 10 year TOT provides a reasonable length of time for responding to environmental problems within the WHPA while concurrently providing a smaller area which can be reasonably managed.

KLSWA has completed traditional wellhead protection area delineations for each of its well fields. Initial delineations were completed in the late 1990s, with a report on the work being completed in June 1997. At that time, delineations were not completed for Wells 6 and 7. These wells had tested low/non-detect for tritium. As such, KLSWA used a "fixed radius" approach to identify the WHPAs for these wells. KLSWA determined it was important to be consistent with the traditional delineations developed for its other wells, and retained F&V to complete traditional WHPA delineations for Wells 6 and 7. This work was completed in September 2016. The resulting report, and letter from MDEQ approving the delineations, is provided in Appendix A.



KALAMAZOO LAKE SEWER AND WATER AUTHORITY  
 WELLHEAD PROTECTION PLAN RENEWAL 2017

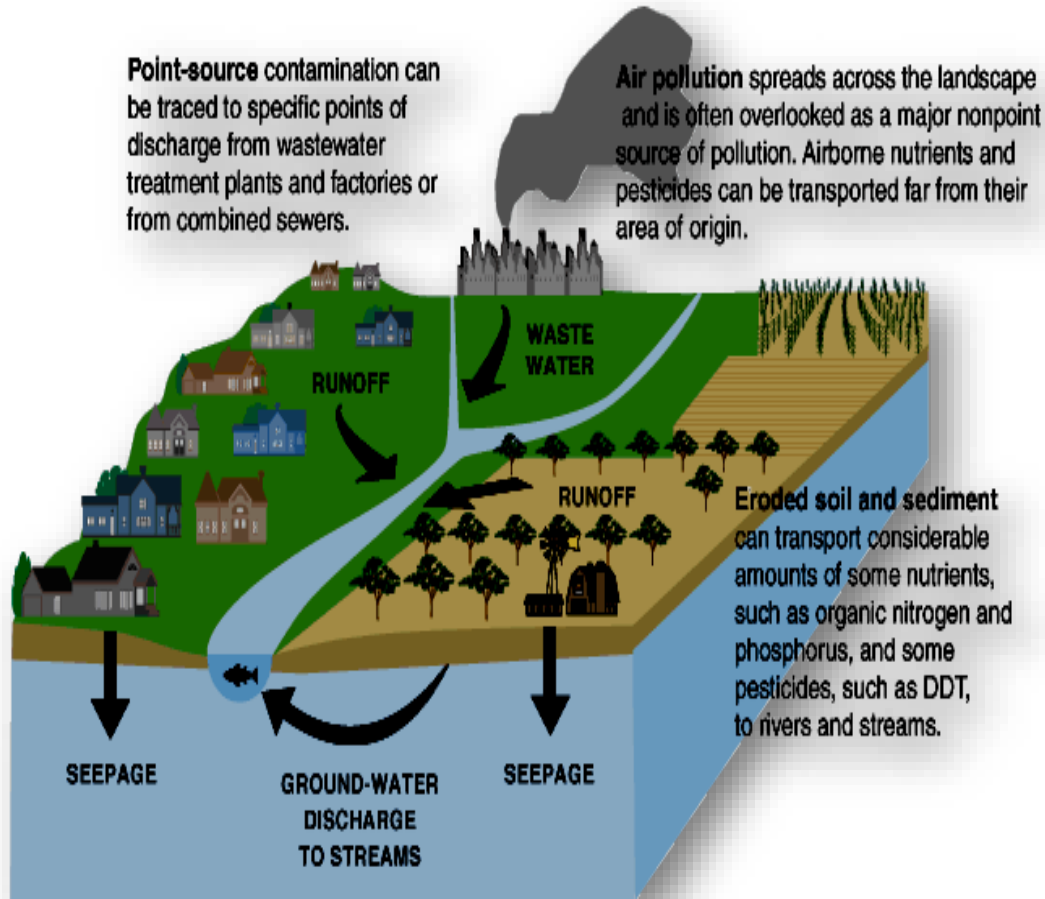
Figure 3: KLSWA Water Supply Wellhead Protection Areas



KALAMAZOO LAKE SEWER & WATER AUTHORITY  
 SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
 WELLHEAD PROTECTION PLAN UPDATE



## SECTION 5 POTENTIAL SOURCES OF CONTAMINATION / CONTAMINATION SOURCE INVENTORY



*Disclaimer: The information contained in this WHPP is limited to that available from public records and the water supplier. Other "potential contamination sites" or threats to the water supply may exist in the Wellhead Protection areas that are not identified in this "Plan". Identification of a site as a "potential contamination site" should not be interpreted that this site has or will cause contamination of the water supply.*

### 5.1 Introduction

A variety of historic and on-going point and non-point industrial, urban, and agricultural activities degrade the quality of groundwater. Discharges to groundwater associated with these activities include industrial and agricultural chemical use and spills; underground and above ground tank and sump leaks; landfill leachate and gas releases; the widespread use of road salts; septic tank failures; improper animal waste management; and chemical seepage via shallow drainage wells and abandoned wells.

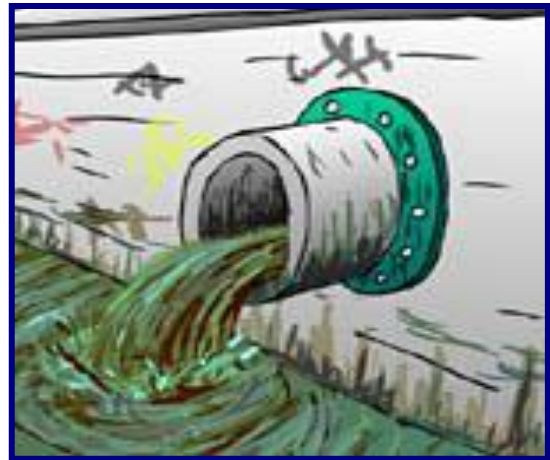
The resulting impacts on groundwater quality from these discharges are often long-term and costly to treat or remediate. Consequently, as discharges are identified, containment and cleanup of source areas and plumes must be undertaken as quickly as possible.

**There are two general classifications of pollutant sources:  
\*\*\* Point and Non-Point \*\*\***

Groundwater pollution can come from many different sources. Some sources are easy to identify, such as a leaky storage tank, or an old landfill. This type of pollution is called point source pollution. Other types of pollution are broader and not as easy to identify, such as runoff from fertilized farm areas or contamination from animal wastes. This type of pollution is called non-point source pollution.

### 5.1.1 Point Source Pollution

Pollutants that are coming from a concentrated originating point like a pipe from a factory or a large registered feedlot with a specific point of discharge. Point-source pollutants in surface water and groundwater are usually found in a plume that has the highest concentrations of the pollutant nearest the source (such as the end of a pipe or an underground injection system) and diminishing concentrations farther away from the source. The various types of point-source pollutants found in waters are as varied as the types of business, industry, agricultural, and urban sources that produce them. Commercial and industrial businesses use hazardous materials in manufacturing or maintenance, and then discharge various wastes from their operations. The raw materials and wastes may include pollutants such as solvents, petroleum products (such as oil and gasoline), or heavy metals. Point sources of pollution from agriculture may include animal feeding operations, animal waste treatment lagoons, or storage, handling, mixing, and cleaning areas for pesticides, fertilizers, and petroleum.



Municipal point sources might include wastewater treatment plants, landfills, utility stations, motor pools, and fleet maintenance facilities.

For all of these activities, hazardous materials may be included in the raw materials used in the process as well as in the waste stream for the facility. If the facility or operator does not handle, store, and dispose of the raw materials and wastes properly, these pollutants could end up in the water supply. This may occur through discharges at the end of a pipe to surface water, discharges on the ground that move through the ground with infiltrating rainwater, or direct discharges beneath the ground surface.

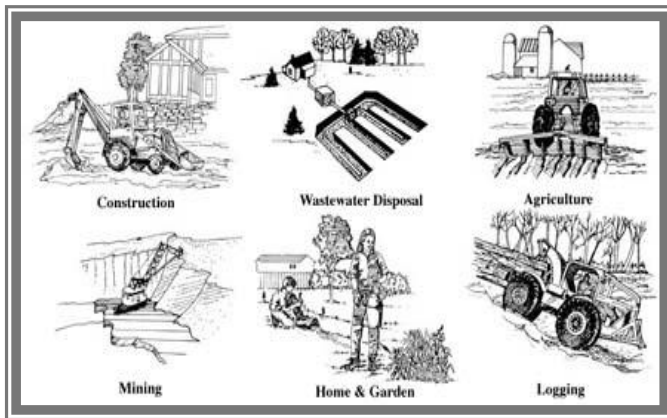
**“It takes only a small amount of these chemicals to raise health concerns”**

Some of the most persistent point-source pollutants in Groundwaters are volatile organic compounds, which

include manufactured and refined toxic substances such as solvents, oils, paint, and fuel products. In general, it takes only a small amount of these chemicals to raise health concerns. For example, approximately 4 liters (about one gallon) of pure trichloroethylene, a common solvent, will contaminate over 1 billion liters (300 million gallons) of water. Once groundwater is contaminated, it is difficult and costly to clean up.

### 5.1.2 Non-Point Source Pollution

Non-point Source (NPS) pollution comes from many sources in both urban and rural areas. Runoff from cropland, parking lots, lawns, mines, and septic systems often contribute to NPS pollution. NPS pollutants are transported to the surface and groundwater by precipitation.



During large storms, the runoff to surface water and infiltration to groundwater increases, and so does the rate of NPS movement (or transport). An official definition used for several years has been: Pollutants from a source that is not required to have a National Pollutant Discharge Elimination System Permit (NPDES). NPDES permits are required for cities, industries, storm water runoff from cities over 100,000 populations,

storm water runoff from certain industries and animal feedlots with more than 1000 animal units. Everything left over is a non-point pollutant source.

### 5.1.3 Contaminants of Concern

The presence of potential contaminant sources within the delineated area indicates potential sources of contaminants could, if improperly managed or released, impact the water quality at the wellhead. A small quantity of contaminants, in some cases a gallon or less, can significantly affect the supply.



Identification of a business, industry or operation as a potential contaminant source does not mean that the business, industry or operation is out of compliance with any local, state, or federal regulation, and it does not necessarily mean that the business, industry or operation has or will cause contamination.

What it does mean is that the potential for contamination (or pollution as it is sometimes called) exists due to the nature of the business, industry, or operation. An inventory of potential contaminant sources can:

1. Provide an effective means of educating the public about potential contaminants;
2. Provide information on the locations of potential sources, especially those that present the greatest risks to the water supply; and
3. Provide a reliable basis for developing a local management plan to reduce the risks of contamination to the water supply.

The inventory process attempts to identify potential point-source contaminants within the source-water area. It does not include an attempt to identify specific potential contamination problems at specific sites, such as facilities that do not safely store potentially hazardous materials. However, assumptions were made about particular types of land use. For example, it is assumed that rural residences associated with farming operations have specific potential contamination sources such as fuel storage, chemical storage and mixing areas, and machinery repair shops.

#### **5.1.4 Contaminant Pathways**

Septic systems, drywells, interior floor drains, underground storage tanks, storm water drainage pipes, and bare soils may be conduits by which contaminants can easily reach groundwater. Leaking tanks (above ground and below the ground), spills, wash water runoff, and improperly stored hazardous substances also can contaminate groundwater. Pathways that are applicable to this program include the following:

##### **5.1.4.a Septic Systems**

Septic systems are designed for sanitary wastewater, not for industrial wastewater or water carrying chemicals or solvents. Discharges of wastewater from a commercial facility require a groundwater discharge permit from the MDEQ. Septic systems are designed so that some of the sewage is degraded in the tank and some is degraded and absorbed by the surrounding sand and subsoil. Contaminants that may enter groundwater from septic systems include bacteria, viruses, detergents, and household cleaners. These can create serious contamination problems.

##### **5.1.4.b Floor Drains**

General-purpose floor drains in work and storage areas can be direct conduits to the ground or groundwater. Floor drains can also leak, and have been known to cause and federal regulations, floor drains in work areas where hazardous substances or wastewater are generated only permitted if they are connected to a sanitary sewer (with permission from the facility) or a closed holding tank.

#### **5.1.4.c Underground Storage Tanks (UST)**

Although modern USTs meet federal and state regulatory requirements, they still represent a potential source of groundwater contamination. Small leaks, sometimes too small to be detected, can develop and allow gasoline, oil or chemicals to reach groundwater.

#### **5.1.4.d Bare Soils**

Bare soils allow certain chemicals and contaminants to reach the groundwater quickly by direct percolation. This process can intensify during periods of rainfall, which would tend to “drive” these chemicals into the soil. Bare soils will be more difficult to control because agricultural practices generally dictate this condition during certain periods of the growing season. An alternative mitigation procedure would be plant rye or some other soil stabilizing plant during soil “resting” periods in order to prevent water and (or) wind erosion.

#### **5.1.4.e Storm Water Drainage**

A sizable amount of rainwater runoff seeps into the ground to become groundwater and how the land above groundwater is used by people directly affect source water quality, whether it is farms, houses or shopping centers all have a direct impact on groundwater quality. Most of storm water drainage within KLSWA’s Wellhead Protection area is agricultural runoff which may affect groundwater in many ways. Any change in the land contour, tiling or adding an impervious surface such as roads, parking lots and rooftops affects storm water flow patterns.

Any storm drain that potentially receives wash water requires a discharge permit from the Department of Environmental Quality. In addition, the Drain Commission will have a certain degree of responsibility with storm water discharge issues.

#### **5.1.4.f Dry Wells**

Dry wells, like storm water drainage pipes, sometimes have been discharge points for contaminated wash water or rinse water. When contaminated water is discharged underground for a continuous period of time, contamination of soils and groundwater is inevitable.

#### **5.1.4.g Abandoned Wells, Monitoring Wells, Foundation Borings, etc.**

Unplugged abandoned wells threaten the quality of drinking water obtained from privately owned and community public drinking water supply wells. It is estimated that as many as two million unplugged abandoned water wells exist in Michigan. Plugging abandoned wells protects the groundwater source aquifers that are used by nearly one-half of Michigan’s citizens for drinking water. Michigan now ranks second in the nation for plugging the greatest number of abandoned wells annually. *Approximately 75,000 abandoned wells have been plugged in Michigan since 1998.*

At this time, the KLSWA is working with the Allegan County Health Department updating information regarding private well inventory and abandoned wells within the WHPAs. The goal of the program is to identify and properly plug as many abandoned wells as possible. These structures, if abandoned and not properly closed, may provide direct conduits for hazardous substances and/or nitrates to reach the groundwater.

## 5.2 Types of Potential Contaminants Listed by Land Use

Land use activities can pose a wide range of pollution threats to the water supply of KLSWA. A computerized database search was completed in December 2016, and a field study was completed in August 2011. Potential contamination sources in the WHPA were identified and the locations of the sites were field verified from the database search. The following sections discuss those sources.

### 5.2.1 Residential

Every day over 2,200 homes and businesses over 3,000 residents in the KLSWA service area rely upon groundwater for vital domestic water so protection of this resource is vital. Most citizens are unaware of the effects of numerous potential contaminants stored, used, and disposed of from residential homes.

The potential contaminants include:

- \* household chemicals
- \* automotive products
- \* paints/solvents
- \* fuel storage systems
- \* on-site septic/sand mound systems
- \* lawn/garden chemicals
- \* abandoned wells

#### 5.2.1.a Household Hazardous Waste Collection

Michigan residents generate waste in their homes which contains some of the same chemical components as the hazardous waste generated by industry. Often, this is stored for extended periods of time or is mixed with other solid waste intended for disposal. This waste is called household hazardous waste (HHW), and includes many household cleaners, paint and related products, automobile maintenance wastes, pesticides, batteries, hobby chemicals, and other items. Industrially-generated hazardous wastes are subject to stringent management and disposal standards that are designed to be protective of human health and the environment. However, all household waste, regardless of its hazardous characteristics, is excluded from the regulatory definition of hazardous waste and is currently exempt from all State and federal hazardous waste regulations.

Household hazardous waste is any household waste which would be regulated as a hazardous waste if it were not generated by a household and includes all waste pesticides from a household. Many products used in households with the words "CAUTION," "WARNING," "DANGER," or "POISON" on the label may meet this definition and eventually become HHW. It is conservatively estimated that of approximately 30 million tons of solid waste generated annually in Michigan, about one half of one percent, or 150,000 tons, is HHW. The effects of improperly discarded HHW on the environment and human health are hard to quantify, but the potential effects should not be ignored.

The most environmentally sound method of disposal for many hazardous products is through a community HHW collection program. These programs collect and recycle the wastes or transport them to a hazardous waste treatment, storage, or disposal facility. HHW collection can be done in one of two ways: collection days or permit facilities. A collection day is a one-day program where residents can bring HHW to a central location where it is packaged by a contractor and transported off-site.

Household hazardous waste collection is not available to those within the WHPAs. That said, the community is committed to helping residents properly dispose of household hazardous wastes. Area residents are urged to go through their homes, basements and garages to properly dispose of: aerosol cans; drain cleaners; mercury thermometers; rodent poisons; oil and lead base paints; antifreeze; used motor oil; weed killers and herbicides; unknown chemicals; gun solvent; glue; chemical solvents; dry cell batteries; insecticides; detergents; bleach; varnish; stains and fertilizer.

More information on household hazardous waste is available at:

[http://www.michigan.gov/deq/0,4561,7-135-70153\\_70155\\_3585\\_4130-70304--,00.html](http://www.michigan.gov/deq/0,4561,7-135-70153_70155_3585_4130-70304--,00.html)

#### **5.2.1.b On-Lot Septic Systems - Outreach**

The KLSWA WHPAs are located within a developing residential area with many potential sources of contamination. There is a moderate potential for more development in the WHPAs. This area is primarily served by on-lot septic systems. The KLSWA will mail materials about the household hazardous waste collection program to all residents in the WHPAs, and distribute educational materials to all residents identified as having an on-lot septic system and/or well located in the WHPAs. The materials will include BMPs (Best Management Practices - Brochures & Outreach materials) for septic systems, well installation, well abandonment, fertilizer application, pesticide application and nitrate minimization.

More information on septic system management is available at: BMP Residential

Properties: [http://www.michigan.gov/dnr/0,4570,7-153-10364\\_52259\\_70620--,00.html](http://www.michigan.gov/dnr/0,4570,7-153-10364_52259_70620--,00.html)

### **5.2.2 Agricultural Land Use**

Application of fertilizers, pesticides, and improper storage of silage and manure can impact groundwater quality. Of particular concern are problems caused by inadequate management of nitrogen compounds (fertilizers) that lead to groundwater pollution by nitrate. Also of concern is the pollution of groundwater by pesticides. The magnitude of groundwater pollution associated with agriculture is dependent on a variety of factors, such as chemicals/materials applied to the land/crops, soil/aquifer characteristics and water management. While it is not possible to completely stop groundwater pollution in agriculture while maintaining high crop productivity, there is a potential, through utilizing best management practices to minimize groundwater pollution.

### **5.2.2.a CREP Wellhead Protection**

[http://www.michigan.gov/mdard/0,4610,7-125-1599\\_1603---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1599_1603---,00.html)

The MDEQ works closely with the Michigan Department of Agriculture and Rural Development (MDARD) to implement the Conservation Reserve Enhancement Program (CREP), a federal-state-local conservation partnership designed to reduce significant environmental effects related to agriculture. The objectives of the program are to improve and protect water quality and to promote and enhance wildlife habitat by providing incentives to Michigan citizens for implementing conservation practices for a period of 15 years. Eligible conservation practices include grass plantings, filter strips, riparian buffer strips, field windbreaks, and wetland restoration. As of November 2005, approximately 59,000 acres of conservation practices are either under contract or pending in Michigan under the CREP.

### **5.2.2.b CRP Wellhead Protection**

[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/mi/programs/?cid=nrcs141p2\\_024527](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/mi/programs/?cid=nrcs141p2_024527)

Wellhead Protection Areas Eligible for Conservation Reserve Program – included in the 1996 Farm Bill's continuous Conservation Reserve Program (CRP) sign-up, is a provision under which Wellhead Protection Areas may be eligible for enrollment in the CRP. Wellhead Protection Areas, designated under the Safe Drinking Water Act, may be eligible for enrollment with a 10 percent incentive added to the annual CRP rental rate. One requirement for eligibility is that the land must have been planted to an agricultural crop for 2 of the last 5 years. If the land is around a well or well field, the landowner may be eligible for the CRP continuous sign-up.

### **5.2.2.c Soil Erosion**

Reducing erosion and runoff is important to protect both our soils and our water supplies. Soil erosion occurs when soil particles are carried off by water or wind and deposited somewhere else. Often water that does not soak into the ground, but flows over the surface and runs to another area - such as into storm drains, streams, or lakes, this runoff entering lakes and stream, is water that is needed to soak through the soil to resupply our groundwater.

### **5.2.2.d Nutrients**

Fertilizer nutrients, especially nitrogen, phosphorus, and potassium, contribute to the health of plants. Nitrogen and phosphorus, however, must be managed carefully to ensure that excessive amounts do not degrade water quality. Too much nitrogen and phosphorus along with carbon in surface water cause eutrophication (death from excessive algae growth) in rivers, lakes, and ponds. High nitrogen levels in groundwater and surface water can lead to the ingestion of nitrogen in its nitrate (NO<sub>3</sub>) form, which can cause health problems in humans and livestock. Nitrogen, whether from compost or fertilizer, may leach past plant roots and accumulate in groundwater or eventually move out to surface impoundments if not used completely by grass, shrubs, or garden crops.

### 5.2.2.e Application of Pesticides

The term "pesticide" is a composite term that includes all chemicals that are used to kill or control pests. In agriculture, this includes herbicides (weeds), insecticides (insects), fungicides (fungi), nematocides (nematodes), and rodenticides (vertebrate poisons).

Pesticide contamination of groundwater has emerged in recent years as a major factor in the development, licensing, and use of pesticides in the United States. When pesticides do get into groundwater, cleanup of the contamination is often impossible. The cold temperatures and low microbial activity in groundwater cause pesticide degradation to occur more slowly than at the soil surface. The slow movement of groundwater means that it may take decades for the contaminated water to flow beyond the affected wells and reduce the pesticide concentrations to levels acceptable for drinking water.

Many factors determine whether a pesticide will leach to groundwater, including pesticide properties, soil characteristics, site conditions, and management practices. The pesticides most susceptible to leaching are those with high solubility in water, low adsorption to soil, and long-term persistence. When these pesticides are applied to sites with sandy soils, shallow depth to groundwater, and either a wet climate or extensive use of irrigation, the risk of groundwater contamination is high. A major question facing modern agriculture, therefore, is how to control pests and protect crop yields without allowing pesticides to contaminate underlying groundwater.

Practices such as conservation tillage, terraces, strip-cropping, and contouring reduce runoff and control erosion. Sediment basins, farm ponds, and wetlands trap sediments. Keeping the chemicals in the field or trapping those in biologically active areas like ponds or wetlands provide opportunity for microorganisms to degrade the pesticides, eventually rendering them harmless.

- **Grassed Waterways**

In addition to slowing erosion, grassed waterways protect places in fields where water infiltrates into the ground. They provide living filters that keep silt and some attached heavy metals and pesticides from contaminating surface or groundwater resources. The grass also will use some of the nitrate from infiltrating water.

- **Cover Cropping**

Cover crops are recommended before heavy fall and winter precipitation, when erosion and leaching are greatest. By taking up mobile nutrients like nitrate, cover crops protect groundwater. Plowing or incorporating the cover crop into the soil before planting releases the nutrients for the next crop.

- **Low Input Farming**

Low input farming protects groundwater by reducing the use of agrichemicals, including pesticides and fertilizers. Various combinations of legume cover crops, manure, and sludge can reduce off-farm purchases of nitrogen.

### 5.2.3 Urban Impact

Because of the complexities involved, urban groundwater pollution is considered to be a significant water management issue. Urban groundwater pollution sources and pathways are complex, and sources of pollution are difficult to control. Urban pressures are site-specific, depending on such factors as land use patterns, degree and nature of industrial activity, sewer systems, and local hydrogeology. Urban pressure types generally fall into just a few categories: industrial manufacture, waste disposal, transport activities, road and building runoff, amenity land uses (e.g., parks and lawns), and sewerage.

### 5.2.4 Industrial Impact

Industrial operations commonly use toxic substances as part of manufacturing, warehousing, and/or distribution. Materials such as chemicals, petroleum, cleaning supplies, machinery, metals, electronic products, asphalt, and others pose a potential threat to KLSWA's water supply and must be managed.

The KLSWA contaminant source inventory shows several known and potential sources of contamination within the WHPAs.

### 5.2.5 Commercial Impact

Many commercial operations use toxic and hazardous materials in their processes. The storage, use, and disposal of chemicals required by these operations can pose a potential threat to water since even small amounts of the hazardous materials can contaminate large amounts of surface or groundwater. Storing quantities of the materials can also create a serious problem if they are not contained and stored properly. Leaks and spills from storage tanks and pipes can contaminate water, rendering the water unfit for consumption.

It is anticipated that the WHPAs have a *moderate potential* for commercial growth. Primarily, the handling of engine fluids (oil, antifreeze, etc.), restaurant waste (oil), and the private wells and on-lot septic systems at these facilities are the highest concern. Examples include:

- auto, farm and recreational vehicle repair shops, car washes and gas stations
- road maintenance, de-icing operations and municipal operation
- warehouses, shipping and receiving
- sand and gravel quarry, construction and excavation operations
- medical institutions, research laboratories, photography establishments, printers
- auto salvage yards, railroad tracks and yards

### 5.2.6 Above-Ground Storage Tanks & Underground Storage Tanks

Storage tanks for vehicle fuel and heating oil are common on farms and rural residences nationwide. These above-ground and underground tanks historically have been constructed of steel, and over the years tens of thousands of the tanks have corroded and leaked petroleum products into the ground. Large spills and overfills can contaminate nearby surface waters. Less visible, but equally a threat to surface waters, is petroleum that seeps down to the water table and then travels horizontally underground into a nearby stream or lake. Problems resulting from



leaking tanks can include: surface water contamination, surface and subsurface soil contamination and property damage.

Storing liquid petroleum products, such as motor fuel and heating fuel, above ground or underground presents a potential threat to public health and the environment. Nearly one out of every four underground storage tanks in the United States may now be leaking, according to the U.S. Environmental Protection Agency. If an underground petroleum tank is more than 20 years old and especially if it is not protected against corrosion, the potential for leaking increases dramatically. Newer tanks and piping can leak, too, especially if they were not installed properly.

Even a small gasoline leak of one drop per second can result in the release of about 400 gallons of gasoline per year. A few quarts of gasoline in the groundwater may be enough to severely pollute drinking water. At low levels of contamination, fuel contaminants in water cannot be detected by smell or taste, yet seemingly pure water may be contaminated to the point of affecting human health.

Environmental Remediation of Act 451, Public Acts of 1994, as amended, the Natural Resources and Environmental Protection Act, authorizes MDEQ to identify, regulate, and cleanup sites of environmental contamination and leaking underground storage tanks.

Most of these sites are known or expected to have adverse effects on groundwater quality. Typical locations for above and below ground storage tanks include manufacturing, commercial facilities, oil and gasoline station storage tanks, and highway maintenance (There are no mining operations in the assessed area.

The Storage Tanks Program encompasses both Aboveground Storage Tanks & Underground Storage Tanks, and is administered by the Waste and Hazardous Materials Division of the Department of Environmental Quality.

The Aboveground Storage Tank Program includes regulatory activities and oversight of tanks and containers designed to store and dispense three types of products: flammable liquids and combustible liquids tanks, liquefied petroleum gas containers, and compressed natural gas systems.

The Underground Storage Tank Program includes regulatory activities and oversight of the design, construction, installation and maintenance of regulated tanks under Part 211, Underground Storage Tank Regulations, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

### **5.2.7 Storm Water Drainage & Management**

All storm water from the wellhead WHPAs enters Kalamazoo Lake, Kalamazoo River and directly into Lake Michigan or infiltrates into the ground where it has the potential to be captured by the supply wells. The need to manage storm water is created by increased land development - residential, commercial, and industrial - since impervious surfaces prevent rain from soaking into the soil and allow pollutants to accumulate. Storm water management, which has been a subject of concern for many years, focuses on controlling the volume and peak discharge rate that

increase dramatically when impervious surfaces cover an area. Concern also needs to be given to potential impacts on groundwater and storm water system monitoring to determine if they are causing groundwater pollution

#### **5.2.8 NPDES Permits**

The purpose of the program is to control the discharge of pollutants into source water by imposing effluent limitations to protect the environment. The MDEQ regulates discharges to the ground through the development and issuance of permits and self-certifications.

#### **5.2.9 Waste Management (Waste Data System)**

Department of Environmental Quality (DEQ) Waste Management Division (WMD) administers a diverse number of prevention programs to protect the environment and the public's health through proper management of solid, liquid, and hazardous waste. The division is organized into six sections: Hazardous Waste, Source water, Solid Waste, Enforcement, Field Operations, and Administration.

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs. WDS provides information on ownership and operation of the facility; the status of any required permits, licenses, registrations, or certifications; compliance status; authorized transporters; shipments of hazardous or liquid industrial waste (manifest); and user fees. The WMD staff in the Hazardous Waste Inspection Program maintained twelve different databases and two Federal for tracking program activity. The objective of this project is to develop an integrated database to house all the information relative to the Waste Inspection program and combining the State and Federal database into one system.

#### **5.2.10 Transportation Routes**

There are many highway spills reported in Michigan each year. Chemicals, from accidental spills, are often diluted with water; potentially washing the chemicals into the soil or nearby surface water and increasing the potential for contamination. Oil spills can create plumes that travel with runoff water flow for long distances. Additionally, de-icing compounds used on transportation routes can contaminate water. Highway Accidents Involving Tank Trucks or Spills are outlined in the Allegan County Emergency Management Disaster Operations Plan. This plan outlines the contacts for any emergencies related to spill or tank truck accidents. Highway spills likely represent one of the greatest threats to any drinking water well in the Intake Protection Areas. Blue Star Highway and US-31 which is located within the KLSWA Wellhead Protection Area and could present a high risk of potential contamination.

### **5.3 Contaminant Source Inventory**

The contaminant source inventory is one of the most important elements in the WHPP. It identifies known and potential sources of contamination associated with specific activities, industries, and land uses located within the source water assessment area.

The contaminant source inventory serves three important functions:

1. Assesses past and present activities that may pose a threat to the water supply based on their contamination potential. Activities covered include transporting, storing, manufacturing, producing, using, or disposing of potential contaminants;
2. Identifies the locations of activities and operations that pose the greatest risks to the water supply; and
3. Educates the public about the potential threats to the water supply posed by various activities.

The identification of existing sources of contamination has been compiled using data obtained from various state and federal databases. The firm EDR was used to compile information for the WHPAs. The following sites were included in the EDR search:

- MDEQ leaking underground storage tank (LUST) sites;
- MDEQ registered underground storage tank (UST) sites;
- MDEQ Environmental Cleanup Site Information System (ECSI) sites;
- MDEQ Source Information System (for water discharge permit sites including National Pollutant Discharge Elimination System (NPDES) permits, MDEQ Active Solid Waste Disposal Permits list;
- Michigan Department of Transportation (MDOT) - Hazardous Materials database;
- State Fire Marshall registry of above-ground fuel storage tank sites;
- Hazardous Material Incidents (HAZMAT) sites;
- U.S. EPA Envirofacts database;
- U.S. EPA National Priorities List (NPL);
- U.S. EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLA) List;
- U.S. Department of Transportation (DOT) Hazardous Materials Information Reporting System (HMIRS);
- U.S. EPA Toxic Chemical Release Inventory System (TRIS); and
- MDEQ Remediation and Redevelopment Division–Part 201 of Public Act 451 (formerly 307)
- MDEQ Underground Storage Tank Division. UST & LUST sites.
- Oil and Gas Contamination Sites

The CSI is provided in Appendix B.

#### **5.4 KLSWA Supply Susceptibility**

The 1996 amendments to the federal Safe Drinking Water Act (SDWA) require each state to develop and implement a Source Water Assessment Program (SWAP) to assess the susceptibility of all public water supply sources to contamination. The Michigan SWAP was developed through an advisory committee, approved by the U. S. Environmental Protection Agency in October 1999 and is currently being implemented. This program requires the DEQ to analyze source sensitivity (natural protection available), delineate source water areas, inventory contaminant sources, determine susceptibility, and assure the public is notified of this determination. The assessments consist of a “geologic sensitivity” analysis and an overall source water “susceptibility” determination. The geologic sensitivity is inherent to the aquifer from which the production wells obtain groundwater. Susceptibility is determined in large

part by the number and type of contamination sources within the wellhead protection area (WHPA), with additional consideration to aspects of well construction and the chemical monitoring history of individual production wells.

Since the KLSWA has already addressed many of the SWAP requirements, the DEQ utilized this information to complete a source water assessment of your water supply. The following paragraphs summarize information from your WHPA delineation for the geologic sensitivity of your wells and contaminant source inventory within the delineated source water areas.

Hydrogeologic information from the WHPA delineation was reviewed to establish the geologic sensitivity for the KLSWA public water supply wells. Sensitivity (Stations Supplying: Douglas and Saugatuck) Information from the WHPA delineation indicates the aquifer supplying the KLSWA wells in Douglas is unconfined, while the aquifer contributing water to the wells in Saugatuck is confined. Unconfined aquifers are considered “sensitive” and confined aquifers are geologically categorized as “not sensitive.”

The wells in the Douglas well field have “high” susceptibility, while the wells in the Saugatuck well field possess a “moderate” susceptibility based on the above mentioned geologic sensitivity analysis, the listed potential contaminant sources within the WHPA as identified in the Allegan County “windshield” survey provided to the DEQ, and on consideration of the following:

- No Maximum Contaminant Level (MCL) violations have occurred.
- The well construction meets standards.
- There are no potential contamination sources within the standard isolation area.
- Community has an active WHPP that supports management of existing or potential sources of contamination in the WHPA.
- Known sources of contamination within the WHPA are being remediated to prevent movement of contamination to the municipal wells.

The susceptibility determination may be altered in the future with a demonstration that the KLSWA has an active WHPP that supports management of existing and potential sources of contamination in the WHPA. This means contaminant sources identified in the Allegan County survey must be first separated out to identify those sources that lie within each WHPA. The KLSWA must then demonstrate an ability to manage the contaminant sources in the WHPAs through their WHPP.

## ***SECTION 6 MANAGEMENT APPROACHES FOR CONTROLLING POTENTIAL SOURCES OF CONTAMINATION WITHIN THE WELLHEAD PROTECTION AREA***

### **6.1 Overall Goals and Objectives**

This section presents the goals for the KLSWA-WHPP, which are to be considered and used as guidelines when making decisions concerning matters affecting the WHPAs.

**Goal #1** Promote the identification, prevention and cleanup of contamination within the WHPAs.

#### **Ways to Accomplish Goal #1**

1. Identify sites of historical environmental significance through periodic update to the contaminant source inventory.
2. Encourage recycling and proper storage of chemicals through the use of best management practices (BMPs).
3. Encourage fast, effective remediation of contaminated sites discovered within WHPAs.
4. Support redevelopment of Brownfield/contaminated sites within the WHPAs.
5. Use local jurisdictional powers to prevent pollution (e.g., Groundwater Protection Ordinance)

**Goal #2** Educate the public on the need to protect groundwater and surface water sources within the WHPAs.

#### **Ways to Accomplish Goal #2**

1. Produce and distribute education materials.
2. Offer special demonstrations, seminars and other activities that promote Wellhead Protection to the public.
3. Place road signs at the WHPAs points of entry.

**Goal #3** Promote and facilitate intergovernmental cooperation to ensure protection of the water resources within the WHPAs.

**Ways to Accomplish Goal #3**

1. Seek, review and evaluate information from local government agencies to identify issues that may potentially affect the WHPAs.
2. Seek active participation of local government officials as part of the WHPP.
3. Schedule regular WHP Team meetings and invite local representatives of government and other entities that have a stake in WHPAs.
4. Incorporate WHPAs in local and regional planning and zoning.

## **6.2 Introduction**

The KLSWA WHPP is intended to help protect the municipal water supply from contamination. Almost every activity on the land has the potential to affect the quality of the community water supply. The KLSWA is the local agency with the primary responsibility for overseeing the development and implementation of the WHPP. They have chosen to utilize a volunteer and community-based management strategies. This approach brings together the people within the WHPAs to address those activities, regardless of existing political boundaries; it also results in solutions that respect the community's unique social, economic, and environmental conditions and values.

## **6.3 Management Tools and Options**

The KLSWA WHP Team reviewed numerous management strategies during team meetings. The following strategies were selected for follow-up. This list consolidates, or in some cases eliminates, management strategies identified in the 2011 WHPP. It also eliminates those strategies with an educational component that are already included in the education and outreach section of the WHPP.

Management strategies identified by the team are presented along other implementation information in Appendix C.

## ***SECTION 7 WELLHEAD PROTECTION CONTINGENCY PLAN***

Because much of the information in this section is personal, it was moved to an appendix. This entire section is provided in Appendix D.

## ***SECTION 8 ALTERNATIVE WATER SOURCES (PLANNING NEW WELLS)***

### **8.1 Introduction**

KLSWA will be proactive in siting new wells rather than reactive when problems develop. Taking steps before a problem arises has the added advantage of avoiding disruptions to existing land uses and potential legal challenges. The KLSWA, City of Saugatuck and City of Douglas planning authorities, and zoning boards will work together to identify potential well sites for future use.

### **8.2 Planning for New Groundwater Supplies**

The firm capacity is defined as the capacity delivered with the largest well out of service, so firm capacity for the system is 1,871 gpm with Well No. 7 out of service. The MDEQ recommends the firm capacity of any water supply system meet or exceed the maximum day demands placed in the system. The maximum day demand in the last five years was 1,548 gpm. The existing firm capacity is sufficient to meet the flows demanded by the system, but a new well(s) will become necessary in the coming years.

New public water supply wells, if needed, will be sited to maximize well yield and minimize potential contamination. The KLSWA will site any new wells in general accordance with regulations of the MDEQ. In addition, information and concerns about hazardous substances and groundwater vulnerability will be included in the assessment process. Isolation distances from potential sources of contamination will be maximized. Opportunities for site acquisition and open space protection will also be noted.

### **8.3 Regional Alternative**

The regional alternative for providing water to the KLSWA service area is to receive treated water from the City of Holland which the closest municipal water works system to KLSWA. Holland has water available from their distribution system located at 12-inch Main the Distance to the KLSWA system is about 5 miles.

### **8.4 Public Participation**

Public participation is an essential component of water supply planning. The expansion of WHPAs due to increasing demand or the creation of additional WHPAs may be of concern to businesses and residents located within WHPAs. To foster responsible water supply practices at the local level, public



hearings on water development plans and source management approaches are strongly encouraged. A public forum for long-term water supply planning issues may be a natural extension of the duties of a community's the WHP Team.

### **8.5 Efforts to Date**

KLSWA, working with Fleis & VandenBrink, has begun the process to find new well sites. An extensive investigation of properties south of the Kalamazoo River was conducted in 2015. The findings from this investigation were reported by F&V in a report titled Evaluation of Potential Water Supply Sites, September 2015. This report is provided in Appendix E.

KLSWA is now in the process of exploring sites on the north side of the Kalamazoo River.

## ***SECTION 9 PUBLIC EDUCATION***

### **9.1 Introduction**

Public education programs are designed to increase public awareness of water quality conditions and provide opportunities for participation and involvement. Public Education

The WHP Team reviewed a variety of education and outreach ideas and selected the strategies outlined in the Public Participation, Outreach and Education Schedule provided in Appendix F.

## ***SECTION 10 PLAN UPDATES***

A guideline for updating the WHPP is provided in Appendix G. The MDEQ recommends these plans be updated on a 5-year frequency.

## ***SECTION 11 GLOSSARY OF SOURCE WATER TERMS***

A glossary of groundwater terms is provided in Appendix H.

## ***SECTION 12 SELECTED REFERENCES***

- Concentrated Animal Feeding Operation (CAFO): [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682-96774--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682-96774--,00.html)
- KLSWA <http://www.cityofsaugatuck.com/directory.htm>
- Saugatuck Chamber of Commerce <http://www.saugatuckmi.com/>
- Michigan's Environmental Quality Land programs: <http://www.michigan.gov/deq/0,1607,7-135-3311---,00.html>
- Michigan Groundwater Discharge Program: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_4117---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_4117---,00.html)
- Michigan Hazardous and Liquid Industrial Waste Programs: [http://www.michigan.gov/deq/0,1607,7-135-3312\\_4118---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3312_4118---,00.html)
- Michigan Environmental Mapper: [http://www.michigan.gov/deq/0,1607,7-135-3311-141852--\\_00.html](http://www.michigan.gov/deq/0,1607,7-135-3311-141852--_00.html)
- Michigan Water Information Management System: <http://www.mcgi.state.mi.us/miswims/MapPage.aspx>
- National Pipeline Management System: <http://www.npms.phmsa.dot.gov/>
- NPDES Permit Information: <http://www.deq.state.mi.us/owis/Page/main/Home.aspx>
- Part 5 Rules Reporting Releases: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_23420---\\_00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_23420---_00.html)
- Allegan County Government Offices: <http://www.mygovhelp.org/ALLEGANCOUNTYMI/>
- Release Toxicity Reference Database: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_23420---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_23420---,00.html)
- The Remediation Division programs facilitate cleanup and redevelopment: [http://www.michigan.gov/deq/0,1607,7-135-3306\\_28608---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3306_28608---,00.html)
- Superfund Program: [http://www.michigan.gov/deq/0,1607,7-135-3311\\_4109\\_4217---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3311_4109_4217---,00.html)
- Michigan's Nonpoint Source Program: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682---\\_00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682---_00.html)
- Environmental Resource Management Division (ERMD): [http://www.michigan.gov/deq/0,1607,7-135-3306\\_28609---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3306_28609---,00.html)

- DEQ Water Resources Division: [http://www.michigan.gov/deq/0,1607,7-135-3306\\_28610---.00.html](http://www.michigan.gov/deq/0,1607,7-135-3306_28610---.00.html)
- NPDES permits water quality parameters: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682-10416--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682-10416--,00.html)
- Wellhead Protection Program: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3695---.00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3695---.00.html)
- Watershed basins and permit reissuance: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682-10412--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682-10412--,00.html)
- Wellogic internet-based data entry program: [http://www.michigan.gov/deq/0,1607,7-135-6132\\_6828-16124--,00.html](http://www.michigan.gov/deq/0,1607,7-135-6132_6828-16124--,00.html)
- Laws to obtain a National Pollutant Discharge Elimination System (NPDES) permit: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682-10200--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682-10200--,00.html)
- Michigan Groundwater Mapping Project: <http://gwmap.rsgis.msu.edu/>
- Interactive Groundwater System: <http://www.egr.msu.edu/igw/>
- DEQ Public Forms: <http://www.deq.state.mi.us/deqforms/>
- MIGWHPP Probabilistic Mapping Program: [http://www.michigan.gov/documents/deq/deq-wb-dwehs-09awwagwconf8\\_269420\\_7.pdf](http://www.michigan.gov/documents/deq/deq-wb-dwehs-09awwagwconf8_269420_7.pdf)
- Part 201 Site List: The data is current through 12/20/2010: <http://www.deq.state.mi.us/part201/>
- Michigan Surface Water Information Management (MiSWIM) system: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3686\\_43375---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3686_43375---,00.html)
- DEQ Site Registry Inquiry System: <http://www.deq.state.mi.us/SiteRegistry/>
- USGS Mapper and Updates Site: <http://mi.water.usgs.gov/>
- MI wellhead protection program: [http://www.hazmat.msu.edu/whpp/whpp\\_intro.htm](http://www.hazmat.msu.edu/whpp/whpp_intro.htm)
- Waste Data System (WDS): <http://www.deq.state.mi.us/wds/pi/>
- MI Source Water Assessment and Protection (SWAP): <http://mi.water.usgs.gov/splan2/sp08902/swapsw.php>
- Mi Wellhead Protection Area Maps: [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3695-59280--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3695-59280--,00.html)
- Mi Census of Agriculture: [https://www.agcensus.usda.gov/Publications/2012/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Michigan/](https://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Michigan/)
- Sites of Environmental Contamination (201 sites), Remediation and Redevelopment Division (RRD), MDEQ(Part 201 of Act 451): <http://www.deq.state.mi.us/part201ss/>
- Underground Storage Tank List, Waste and Hazardous Materials Division (WHMD), MDEQ (Part 211 of Act 451): <http://www.deq.state.mi.us/ustd/>
- Leaking Underground Storage Tank Sites, Remediation and Redevelopment Division (RRD) MDEQ (Part 213 of Act 451): <http://www.deq.state.mi.us/lustcs/>
- Oil & Gas Contamination Sites, Geological and Land Management Division, MDEQ (Act 61): <http://www.deq.state.mi.us/mir/>

KALAMAZOO LAKE SEWER AND WATER AUTHORITY  
WELLHEAD PROTECTION PLAN RENEWAL 2017

---

- Hazardous Waste Generators, Waste and Hazardous Materials Division (WHMD), MDEQ (Part 111 of Act 451): <http://www.deq.state.mi.us/tsd/> & <http://www.deq.state.mi.us/wdsp/>
- Landfill/Solid Waste Disposal Site List, Waste and Hazardous Materials Division (WHMD), MDEQ (Part 115 of Act 451): <http://www.deq.state.mi.us/wdsp/>
- Federal National Priorities List; EPA, Region 5 (CERCLA & Superfund): <http://www.epa.gov/superfund/sites/npl/npl.htm> & <http://www.deq.state.mi.us/spad/>
- Saugatuck historical information: [http://en.wikipedia.org/wiki/Saugatuck,\\_Michigan](http://en.wikipedia.org/wiki/Saugatuck,_Michigan)
- Douglas historical information: [http://en.wikipedia.org/wiki/Douglas,\\_Michigan](http://en.wikipedia.org/wiki/Douglas,_Michigan)
- Douglas official website: <http://ci.douglas.mi.us/>
- Saugatuck official website: <http://www.saugatuck-mi/government-city>
- Saugatuck Township website: <http://saugatucktownship.org/>
- Laketown Township: <http://laketowntwp.org/>

**APPENDIX A**

# Wellhead Protection Area Delineation Report for Wells 6 and 7

*Kalamazoo Lake Sewer and Water Authority*



**Kalamazoo Lake Sewer and Water Authority  
Wellhead Protection Program**

September 2016  
Project No. 825400

  
**FLEIS & VANDENBRINK**  
DESIGN. BUILD. OPERATE.

# Kalamazoo Lake Sewer and Water Authority

## WELLHEAD DELINEATION REPORT FOR WELLS 6 AND 7

### TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Background and Purpose.....	1
1.1.1 Well Field Description .....	1
<b>2.0 BACKGROUND INFORMATION .....</b>	<b>1</b>
2.1 Physical Setting.....	1
2.1.1 Topography.....	1
2.1.2 Regional Hydrogeology.....	2
2.1.3 Site Geology .....	4
<b>3.0 GROUNDWATER FLOW MODEL .....</b>	<b>4</b>
3.1 Conceptual Model .....	4
3.2 Model Selection.....	5
3.3 Aquifer Properties.....	5
3.3.1 Transmissivity/Hydraulic Conductivity .....	5
3.3.2 Porosity .....	6
3.3.3 Groundwater Flow.....	6
3.4 Model Calibration .....	7
3.5 Model Sensitivity .....	7
3.6 Model Limitations and Use .....	7
<b>4.0 WELLHEAD PROTECTION AREA DELINEATION .....</b>	<b>8</b>
4.1 Pumping Rates used for Modeling Input.....	8
4.2 Wellhead Protection Area Modeling.....	8
4.3 Delineation Uncertainties and Recommended Wellhead Protection Area.....	8
<b>5.0 REFERENCES.....</b>	<b>9</b>

### FIGURES

Figure 1	Site Map
Figure 2	Topography and Local Watersheds (in text)
Figure 3	Glacial Geology Landsystems (in text)
Figure 4	Potentiometric Surface Map
Figure 5	Comparison of Measured and Simulated Potentiometric Surface
Figure 6	Particle Traces
Figure 7	Proposed Wellhead Protection Area Delineation

### TABLES

Table 1	General Well Information for KLSWA Wells 6 & 7 (in text)
Table 2	Peerless-Midwest Aquifer Analysis Key Findings (in text)
Table 3	Water Level and Survey Data
Table 4	KLSWA Wells 6 & 7 Pumping Data for 2012-2015 (in text)



## **APPENDICES**

- Appendix 1 F&V May 2000 KLSWA WHP Delineation Figures including:  
Cross Section location map  
Cross Section A-A'  
Cross Section B-B'  
Saugatuck Potentiometric Surface Map  
Saugatuck Confirmed Potentiometric Surface Map  
Appendix 2 MDEQ Water Table Map  
Appendix 3 Calibration Statistics

## **ABBREVIATIONS/ACRONYMS**

amsl	above mean sea level
bgs	below ground surface
F&V	Fleis & VandenBrink
gpm	gallons per minute
MDEQ	Michigan Department of Environmental Quality
NAVD	North American Vertical Datum
mgd	million gallons per day
RI	Remedial Investigation
WHPA	Wellhead Protection Area

## 1.0 INTRODUCTION

Fleis & VandenBrink (F&V) was retained by Kalamazoo Lake Sewer and Water Authority (KLSWA) to delineate the wellhead protection area (WHPA) for KLSWA Wells 6 and 7 (Site). The purpose of this document is to present our findings and proposed WHPA delineation for Wells 6 and 7.

The Michigan Department of Environmental Quality (MDEQ) has completed a provisional delineation of the Site WHPA. KLSWA has chosen to complete a traditional delineation for these wells, which is consistent with their other delineations.

## 1.1 BACKGROUND AND PURPOSE

### 1.1.1 WELL FIELD DESCRIPTION

The Site is located in Saugatuck Township of Allegan County, Michigan (T3N, R16W, Section 3), 200 feet west of Blue Star Highway and 350 feet south of Clear Brook Drive. This well field was originally installed by Saugatuck Township, and the wells were identified as Well 1 and Well 2. These wells later became part of the KLSWA system and are identified as Wells 6 and 7. This well field has serviced KLSWA since approximately 1997. The well field is a portion of the approximately 20-acre Cemetery property which is bordered by Blue Star Highway to the east and Clear Brook Drive to the north. Figure 1 shows the Site area and relevant geographic features. Table 1 contains construction details about wells 6 and 7.

**Table 1: General Well Information for Wells 6 and 7**

Well ID	Installation Date	Contractor	Rated Capacity (gpm)	Well Diameter (in)	Total Depth (feet)	Screen Length (feet)	Screen Slot Size	Static Water Level (feet-Appx.)
Well 6 (formerly well #1)	February 1997	Peerless-Midwest	410	8" well; 6" screen	148-217	30	0.018"	19
Well 7 (formerly well #2)	March 1997	Peerless-Midwest	1,020	12" screen	181-211	30	0.018"	18.2

## 2.0 BACKGROUND INFORMATION

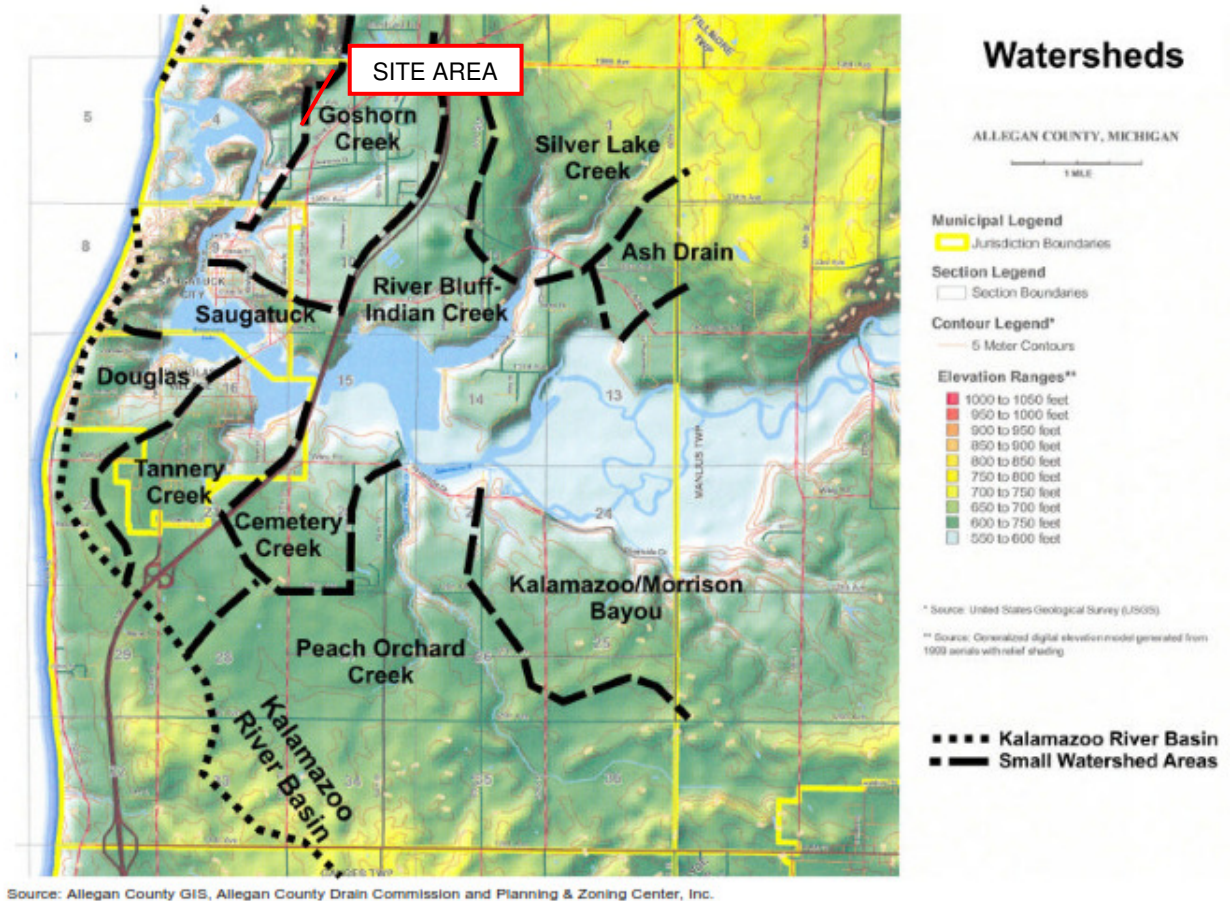
### 2.1 PHYSICAL SETTING

#### 2.1.1 TOPOGRAPHY

The topographic surface elevation in the Saugatuck area ranges from 745 to roughly 580 feet amsl. Typically, highest elevations are to the northeast and decrease toward Kalamazoo Lake, which is approximately 580 feet amsl. The Site elevation ranges from 610 to 621 feet amsl.

The primary surface water bodies in the area are Goshorn Creek, Goshorn Lake, Kalamazoo River, Kalamazoo Lake and Lake Michigan. The Site is located within the Goshorn Creek Watershed subsystem, a part of the Kalamazoo River Watershed Basin (as shown on Figure 2 below). The closest surface water body is Goshorn Creek, which cuts across the southeast corner of the Cemetery property, approximately 180 feet to the southeast of the Site.

FIGURE 2 – TOPOGRAPHY AND LOCAL WATERSHEDS

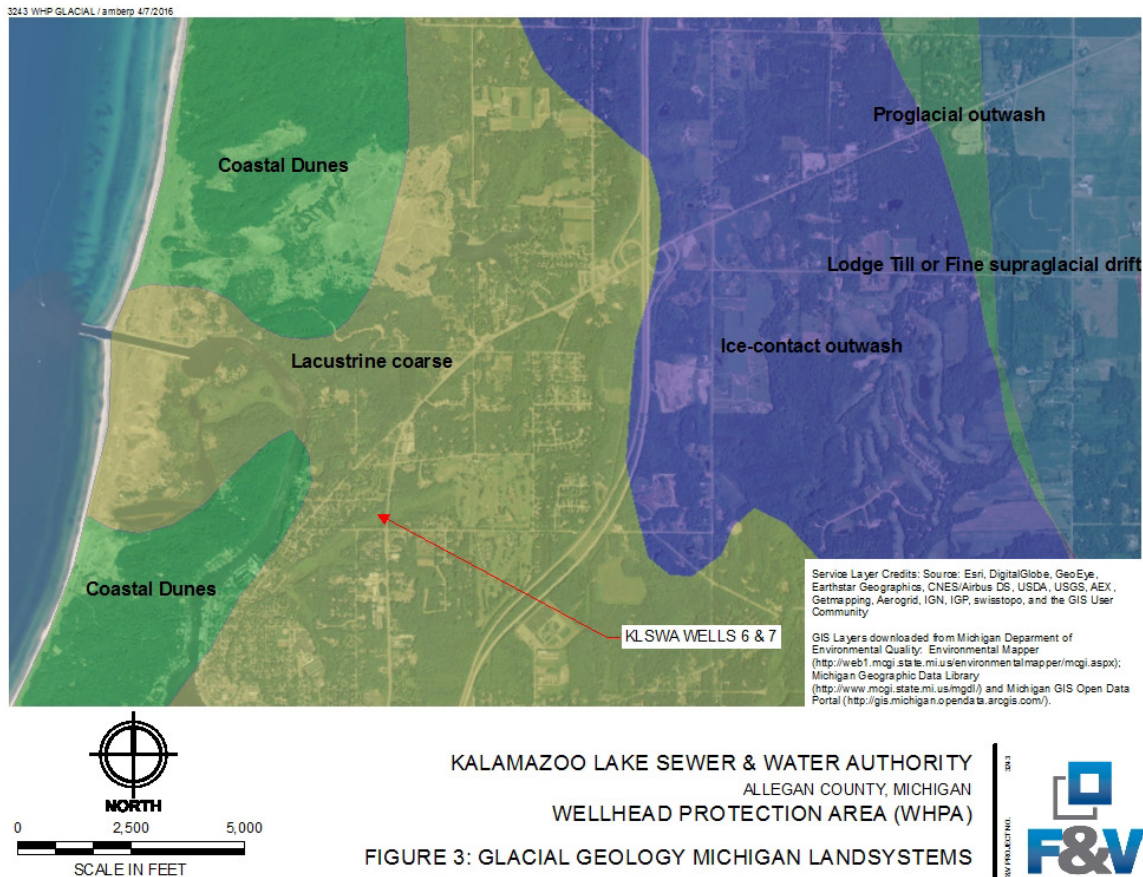


## 2.1.2 REGIONAL HYDROGEOLOGY

### Geological Setting

The glacial geology in the general vicinity of the Site is described as lacustrine sand and gravels with end moraines of fine-textured till to the northeast and coastal dune sand to the west (as shown on Figure 3 below). Bedrock underlying the glacial drift is the Coldwater Formation. The Coldwater Formation is predominantly shale and is not considered a viable groundwater source. The thickness of the glacial material overlying the bedrock is estimated to be 200-250 feet (MDEQ Glacial Thickness Map – Not Published, and WMU, 1981).

FIGURE 3 – GLACIAL GEOLOGY LANDSYSTEMS



### Regional Glacial Stratigraphy

Cross sections were developed by F&V as part of previous WHPA delineation work in May of 2000. These cross sections are provided in Appendix 1. The area is characterized by multiple alternative fine and coarse textured deposits as shown in cross sections A-A' and B-B'.

### Regional Groundwater Flow

F&V developed regional groundwater flow maps as part of the May 2000 WHPA delineation work. These figures include both preliminary and confirmed potentiometric surface maps. The confirmed potentiometric surface map was developed using multiple measured groundwater elevations and surface water elevations. These regional groundwater flow maps are included in Appendix 1. These maps suggest groundwater in the region is flowing from the northeast to southwest toward the Kalamazoo River Basin.

Water table elevations in the Site area have been mapped by MDEQ. Water table elevations in the general vicinity of the Site indicate groundwater is generally flowing west toward Lake Michigan. The MDEQ water table map for the Site is provided in Appendix 2. Water table elevations at the Site are approximately 600-610 feet amsl; whereas potentiometric surface water elevations are slightly lower at approximately 580 feet amsl.

A further analysis of the regional potentiometric surface is provided in this report.

### Groundwater Recharge

On average, the well Site area receives approximately 36 inches of precipitation per year (Weather Data Base for Saugatuck, Michigan). Of that precipitation, an average of 10 to 15 inches per year enters the groundwater system as effective recharge (Holtschlag, 1996). Recharge is not expected to be spatially uniform in the area.

### **2.1.3 SITE GEOLOGY**

Two (2) production wells and one observation well were drilled at the Site (Well #1, Well #2 and TW-96A.) Geological records from these wells provide data regarding the hydrogeological conditions at the Site.

A generalized description of the Site geology is as follows:

<u>Depth (ft)</u>	<u>Geology</u>
0-19	Sand
19-27	Clay
27-42	Interbedded sand/clay
42-65	Silty sand with clay
65-127	Clay
127-138	Fine Sand
138-153	Clay with find sand
153-190	Find sand
190-205	Fine sand with some medium sand
205-214	Interbedded sand, gravel and clay

## **3.0 GROUNDWATER FLOW MODEL**

### **3.1 CONCEPTUAL MODEL**

Aquifer testing indicates that Wells 6 and 7 are completed in a confined aquifer. Tritium testing by KLSWA indicates this aquifer is protected. Deposits in the well field area, including the production aquifer and overlying confining layers are interpreted to be lacustrine (lake derived). A review of well logs suggests much of the drift in the area is interbedded with alternating coarse and fine textured deposits, which is consistent with their lacustrine origin.

The surficial geological deposits and groundwater flow mapping suggest recharge to the aquifer used by Wells 6 and 7 is from the northeast. Outwash deposits are present to the east. These deposits are typically coarse in nature and would promote recharge. To the west is Lake Michigan, a regional groundwater discharge area. These two conditions appear to result in flow from the northeast to southwest in the well field area.

An analysis of the hydraulic gradient for the area suggests two distinct patterns. Areas to the east of US-31 are characterized by a very steep hydraulic gradient. In contract, areas around the well field have a much flatter hydraulic gradient. The gradient changes generally correspond to the transition between lacustrine deposits and ice contact deposits as shown in Figure 3. The steep hydraulic gradient associated with the outwash deposits suggests that the confined aquifer present in the Site area may be limited primarily to the lacustrine deposits.

Wells 6 and 7 are located approximately 3,800 feet from KLSWA production wells 4 and 5. All of these wells are deriving groundwater from lacustrine deposits and, from all indications, are completed in hydraulically connected hydrofacies. The two well fields are on opposite sides of Goshorn Creek.

The aquifer used by Wells 6 and 7 appears to have minimal hydraulic connection with surface waters in the vicinity of the well field. That said, the aquifer likely interacts with the Kalamazoo River and Lake Michigan, both probable discharge points for groundwater.

### 3.2 MODEL SELECTION

Groundwater flow for this project was simulated using the analytical model WinFlow – a module of AquiferWin<sup>32</sup> version 5.01 (© 1997-2013 Environmental Simulations, Inc.) WinFlow is an interactive, analytical model that simulates two-dimensional steady-state and transient groundwater flow (both confined and unconfined aquifers) with wells, uniform recharge, circular recharge/discharge areas, and line sources or sinks. The model depicts the flow field using streamlines, particle traces, and water level contours.

### 3.3 AQUIFER PROPERTIES

#### 3.3.1 TRANSMISSIVITY/HYDRAULIC CONDUCTIVITY

Peerless-Midwest conducted aquifer testing in Well 6 (formerly known as Production Well #1) and Well 7 (formerly Production Well #2) in March of 1997 using constant pumping rates of 500 and 1,003 gpm (respectively). Comparing drawdown values, Peerless-Midwest calculated specific capacities of 10.8 and 126 gpm/ft of drawdown.

The aquifer in this area is confined, as evidenced by the moderately thick clay units shown in the well log and the time vs. drawdown curves derived from aquifer testing. This finding is also supported by tritium testing conducted by KLSWA that showed the production aquifer to be low in tritium.

Key findings from Peerless-Midwest aquifer analysis in Well 7 are summarized in Table 2 below.

**Table 2: Peerless-Midwest Aquifer Analysis Key Findings**

Well	Transmissivity (ft <sup>2</sup> /d)	Storativity (dimensionless)	Hydraulic Conductivity (ft/d)
Well #6 (formerly #1)	4,140	2.0e-03	60.0
TW-96A	3,623	5.13-04	52.5
5" "Maintenance" well	3,388	3.9e-04	49.1

Hydraulic conductivities were calculated using an aquifer thickness of 69 feet, and ranged from 49.1 to 60.0 feet/day. The values fall within the range of conductivities for fine to medium sands.

Aquifer testing was conducted at the Well 4 site. These data were described in F&Vs 2000 Wellhead Protection Delineation Report at Well 4. There were two tests run. One of the tests suggested an aquifer transmissivity of approximately 10,427 ft<sup>2</sup>/d while the other suggested a transmissivity of approximately 3,449 ft<sup>2</sup>/d. The lower transmissivity is consistent with that observed during the Well 7 test.

### **3.3.2 POROSITY**

Effective porosity used in the model is from literature sources. Studies suggest that the effective porosity of a sand/gravel aquifer range between 25 and 30% (Johnson 1967). For the purpose of this model, an effective porosity of 25% was chosen.

### **3.3.3 GROUNDWATER FLOW**

Groundwater elevation data are necessary to develop and calibrate the groundwater model used for the delineation. Regional groundwater flow information has been summarized previously in this report.

To augment the available groundwater elevation/flow information, F&V collected water level data from several local wells. These data augmented water level data collected by F&V for previous KLSWA delineations.

To collect the recent data, KLSWA sent out notifications to well owners asking for their permission for the collection of water level data. A majority of well owners who were sent letters participated.

F&V collected water level data using a sonic meter (meter type). By using this approach, we did not have to enter the well with a traditional electric tape.

F&V surveyors collected x, y and z coordinates for all measuring points. Table 3 summarizes data from the wells used for water level data collection, including data collected by F&V from previous delineations.

Groundwater flow in the vicinity of Wells 6 and 7 has been evaluated by analyzing water levels obtained from well records and measured in local wells.

Water well records available on the State database for the area were imported into a GIS and sorted by well depth. These data were combined in a map showing water level data collected by F&V in 1999 and in 2016. F&V reviewed the combined data set and filtered out data that were clear anomalies. We produced a potentiometric surface map using the combined data. This map is provided as Figure 4. Not all the water well record data were used in the contouring. Data that were omitted were considered to be the least reliable of the data set.

As noted previously, there is a significant hydraulic gradient change that occurs east-northeast of Wells 6 and 7. This change appears to be related to a transition from lacustrine to outwash deposits. F&V chose to use the hydraulic gradient representative of the areas between the A-2/US-31 interchange and the Well 6 and 7 area to calibrate the model.



### **3.4 MODEL CALIBRATION**

The model was calibrated to known pumping conditions and water level conditions. Fourteen (14) head targets were used in calibration of the model with particular emphasis on the Well 6 and 7 well field area. For the calibration, modeled heads were compared to both measured and regional heads in the area, and model parameters were varied through an iterative process to minimize residuals between these surfaces. With an analytical model, the calibration process is limited. The primary goal was to achieve a hydraulic gradient and direction similar to those observed in the Site area. These head targets included the July 2016 water level data collected by F&V and historical water level data collected in the general area. Calibration statistics for the model are provided in Appendix 3.

Pumping rates used in the calibration process were those documented at the time the July 14 and 15, 2016 water levels were collected. KLSWA indicated that Well 6 was operating during the measurement period at a flow rate of 400 gpm for a period of approximately 16 hours each day.

Figure 5 compares the July 2016 potentiometric surface contours with the calibrated model simulated contours. The calibrated, model-simulated potentiometric surface compares very well with the measured surface with respect to flow direction and gradient.

The model is considered sufficiently calibrated for its intended use. Most importantly, the simulated potentiometric surface matches measured potentiometric surfaces in the well field area, both in terms of flow direction and hydraulic gradients.

### **3.5 MODEL SENSITIVITY**

Various simulations were run to examine the model sensitivity. The model was most sensitive to effective porosity. F&V used a conservative estimate of effective porosity (25%). The model is also sensitive to hydraulic conductivity.

### **3.6 MODEL LIMITATIONS AND USE**

As with most models, the model developed for this project is only a rough approximation of the complex hydrogeological setting it was designed to represent. The model developed is sufficient to use for the WHPA delineation for which it was designed. The model is not currently designed to couple with a transport model to predict contaminant fate and migration. If the model were to be used in that application, it would have to be modified accordingly.

A key limitation of the model is noted below:

1. Analytical modeling is limited due to simplifying assumptions. While relatively homogenous, geology of an area is inherently complex and not strictly homogenous.



#### 4.0 WELLHEAD PROTECTION AREA DELINEATION

##### 4.1 PUMPING RATES USED FOR MODELING INPUT

Production well flow data are necessary input into the model. KLSWA production well pumping-rate data for the period 2012 to 2015 have been obtained from the KLSWA Water Supervisor and are tabulated below in Table 4:

**Table 4: KLSWA Wells 6 & 7 Pumping Data for 2012-2015**

Year	Peak Month	Peak Month Total Water Usage(MGD)	Peak Month Minimum Daily Water Usage (MGD)	Peak Month Maximum Daily Water Usage (MGD)	Peak Month Average Daily Water Usage (MGD)
2012	July	19.575	0.060	1.185	0.631
2013	August	14.459	0.070	1.162	0.466
2014	August	21.210	0.000	1.339	0.684
2015	August	9.556	0.066	0.737	0.308

For the purpose of the model, F&V used the average Peak Month Average Daily Water use, which was 0.522 MGD.

Wells 4 and 5 were also assumed to be pumping in the model. F&V used a combined flow rate of 0.279 MGD for these wells. This rate was also used in the model calibration and deemed by F&V to be generally representative of the average combined flow rate for these wells.

##### 4.1.2 WELLHEAD PROTECTION AREA MODELING

The groundwater flow model was used to delineate the 10-year WHPA for Wells 6 and 7. This was accomplished using the model and applying particle-tracking methods. The particle-tracking was performed using the AquiferWin32 model. Particles were “reverse” tracked for a 10-year period.

Figure 7 shows 1, 5 and 10-year time of travel particle traces for Wells 6 and 7.

##### 4.1.3 DELINEATION UNCERTAINTIES AND RECOMMENDED WHPA

The groundwater flow modeling suggests the ten-year time-of-travel is rather circular as a result of the relatively flat hydraulic gradient in the vicinity of Wells 6 and 7. F&V does not believe the WHPA needs to be adjusted for potential variations in the flow direction and the variables used in the delineation are reasonable for the geological setting. The extent of the WHPA is most sensitive to effective porosity. F&V used a conservative estimate of 25% effective porosity. In addition, the delineation is based on a peak flow rate. As such, F&V does not recommend that the WHPA developed using particle tracking be altered. The recommended WHPA is shown on Figure 7.

## 5.0 REFERENCES

Fleis & Vandenbrink Engineering, Wellhead Protection Area Report, 2000

Farrand, W.R. and Bell, D.L., 1982, Quaternary Geology of Northern Michigan: Michigan Department of Natural Resources, Geological Publication QG-01

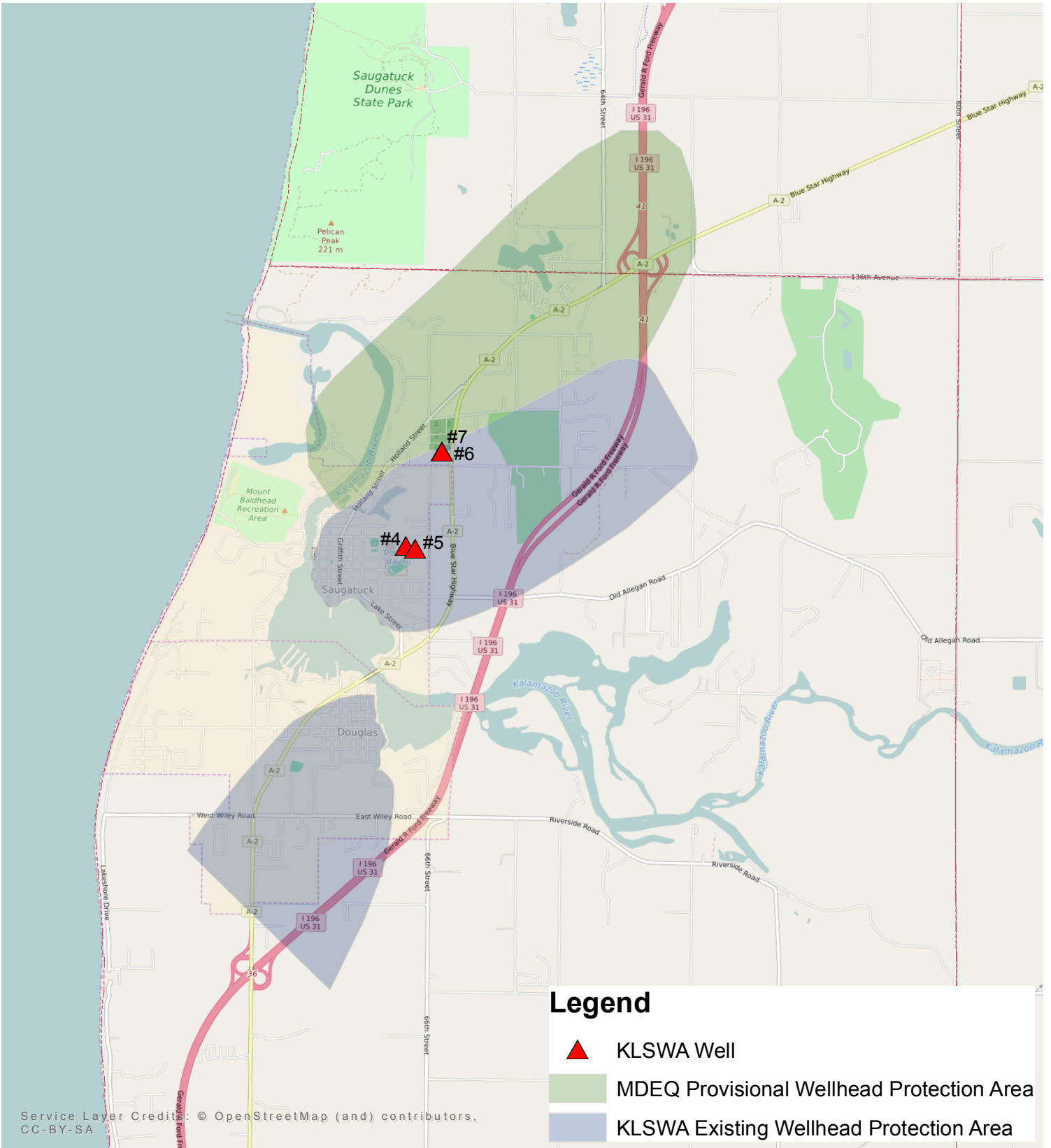
Holtschlag, D.J., 1996, A Generalized Estimate of Ground-Water Recharge Rates in the Lower Peninsula of Michigan: U.S. Geological Survey Open-File Report 96-593, 37 p.

Johnson, A.I., Specific Yield – Compilation of Specific Yields for Various Materials, USGS Water-Supply Paper 1662 – D, 1967

MDEQ Geowebface (<http://www.deq.state.mi.us/GeoWebFace/>)

Western Michigan University, 1981, Hydrogeologic Atlas of Michigan, Department of Geology

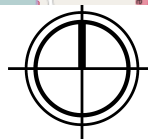
**FIGURES**



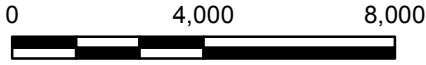
### Legend

- ▲ KLSWA Well
- MDEQ Provisional Wellhead Protection Area
- KLSWA Existing Wellhead Protection Area

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA



NORTH  
4,000



SCALE IN FEET

**KALAMAZOO LAKE SEWER & WATER AUTHORITY**  
 SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
**WELLHEAD PROTECTION PLAN**

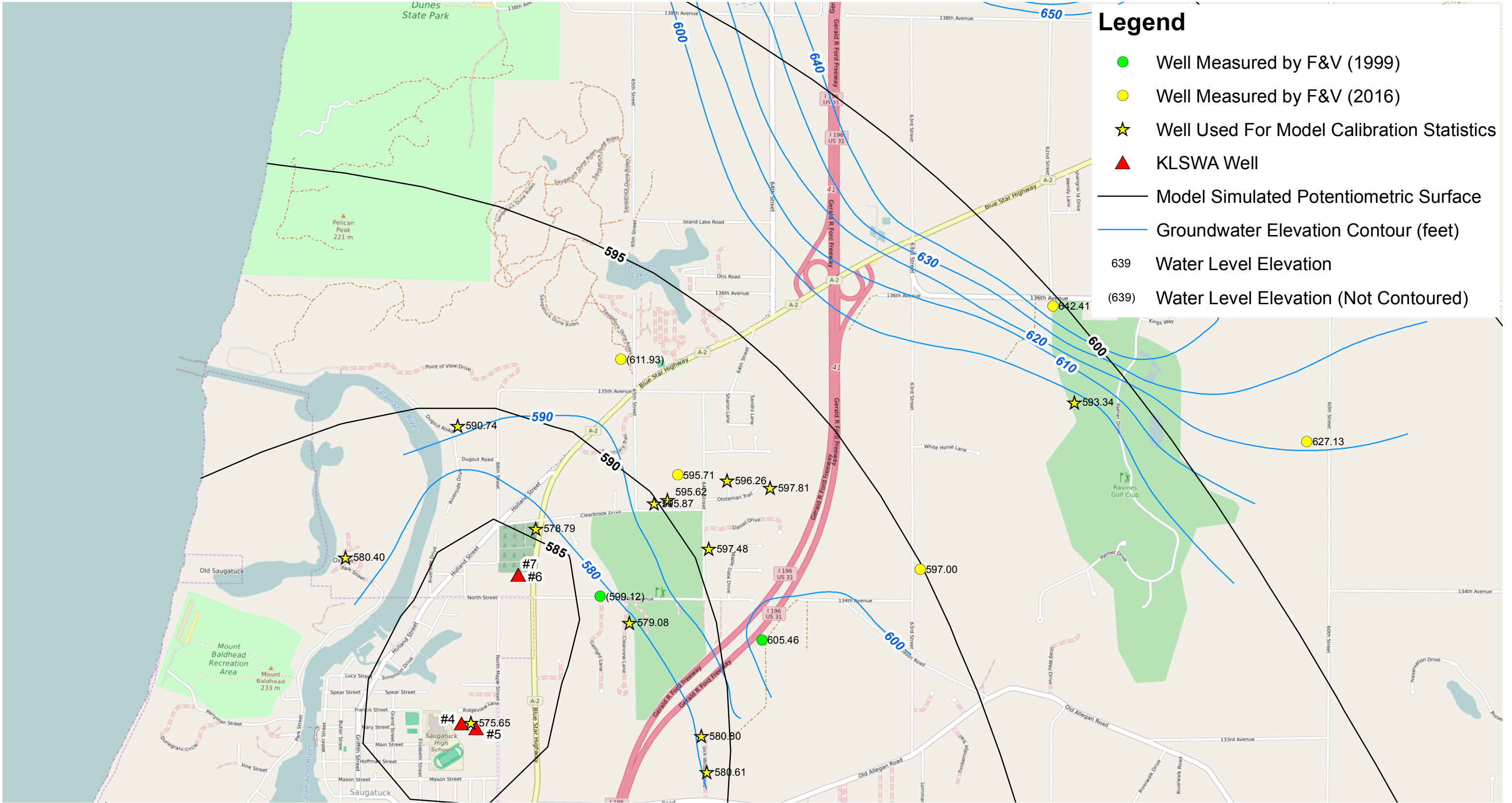
FIGURE 1 SITE MAP

F&V PROJECT NO. 825400 (3243)









**Legend**

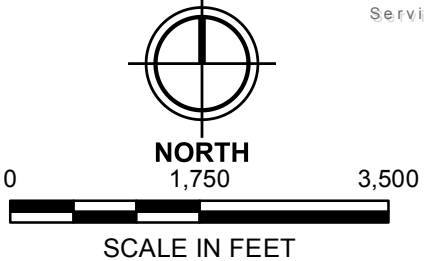
- Well Measured by F&V (1999)
- Well Measured by F&V (2016)
- ★ Well Used For Model Calibration Statistics
- ▲ KLSWA Well
- Model Simulated Potentiometric Surface
- Groundwater Elevation Contour (feet)
- 639 Water Level Elevation
- (639) Water Level Elevation (Not Contoured)

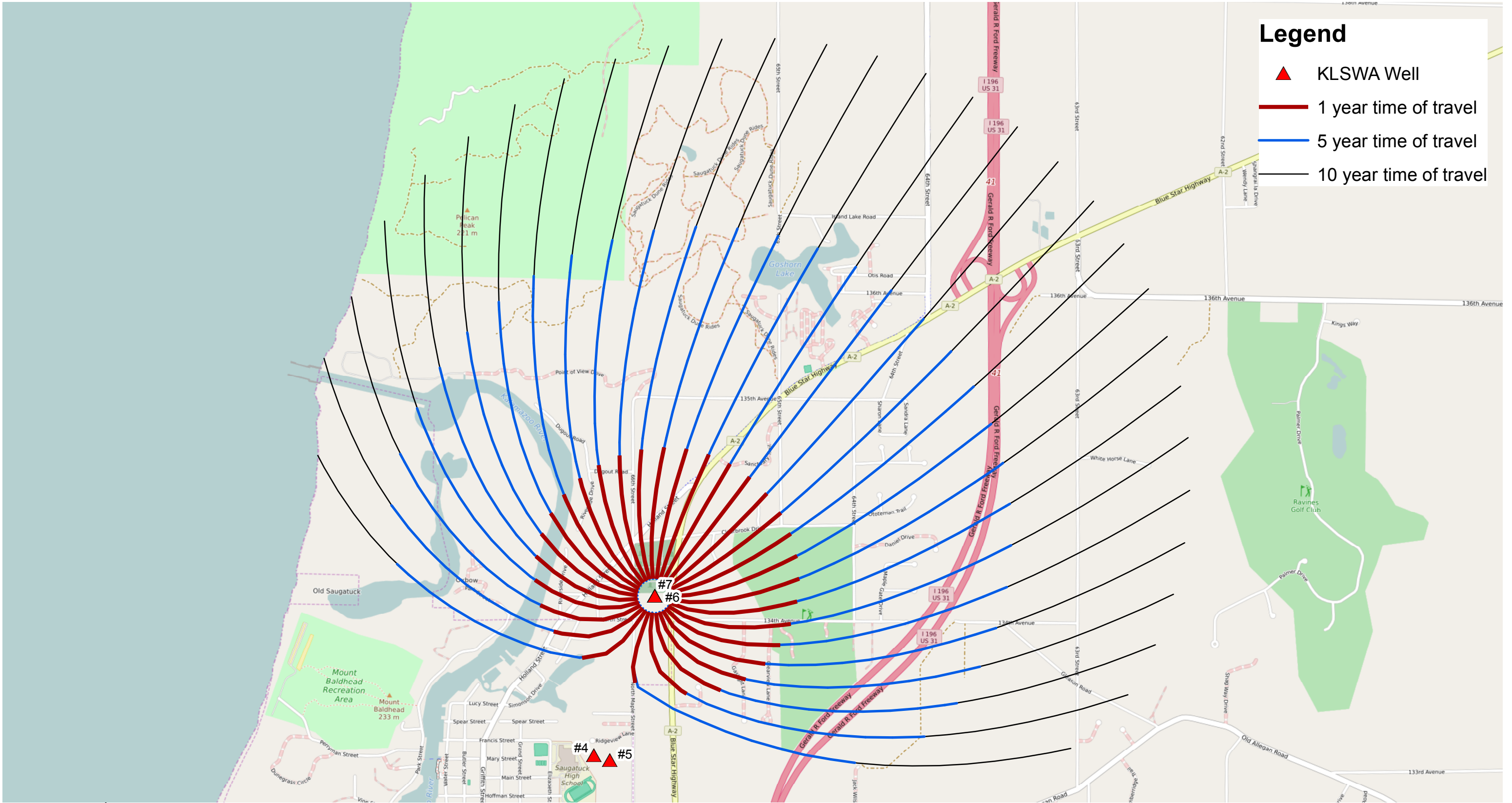
Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

Elevations from MDEQ Well Records were calculated using a Digital Elevation Model and Static Water Levels from the well logs; elevations are in Feet Above Mean Sea Level. Elevations measured by F&V are in NAVD 88 (Feet).

Not all data are contoured.

KALAMAZOO LAKE SEWER & WATER AUTHORITY  
 SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
**WELLHEAD PROTECTION PLAN**  
 FIGURE 5 COMPARISON OF MEASURED AND  
 SIMULATED POTENTIOMETRIC SURFACE CONTOURS





**Legend**

- ▲ KLSWA Well
- 1 year time of travel
- 5 year time of travel
- 10 year time of travel

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

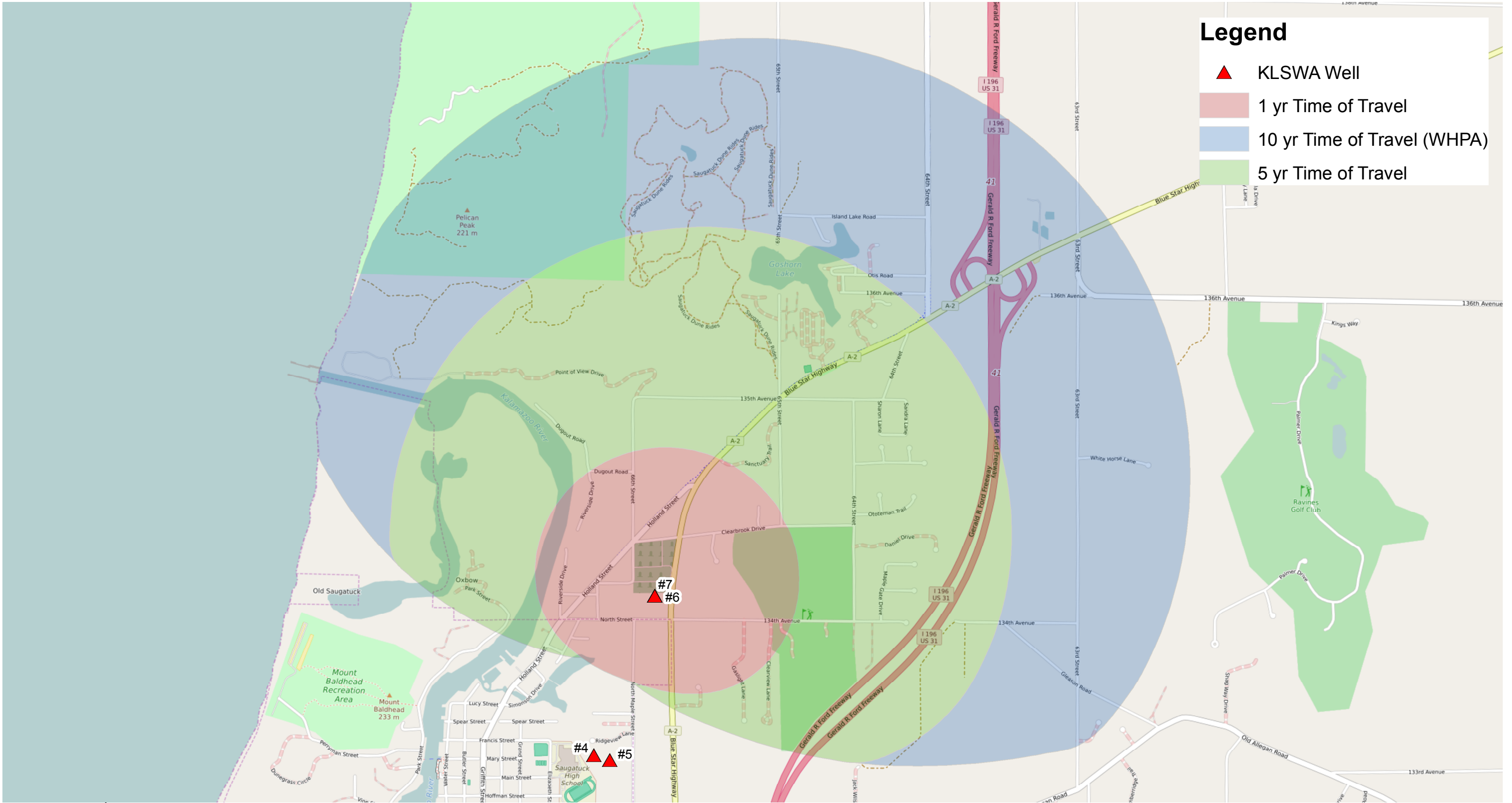
**NORTH**  
0 1,600 3,200  
SCALE IN FEET

**KALAMAZOO LAKE SEWER & WATER AUTHORITY**  
SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
**WELLHEAD PROTECTION PLAN**

**FIGURE 6 PARTICLE TRACES**

F&V PROJECT NO. 825400 (3243)

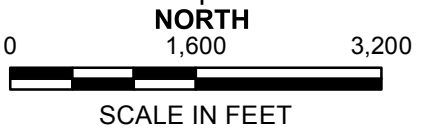
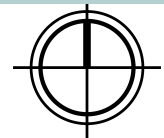




**Legend**

- ▲ KLSWA Well
- 1 yr Time of Travel
- 10 yr Time of Travel (WHPA)
- 5 yr Time of Travel

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA



**KALAMAZOO LAKE SEWER & WATER AUTHORITY**  
 SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
**WELLHEAD PROTECTION PLAN**

**FIGURE 7 PROPOSED WELLHEAD PROTECTION AREA DELINEATION**

F&V PROJECT NO. 825400 (3243)



**TABLES**

**TABLE 3**  
**KLSWA WELLHEAD PROTECTION PROGRAM**  
**REGIONAL STATIC WATER LEVEL MEASUREMENTS**

Collected September 8 & 9, 1999; December 8, 1999

**SAUGATUCK**

ID	Owner	Well Address	X, Y Coord. (NAD27)		Section	POM <sup>1</sup>	TD <sup>6</sup>	Screened Depth	Screened Elevation <sup>3</sup>	Depth to Water <sup>4</sup>	SWE <sup>5</sup>
3-1	Saugatuck Cemetery	Blue Star Hwy	431498	1500531	3	623.59	220'		443.59-403.59	44.80	578.79
3-2	Unknown	3494 N. Kawa	432405	1504161	3	623.41	100+		--	27.15	596.26
9-1	Village of Saugatuck	Maple Street	427802	1499293	9	613.45	202'		--	37.80	575.65
10-1	Unknown	3273 Jack Wilson Dr.	426867	1503774	10	626.81	100'		--	46.20	580.61
10-2	Shovan, Bob	3357 Clearview	429708	1502309	10	620.70	138'		492.70-482.70	41.62	579.08
10-3	York	6532 134th Street	430204	1501749	10	618.76	90+		--	19.64	599.12
15-1	Figeley	6583 Bradley Road	425001	1500326	15	636.54	92'		549.54-545.54	56.65	579.89
16-7	Kal Lake Surf Wtr	North Side	424868	1498743	16	577.77	--		--	--	577.77
MW-7D	Exit 41 Landfill	Saugatuck	429374	1504824	10	627.48	58'		568.91-570.91	22.02	605.46

Collected July 14 & 15, 2016

ID	Owner	Well Address	X, Y Coord. (NAD83)		Section	POM <sup>2</sup>	TD <sup>6</sup>	Screened Depth	Screened Elevation <sup>3</sup>	Depth to Water <sup>4</sup>	SWE <sup>5</sup>
1-1	David / Sharon Meengs	3500 60th St	432965.812	12647499.89	1	709.53	--	--	--	82.40	627.13
1-2	Ravines Golf Club (John Tuckerman)	3520 Palmer Drive	433712.898	12643081.32	1	679.94	--	--	--	86.60	593.34
1-3	Ravines Maintenance Building (John Tuckerman)	6196 136th Street	435539.682	12642676.73	1	696.81	87	77-87	610-620	54.40	642.41
2-1	Saugatuck-Douglas Area Senior Center	3419 63rd Street	430538.065	12640155.98	2	669.10	--	--	--	72.10	597.00
3-3	Keith Aldrich	3437 64th Steet	430928.972	12636136.11	3	624.18	121	101-121	503-523	26.70	597.48
3-4	Ron Conklin	3485 65th	432329.399	12635550.48	3	619.21	116	96=116	503-523	23.50	595.71
3-5	Linus/Janice Starring	Blue Star Highway/65th Street	434527.086	12634464.95	3	622.13	--	--	--	10.20	611.93
3-6	Patric Bergin	6404 Ototeman Trail	432086.548	12637303.55	3	620.71	108	88-108	512-532	22.90	597.81
3-7	Harold Wise	6473 Clearbrook Drive	431854.503	12635356.76	3	622.52	117	97-117	506-526	26.90	595.62
3-8	Bill Baker	6487 Clearbrook Drive	431794.557	12635100.84	3	627.57	125	105-125	503-523	31.70	595.87
4-1	OxBow Art Camp (John Rossi)	3435 Rupprecht Way	430765.805	12629236.00	4	591.50	--	--	--	11.10	580.40
4-2	PineTrail Camp (Mike Mora)	3525 Dugout Rd	433267.339	12631369.29	4	610.84	73	53-73	538-558	20.1	590.74
10-4	KLSWA	6449 Old Allegan Rd	427373.935	12636003.35	10	632.20	162	132-162	470-500	51.40	580.80
26-1	Daryl Miller / Griffin Myer	3916 Beeline Road	444153.269	12638254.97	26	735.48	--	--	--	88.70	646.78

<sup>1</sup>POM Represents Surveyed Reference Point of Measurement on the Well Casing Referenced to 1927 National Geodetic Datum.

<sup>2</sup>POM Represents Surveyed Reference Point of Measurement on the Well Casing Referenced to North American Vertical Datum (NAVD) 88.

<sup>3</sup>Represents POM Less Screened Depths

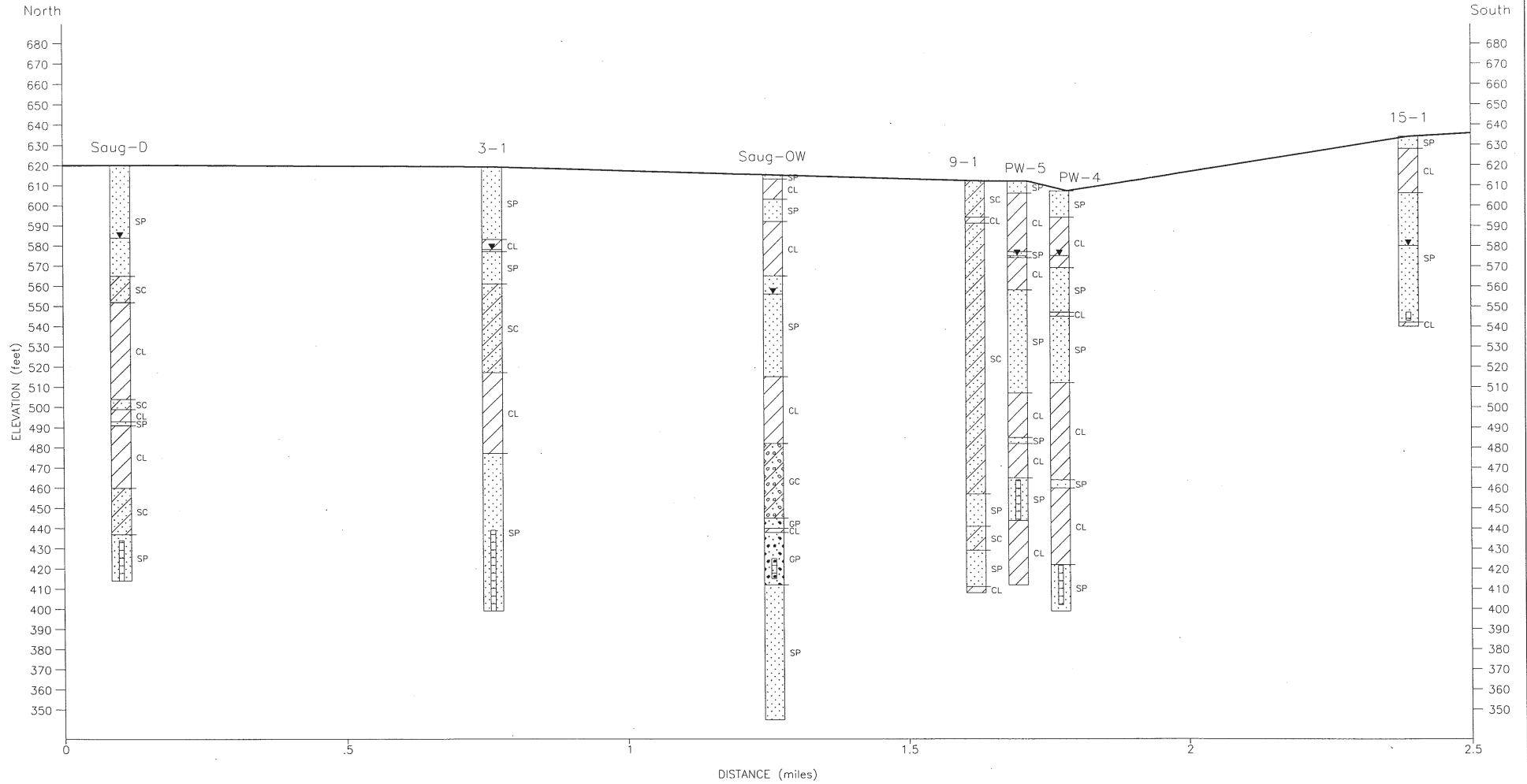
<sup>4</sup>Measurement from POM to water surface; completed in one day

<sup>5</sup>POM Less Depth to Water

<sup>6</sup>Total Depth of Well

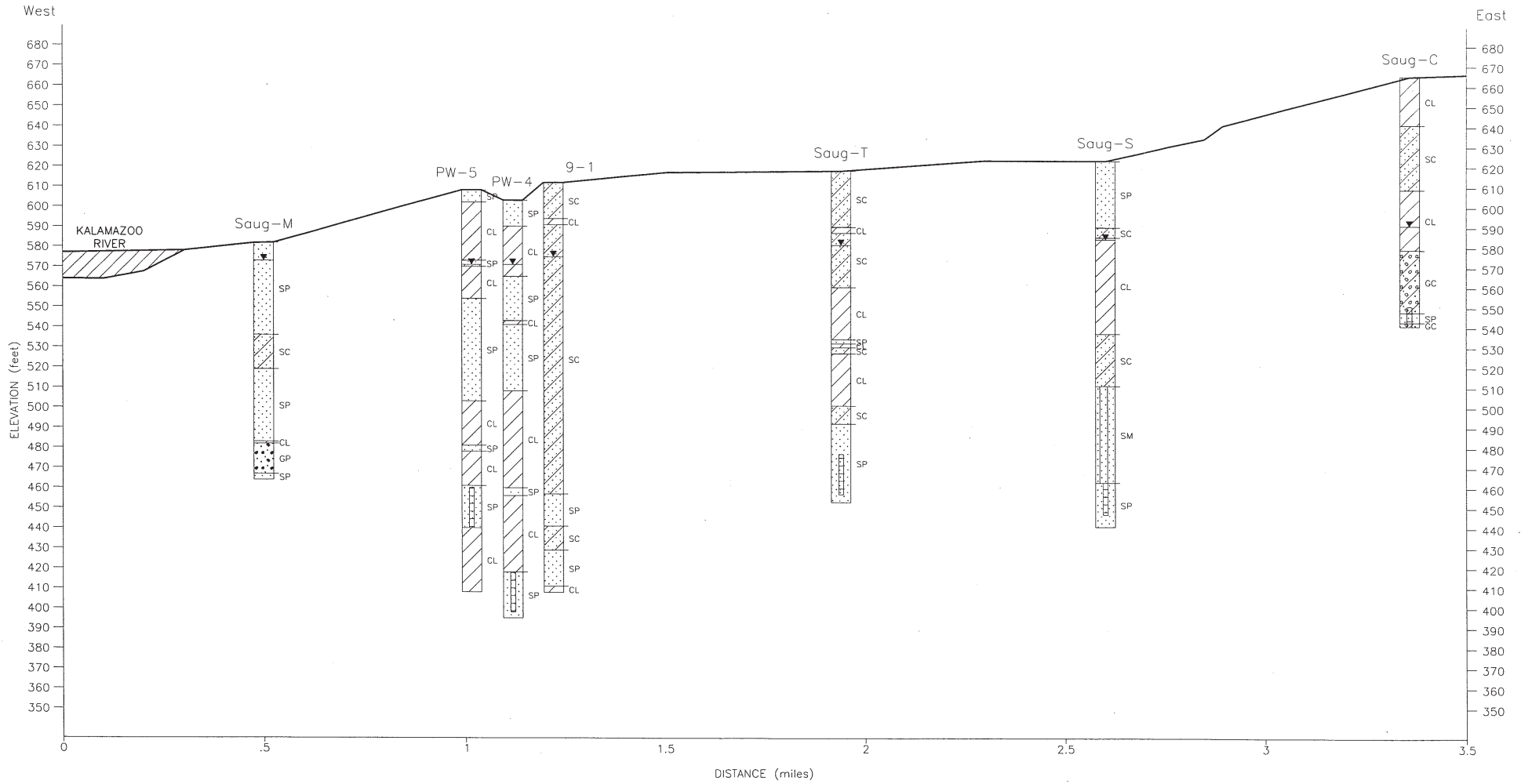
**APPENDIX 1**





**LEGEND**

- |                          |                          |
|--------------------------|--------------------------|
| CL Inorganic Clays       | SP Poorly Graded Sands   |
| GC Clayey Gravels        | SC Clayey Sands          |
| GP Poorly Graded Gravels | ▼ Static Water Elevation |
|                          | ▭ Well Screen            |



**LEGEND**

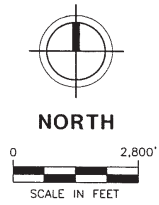
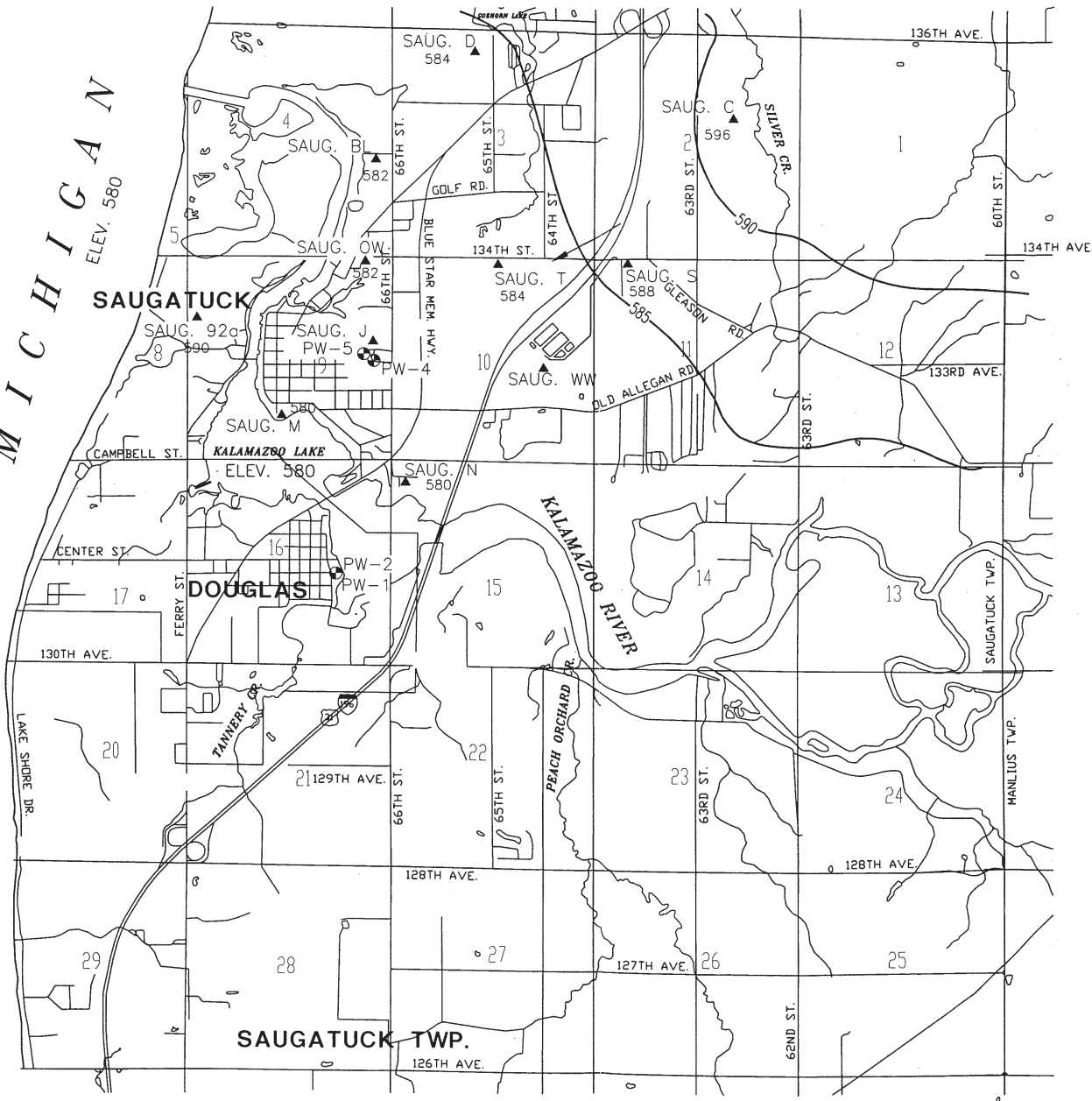
- |                          |                        |
|--------------------------|------------------------|
| CL Inorganic Clays       | SM Silty Sands         |
| GC Clayey Gravels        | SP Poorly Graded Sands |
| GP Poorly Graded Gravels | SC Clayey Sands        |
| Well Screen              | Static Water Elevation |

**KLSWA**  
ALLEGAN COUNTY, MICHIGAN

**SECTION B-B'**  
FIGURE 6

2000 324.3

L A K E M I C H I G A N  
ELEV. 580



**LEGEND**

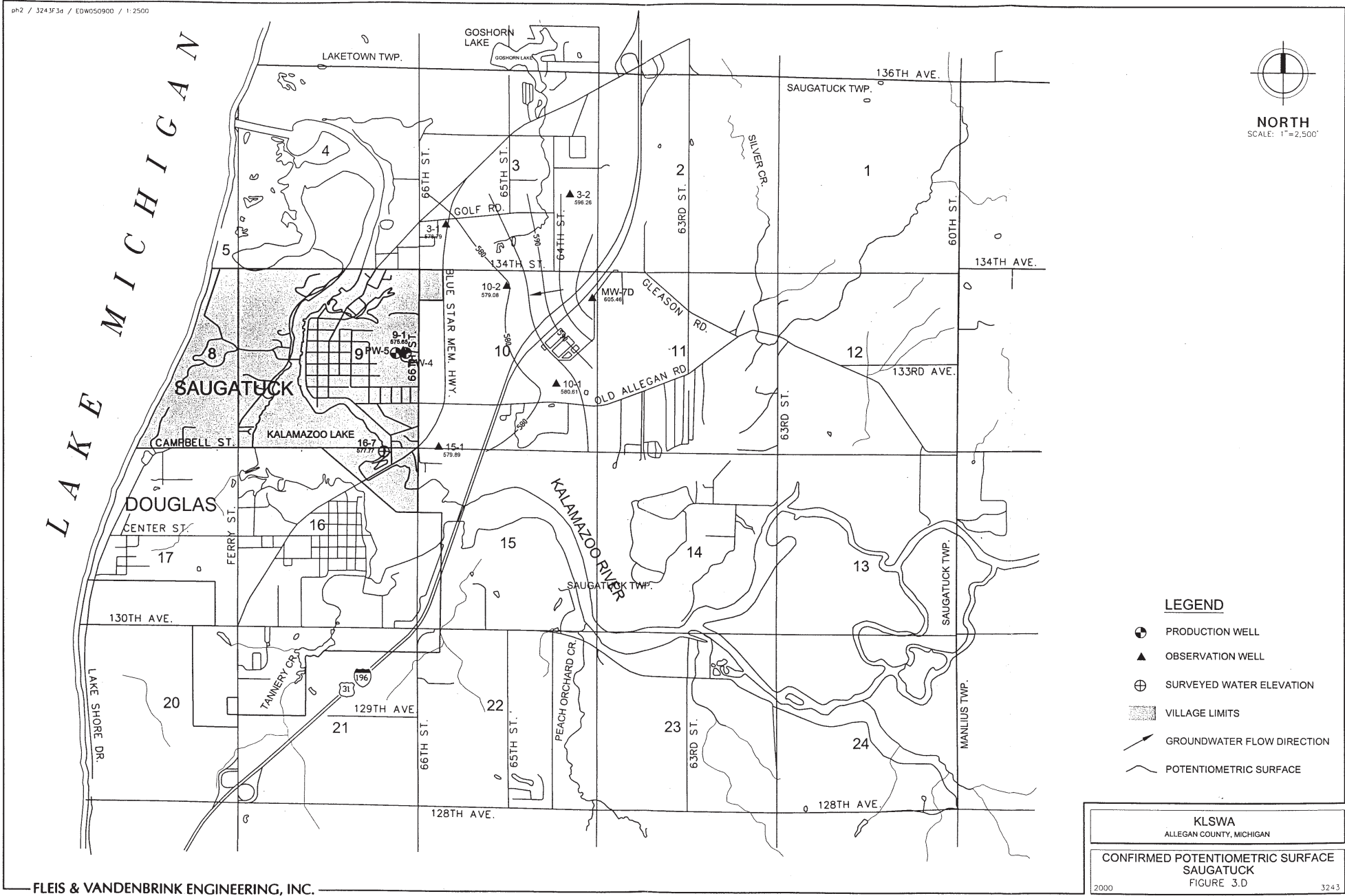
- PRODUCTION WELL (PW)
- OBSERVATION WELL
- GROUNDWATER FLOW DIRECTION
- POTENTIOMETRIC SURFACE

<b>KLSWA</b> ALLEGAN COUNTY, MICHIGAN	
<b>INITIAL POTENTIOMETRIC SURFACE</b> <b>SAUGATUCK</b> FIGURE 3.C	
2000	3243

L A K E M I C H I G A N



NORTH  
SCALE: 1"=2,500'



**LEGEND**

- PRODUCTION WELL
- OBSERVATION WELL
- SURVEYED WATER ELEVATION
- VILLAGE LIMITS
- GROUNDWATER FLOW DIRECTION
- POTENTIOMETRIC SURFACE

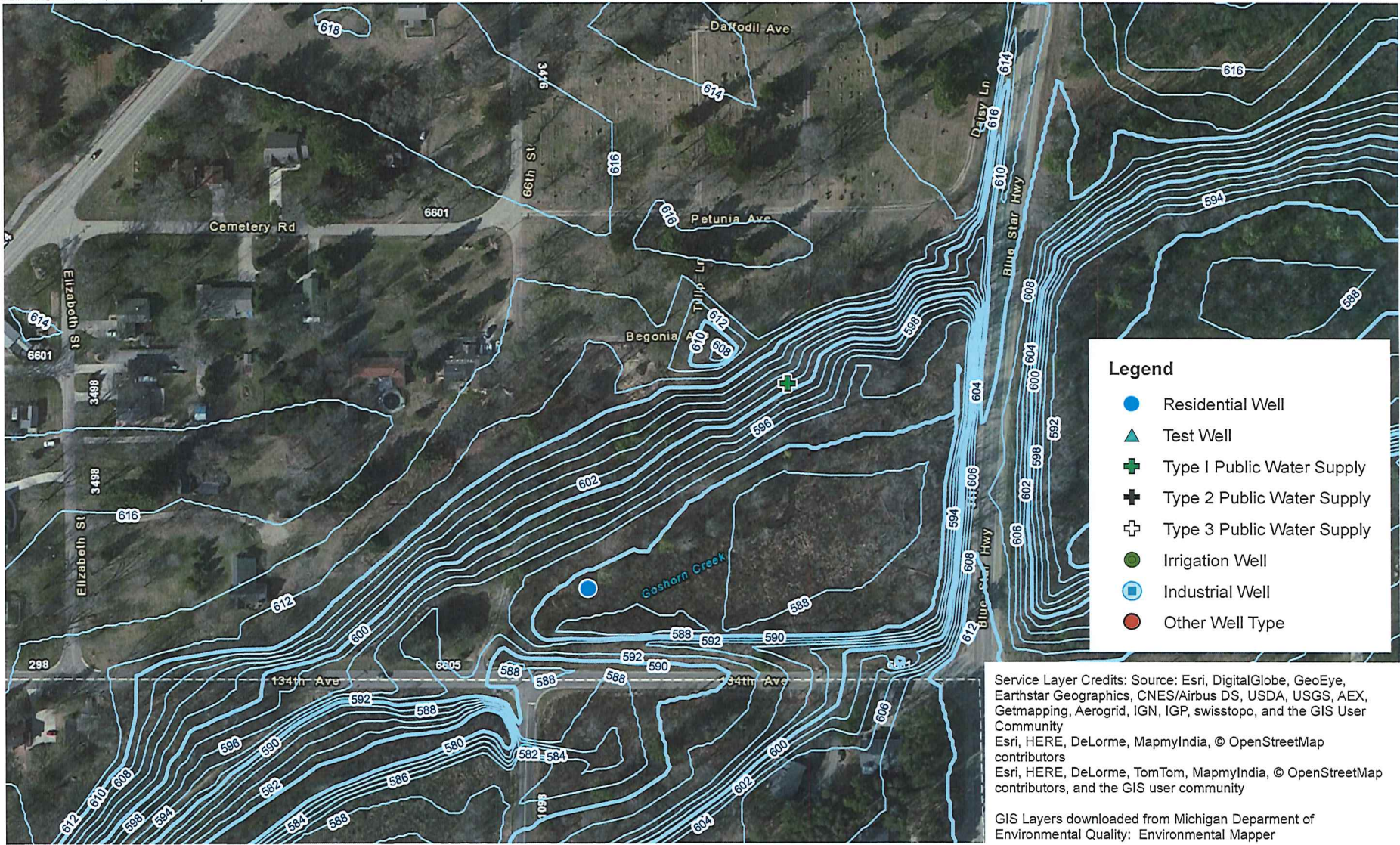
KLSWA  
ALLEGAN COUNTY, MICHIGAN

**CONFIRMED POTENTIOMETRIC SURFACE  
SAUGATUCK**  
FIGURE 3.D

2000 3243



## **APPENDIX 2**

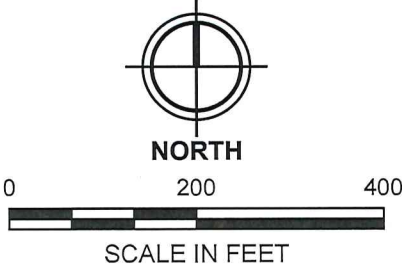


**Legend**

- Residential Well
- ▲ Test Well
- + Type 1 Public Water Supply
- ⊕ Type 2 Public Water Supply
- ⊞ Type 3 Public Water Supply
- Irrigation Well
- Industrial Well
- Other Well Type

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community  
 Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors  
 Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

GIS Layers downloaded from Michigan Department of Environmental Quality: Environmental Mapper



KALAMAZOO LAKE SEWER & WATER AUTHORITY  
 ALLEGAN COUNTY, MICHIGAN  
 WELLHEAD PROTECTION AREA (WHPA)  
 MDEQ WATER TABLE MAP

3243  
 F&V PROJECT NO.





Target Statistics Information

Summary | Detail

Target Summary Statistics

- Residual Mean = -3.219927
- Residual Standard Dev. = 6.335401
- Residual Sum of Squares = 707.073238
- Absolute Residual Mean = 6.258478
- Minimum Residual = -10.632660
- Maximum Residual = 4.816291

OK Cancel Apply Help

Target Statistics Information

Summary | Detail

	Name	Observed (ft)	Predicted (ft)	Residual (ft)	
1	1-2	593.34	600.173	-6.8325	
2	3-1	578.79	587.971	-9.18127	
3	3-2	596.26	592.322	3.93844	
4	3-3	597.48	592.664	4.81629	
5	3-4	595.71	594.869	0.840675	
6	3-6	597.81	594.333	3.47666	
7	3-7	595.62	591.629	3.99094	

OK Cancel Apply Help

### Target Statistics Information



Summary **Detail**

	Name	Observed (ft)	Predicted (ft)	Residual (ft)	
8	3-8	595.87	591.663	4.20685	↑
9	4-1	580.4	588.768	-8.36756	
10	4-2	590.74	591.734	-0.994074	
11	9-1	575.65	585.632	-9.98183	
12	10-1	580.61	590.911	-10.3009	
13	10-4	580.8	590.858	-10.058	
14	10-2	579.08	589.713	-10.6327	↓

OK

Cancel

Apply

Help



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



C. HEIDI GREETHER  
DIRECTOR

October 14, 2016

Mr. Daryl VanDyke  
Kalamazoo Lake Sewer & Water Authority  
P.O. Box 789  
6449 Old Allegan Road  
Saugatuck, Michigan 49453

WSSN: 03525  
Allegan County

Dear Mr. VanDyke:

This letter is in response to the report "Wellhead Protection Area Delineation Report for Wells 6 and 7" dated September 2016 and submitted on your behalf by Fleis & VandenBrink Engineering, Inc. (F&V). The report was intended to update the wellhead protection areas (WHPAs) for the Kalamazoo Lake Sewer and Water Authority (KLSWA), accounting for the additional management of Production Wells 6 and 7 within their public water supply system. The Department of Environmental Quality (DEQ) criteria for WHPA delineation have been met, and the updated WHPA is approved as presented in Figure 7; *Proposed Wellhead Protection Area Delineation* in the F&V report.

As we currently understand, the KLSWA operates six production wells in three well fields distributed across the Saugatuck/Douglas area, under WSSN 03525. Production Wells 1 & 2 are owned by the City of the Village of Douglas; Production Wells 4 & 5 are owned by the City of Saugatuck; and Production Wells 6 & 7 are owned by Saugatuck Township. Wells PW-1, PW-2, PW-4 and PW-5 had originally received WHPA approval in a letter dated June 26, 2000. The current revision for the KLSWA's WHPAs was prompted by the addition of two wells (Wells 6 & 7), owned by Saugatuck Township, to the KLSWA system.

Production Wells 6 and 7 are completed in a glacial drift aquifer, composed primarily of sand interbedded with thick layers of clay, and generally possessing a very good ability to yield groundwater to wells. Hydrogeologic information for the site has been reviewed to establish a geologic sensitivity for Wells 6 and 7. Geologic sensitivity may be considered a "qualitative" characterization of the protection provided to the aquifer by the overlying lithology. The three categories of geologic sensitivity identified are low, moderate, and high, with the order reflecting a decreasing level of protection. These Type I wells are characterized in the report as completed in an aquifer described as "confined," with adequate protection provided to the aquifer by the overlying clay layers. Confined aquifers can be geologically characterized as having "low" sensitivity. A susceptibility determination for the KLSWA's wells may be made upon completion of a contaminant source inventory in the WHPA, and the acquisition of additional information on well construction and chemical monitoring history.

Mr. Daryl VanDyke

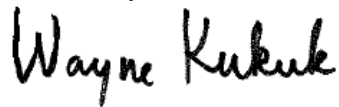
Page 2

October 14, 2016

We are pleased that the KLSWA is continuing to keep their Wellhead Protection Program (WHPP) viable by updating it as changes occur to their WHPAs. Management of the protection areas will be a particularly important task. The WHPAs extend into neighboring municipalities; therefore, cooperation with adjacent townships and the cities of Saugatuck and Douglas will be necessary in management of the WHPAs.

In closing, we commend you and the Authority for your continued evolution and implementation of a local Wellhead Protection Program. If you have any comments or questions with regard to wellhead protection, please contact either me at 517-284-6517, kukukw@michigan.gov; or Mr. Jason Berndt, Environmental Quality Analyst, at 989-705-3420, berndtj1@michigan.gov; or by mail at MDEQ, Source Water Unit, Office of Drinking Water and Municipal Assistance, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

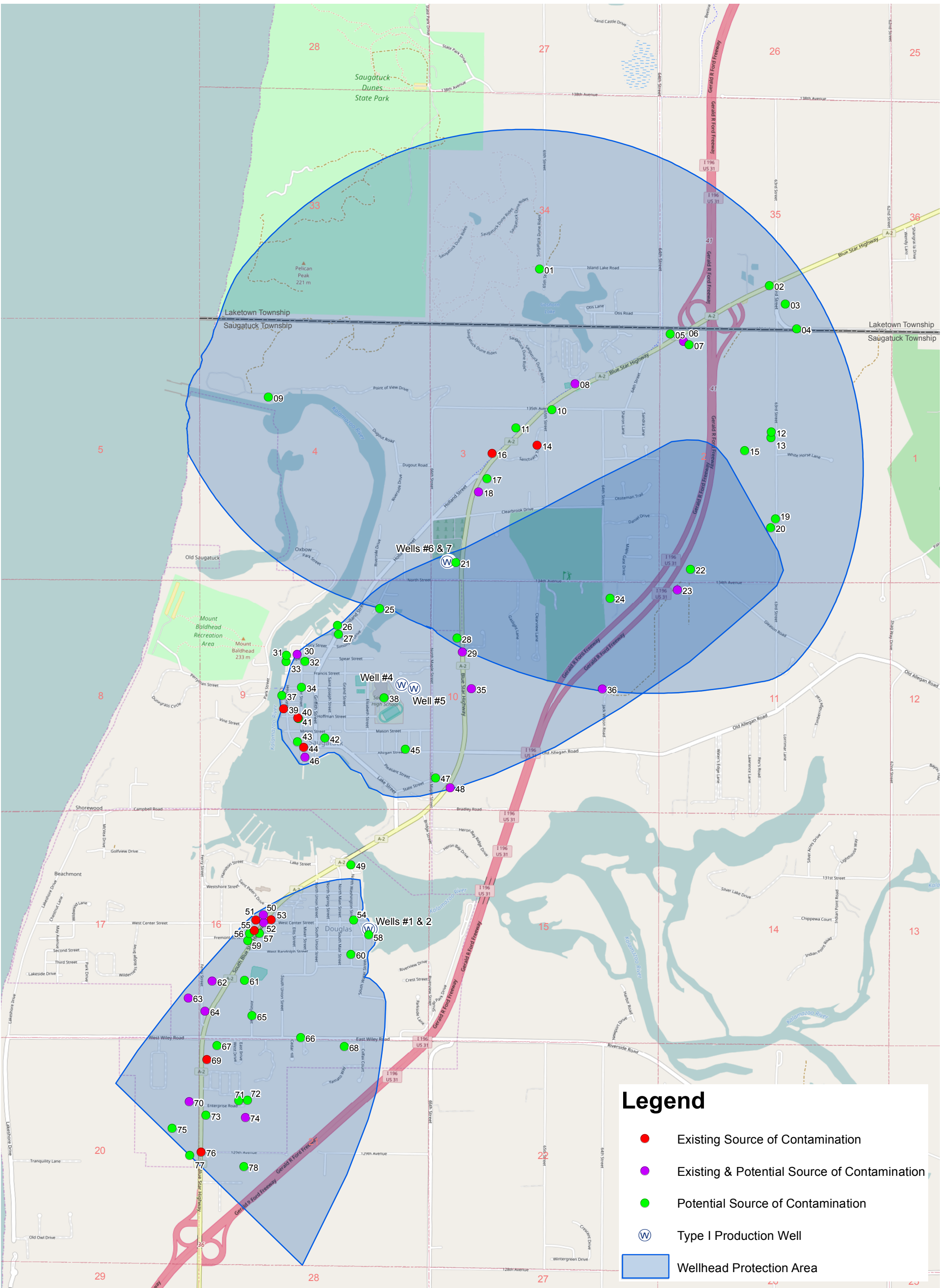
A handwritten signature in black ink that reads "Wayne Kukuk". The signature is written in a cursive, slightly slanted style.

Wayne Kukuk, Geologist  
Source Water Unit  
Field Operations Section  
Office of Drinking Water and Municipal Assistance

cc: Mr. Jim Brode, F&V  
Mr. Matt Gamble, DEQ  
Mr. Jason Berndt, DEQ  
Mr. Wood Chooi, DEQ

**APPENDIX B**

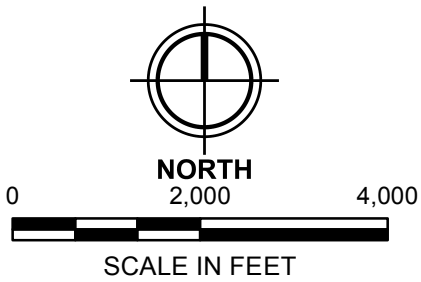




### Legend

- Existing Source of Contamination
- Existing & Potential Source of Contamination
- Potential Source of Contamination
- W Type I Production Well
- Wellhead Protection Area

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA



**KALAMAZOO LAKE SEWER & WATER AUTHORITY**  
 SAUGATUCK / DOUGLAS, ALLEGAN COUNTY, MICHIGAN  
**WELLHEAD PROTECTION PLAN UPDATE**  
**CONTAMINANT SOURCE INVENTORY**

3243B

F&V PROJECT NO.



# 2017 Contaminated Source Inventory

## Kalamazoo Lake Sewer Water Authority WHPA

### Existing and Potential Sites of Environmental Impact

	Site Location	Site Number	Open LUST	Closed LUST	Part 201	BEA	Brown-fields	AUL	Other	Registered UST		Registered AST		RCRA
										Current	Removed	Current	Removed	
Saugatuck Dune Rides	3646 65th Street	Potential	01									3 tanks		
TNT Roofing	3271 Industrial Park Drive ; 6305 Blue Star Hwy	Potential	02									2 tanks		
Blake Vallueau	2500 63rd St.	Potential	03											
US Dept. Justice DEA	6280 136th Ave	Potential	04											
Dunes View Kwik Shop	6397 Washington Road	Potential	05								3 tanks (4 tanks?)			
Blue Star Shell; Fleming Bros Oil Co. - Blue Star	6380 Blue Star Highway	Existing & Potential	06		X		X		X		7 tanks	3 tanks		
KLSWA Pump Station - Behind Shell Station	Behind 6380 Blue Star Hwy	Potential	07									1 tank		
Saugatuck Campground; Blue Star (6473)	6473 Washington; 6473 Blue Star Hwy s/b 6473	Existing & Potential	08	X			X					2 tanks		/NLR
Broward Marine	66th St & 135th Ave	Potential	09											/NLR
Clearbrook Corp.	6494 Blue Star Hwy (s/b 6450 134th Ave)	Potential	10									1 tank		
IHLES Service	6525 Blue Star Hwy	Potential	11										1 tank	
Top Grade Excavating	3516 63rd Street	Potential	12										1 tank	
Shoreline Machine	3516 63rd St	Potential	13											
Sanctuary (6530) Way	6530 Sanctuary Way	Existing	14				X							
D&L Truck & Trailer Repair	3514 63rd Street	Potential	15										2 tanks	
Blue Star (6541) Highway	6541 Blue Star Highway	Existing	16				X							
3483 Blue Star Hwy (Closed Retail)	3483 Blue Star Hwy	Potential	17											
Brenner Oil Company of Saugatuck/Nahal;	3479 Blue Star Highway; 3475/3479 Blue Star	Existing & Potential	18		X		X		X		1 tank	3 tanks		3 tanks
A Cut Above Tree Service	3402 63rd Street	Potential	19										1 tank	
Heavener Landscaping	3448 63rd Street	Potential	20										1 tank	
KLSWA Pump Station - Wells 6&7	Approx 6616 Cemetary Road	Potential	21										1 tank	
Cell Tower -	Approx 6381 63rd Street	Potential	22										2 tanks	
Exit 41 SLF	Off 134th	Existing & Potential	23			X								
Clearbrook Golf Course Maintenance	6450 134th Ave	Potential	24										2 tanks	
<Not Referenced>	997 Elizabeth St.	Potential	25											
Saugatuck Yacht Service	868 Holland Street	Potential	26								2 tanks			
Kalamazoo Lake Sewer Authority/Lift Station #1	851 Holland Street	Potential	27									1 tank	1 tank	
<Not Referenced> Saugatuck Fire District?	3342 Blue Star Hwy	Potential	28											2 tanks
Department of Public Works	3338 Blue Star Highway	Existing & Potential	29	X	X							2 tanks		
Gleason Properties	720 Butler St	Existing & Potential	30					X						
Star of Saugatuck Boat Cruises	716 Water Street	Potential	31										1 tank	
Verse White	647 Butler Street	Potential	32								1 tank			
River Market	650 Water Street	Potential	33								2 tanks			
Marina Man	471 Butler St.	Potential	34											CESQG
Coastal Real Estate/The Boat Shop	3295 Blue Star Highway	Existing & Potential	35				X						1 tank	NonGen
Kalamazoo Lake Sewer Authority	6449 Old Allegan Road	Existing & Potential	36	X	X							2 tanks		
Branch Maintenance Garage	486 Water Street	Potential	37									2 tanks		
Saugatuck Public Schools	401 Elizabeth Street	Potential	38											NonGen
<Not Referenced>	252 Butler Street	Existing	40							SPILLS				
326 Water Street	326 Water Street	Existing	39				X							
City of Saugatuck	246 Butler Street	Potential	41									2 tanks		
Rich Products Corp	350 Culver St.	Potential	42									1 tank		
City of Saugatuck	102 Butler St	Potential	43											
Culver St. Site	201 Culver St.	Existing	44	X			X							
Adam Piantka	822 Allegan St.	Potential	45											
Sergeant Marina	31/39 Butler St; 39 Butler Street	Existing & Potential	46		X						3 tanks (2 tanks?)			
Macatawa Bay Boat Works, LLC.	297 S. Maple St (No such address)	Potential	47										1 tank	CESQG
Mildred Burke Pr Est J Ahearn	3219 Blue Star Highway	Existing & Potential	48		X							2 tanks		
Bob Meeuwesen	221 Washington St	Potential	49											
Douglas Shell / Fleming Oil Co	30 N Washington	Existing & Potential	50		X (3)		X		X		4 tanks	6 tanks	2 tanks	
Coastal Real Estate Holdings IV, LLC	294 W Center St	Existing	51				X							
Johnsons Amoco Service / Johnsons Standard 28	Blue Star Hwy & Center	Existing & Potential	52			X								NonGen
Metropolitan Title Company	25 - 27 Blue Star Highway	Existing	53	X			X							

# 2017 Contaminated Source Inventory

## Kalamazoo Lake Sewer Water Authority WHPA

### Existing and Potential Sites of Environmental Impact

	Site Location	Site Number	Open LUST	Closed LUST	Part 201	BEA	Brown-fields	AUL	Other	Registered UST		Registered AST		RCRA
										Current	Removed	Current	Removed	
Gas Center/Richard Quade	50 Center Road	Potential	54								1 tanks		2 tanks	
Douglas Amoco 28876	10 1/2 S Washington	Existing	55	X		X		X						
Dean Johnson	314 Fremont Street	Potential	56								2 tanks	1 tank		
Weatherwane Partners	102 Blue Star Hwy	Potential	57											NonGen
<b>Kalamazoo Lake WTP</b>	<b>22 Bayou</b>	Potential	58									1 tank		
<b>Saugatuck Public Schools - Garage</b>	<b>Blue Star Highway</b>	Potential	59								3 tanks			
Weather Van Cleaners	102 S Washington	Potential	60											
John Barnhill (2017 Vac Parcel)	201 Blue Star Highway	Potential	61								4 tanks			
Village of Douglas Contamination; Haworth Mfg.	200 Blue Star Hwy; 200 Washington Ave/Blue Star	Existing & Potential	62		X									CESQG
Chase Mfg Co.	281 Chase Road	Existing & Potential	63						SEMS					
Kalico Kitchen Ltd	312 Ferry St	Existing & Potential	64	X							3 tanks			
Douglas Site	Amity Lane - Douglas	Potential	65											
Interurban Transit	100 Wiley St	Potential	66									1 tank		CESQG
Douglas Schools	415 Wiley St	Potential	67											
Van Draght Excavating	11 Wiley Road	Potential	68								3 tanks			
2987 Blue Star Highway	2987 Blue Star Hwy	Existing	69				X							
Hansen Manufacturing; Hansen Manufacturing	2948 Blue Star Hwy; 2948 Blue Star Highway	Existing & Potential	70			X								
Enterprise Hinge	6779 Enterprise Dr	Potential	71									2 tanks		
Randy's West Shore B	6765 Enterprise Dr	Potential	72									1 tank		CESQG
Douglas LP Gas Co.	2935 Blue Star Highway	Potential	73										1 tank	
Douglas Marine Corp	6780 Enterprise Drive; 160 Washington Rd (6786	Existing & Potential	74			X								SQG
Busscher Construction	2922 Blue Star Hwy	Potential	75									2 tanks		
Douglas Marathon	2895 Blue Star Hwy	Existing	76		X									
Overisel Lumber	2894 Blue Star Hwy	Potential	77									1 tank		
Bloks Refuse Service SLF	129th Street	Potential	78											
Orphan Site - Chevron Chemical	0.8 mile east of City	Potential												
Orphan Site - Chevron Chemical	One blk off Main on Fennville	Potential												

# 2017 Contaminated Source Inventory

## Kalamazoo Lake Sewer Water Authority WHPA

### Existing and Potential Sites of Environmental Impact

*(From 2000 CSI) Bold and Italic indicates that the exact location of the site could not be determined.*

Purple text - from Fire Department "Windshield Survey" of 2/1/17

Red text - new listing or additional information in 2016 / 2017 inventory

AIRS: Permit and Emissions Inventory Data

AST: Aboveground Storage Tank

AUL: Activity Use Limitation

BEA: Baseline Environmental Assessment Database

BRS: Biennial Reporting System

CDL: Clandestine Drug Lab

ECHO: Enforcement & Compliance History Information

ERNS: Emergency Response Notification System

FINDS: Facility Index System/Facility Registry System

FTTS: Federal Insecticide/Fungicide/Rodenticide (FIFRA) and Toxic Substances Control Act (TSCA) Tracking System

HMIRS: Hazardous Materials Information Resource System

HMP: Hazardous Material Pipeline

ICIS: Integrated Compliance Information System

LUST: Leaking Underground Storage Tank Site

MANIFEST: Hazardous Waste Manifest

MI NPDES: National Pollutant Discharge Elimination System permits and storm water permits

MLTS: Material Licensing Tracking System

NPDES: National Pollutant Discharge Elimination System

NPL: National Priority List

O&G: Oil and Gas

PADS: PCB Activity Database System

Part 201: Contaminated Site

PEAS: Pollution Emergency Alerting System

PRP: Potentially Responsible Parties

RAATS: RCRA Administrative Action Tracking System

RADINFO: Radiation Information Database

RCRA: Resource Conservation and Recovery Act - CESQG (conditionally exempt small quantity generators); LQG (large quantity generators); NonGen (non-generator); NLR (no longer requires reporting)

RGA: Recovered Government Archive (historical records)

RMP: Risk Management Plan

ROD: Record of Decision

SEMS: Superfund Enterprise Management System

SPILLS: Haz/Petro Spill

SWF/LF: Solid Waste Facilities/Landfill Site

TRIS: Toxic Chemical Release Inventory System

TSCA: Toxic Substances Control Act

UST: Underground Storage Tank

WDS: Waste Data System

POTENTIAL IMPACT sites have current or historical land use that has the potential to result in environmental contamination.

EXISTING IMPACT sites have documented contamination (e.g., laboratory sample analysis).

Removed USTs or leaking UST sites remediated/closed are reported as POTENTIAL IMPACT.

Current or historical leaking UST sites are reported as EXISTING IMPACT.

Mappable area refers to Sections 1-24 of Saugatuck Township

**KLSWA North**

65th Street

Saugatuck, MI 49453

Inquiry Number: 4808622.2s

December 20, 2016

# The EDR Radius Map™ Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	8
Orphan Summary .....	160
Government Records Searched/Data Currency Tracking .....	GR-1

## GEOCHECK ADDENDUM

GeoCheck - Not Requested

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

### **Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

65TH STREET  
SAUGATUCK, MI 49453

#### COORDINATES

Latitude (North): 42.6725610 - 42° 40' 21.21"  
Longitude (West): 86.1838320 - 86° 11' 1.79"  
Universal Transverse Mercator: Zone 16  
UTM X (Meters): 566878.8  
UTM Y (Meters): 4724562.5  
Elevation: 628 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 6065673 SAUGATUCK, MI  
Version Date: 2014  
  
East Map: 6065655 HAMILTON WEST, MI  
Version Date: 2014

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140722, 20140721  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
65TH STREET  
SAUGATUCK, MI 49453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	SANCTUARY (6530) WAY	6530 SANCTUARY WAY	MI INVENTORY	Higher	435, 0.082, NW
A2	SANCTUARY (6530) WAY	6530 SANCTUARY WAY	MI BEA	Higher	435, 0.082, NW
B3	BLUE STAR (6541) HIG	6541 BLUE STAR HWY V	MI INVENTORY	Lower	1253, 0.237, WNW
B4	BLUE STAR (6541) HIG	6541 BLUE STAR HIGHW	MI INVENTORY	Lower	1253, 0.237, WNW
B5	BLUE STAR (6541) HIG	6541 BLUE STAR HWY	MI BEA	Lower	1257, 0.238, WNW
6	CLEARBROOK CORP	6494 135TH AVE	MI UST	Lower	1310, 0.248, North
7	IHLES SERVICE	6525 BLUE STAR HWY	MI WDS	Lower	1376, 0.261, NW
C8	3483 BLUE STAR HIGHW	3483 BLUE STAR HIGHW	HMIRS	Lower	1378, 0.261, WSW
C9	SAUGATUCK CAMPGROUND	6743 WASHINGTON RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	1526, 0.289, West
C10	SAUGATUCK CAMPGROUND	6743 WASHINGTON RD	MI WDS	Lower	1526, 0.289, West
C11	BRENNER OIL, SAUGATU	3479 BLUE STAR HIGHW	MI BEA	Lower	1643, 0.311, WSW
C12	NAHAL OF SAUGATUCK	3479 BLUE STAR HWY	MI RGA LUST	Lower	1643, 0.311, WSW
C13	BRENNER OIL CO OF SA	3479 BLUE STAR HWY	MI RGA LUST	Lower	1643, 0.311, WSW
C14	DOUGLAS GAS & OIL	3479 BLUE STAR HWY	FINDS	Lower	1643, 0.311, WSW
C15	NAHAL OF SAUGATUCK	3479 BLUE STAR HWY	MI LUST, MI UST, MI INVENTORY	Lower	1643, 0.311, WSW
C16	BRENNER OIL, SAUGATU	3479 BLUE STAR HIGHW	MI INVENTORY	Lower	1643, 0.311, WSW
C17	BRENNER OIL COMPANY	3479 BLUE STAR HWY	MI RGA LUST	Lower	1643, 0.311, WSW
18	BRENNER OIL OF SAUGA	3475/3479 BLUE STAR	MI AUL	Lower	1708, 0.323, WSW
D19	SAUGATUCK CAMPGROUND	6473 WASHINGTON	MI RGA LUST	Lower	1999, 0.379, NNE
D20	SAUGATUCK CAMPGROUND	6473 WASHINGTON	MI LUST, MI UST, MI INVENTORY	Lower	1999, 0.379, NNE
21	PRESBYTERIAN CAMPS	PERRYMAN ST	MI UST	Higher	2292, 0.434, ENE
E22	BLUE STAR (6473) HIG	6473 BLUE STAR HIGHW	MI BEA	Lower	2673, 0.506, NNE
E23	SAUGATUCK CAMPGROUND	6473 BLUE STAR HIGHW	MI INVENTORY	Lower	2673, 0.506, NNE
24	BROWARD MARINE INC	66TH ST AND 135TH AV	MI WDS	Higher	2882, 0.546, WNW
25	EXIT 41 LF	134TH AVE	MI INVENTORY, MI PART 201	Lower	4016, 0.761, SE
F26	DUNES VIEW KWIK SHOP	6397 WASHINGTON RD	MI UST	Higher	4158, 0.788, NE
F27	T N T ROOFING	6305 BLUE STAR HWY	MI WDS	Higher	4216, 0.798, NE
F28	BLUE STAR SHELL	6380 BLUE STAR HWY	MI RGA LUST	Higher	4320, 0.818, NE
F29	BLUE STAR SHELL	6380 BLUE STAR HWY	MI LUST, MI UST, MI AUL, MI INVENTORY	Higher	4320, 0.818, NE
G30		3342 BLUE STAR HWY	ERNS	Lower	4395, 0.832, SSW
H31	BROWARD MARINE INC	66TH ST AND 135TH AV	RCRA NonGen / NLR	Lower	4545, 0.861, SW
H32	CITY OF SAUGATUCK	338 WASHINGTON RD	MI WDS	Lower	4618, 0.875, SW
G33	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY	MI RGA LUST	Lower	4691, 0.888, SSW
G34	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY	MI LUST, MI UST, MI INVENTORY	Lower	4691, 0.888, SSW
35	SHORELINE MACHINE	3516 63RD ST	MI WDS	Higher	5258, 0.996, East
I36	COASTAL REAL ESTATE	3295 BLUE STAR HWY	RCRA NonGen / NLR	Lower	5374, 1.018, SSW
I37	BLUE STAR (3295) HIG	3295 BLUE STAR HIGHW	MI BEA, MI WDS	Lower	5374, 1.018, SSW
I38	COASTAL REAL ESTATE	3295 BLUE STAR HWY	FINDS, ECHO	Lower	5374, 1.018, SSW
I39	BLUE STAR (3295) HIG	3295 BLUE STAR HIGHW	MI INVENTORY	Lower	5374, 1.018, SSW



MAPPED SITES SUMMARY

Target Property Address:  
65TH STREET  
SAUGATUCK, MI 49453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40		3295 BLUE STAR HWY	EDR Hist Auto	Lower	5374, 1.018, SSW
J41	BLAKE VALLEAU	2500 63RD ST	FTTS	Higher	5855, 1.109, ESE
J42	BLAKE VALLEAU	2500 63RD ST	FINDS	Higher	5855, 1.109, ESE
K43	SAUGATUCK YACHT SERV	868 HOLLAND ST	MI RGA LUST	Lower	5995, 1.135, SW
K44	SAUGATUCK MARINA	868 HOLLAND ST	MI LUST, MI UST, MI NPDES	Lower	5995, 1.135, SW
K45		868 HOLLAND ST.	MI SPILLS	Lower	5995, 1.135, SW
K46	LIFT STATION #1	851 HOLLAND ST	MI UST	Lower	6052, 1.146, SW
L47	SAUGATUCK PUBLIC SCH	401 ELIZABETH ST	RCRA NonGen / NLR	Lower	6371, 1.207, SW
L48	SAUGATUCK PUBLIC SCH	401 ELIZABETH ST	FINDS, ECHO	Lower	6371, 1.207, SW
L49	SAUGATUCK PUBLIC SCH	401 ELIZABETH ST	MI WDS	Lower	6371, 1.207, SW
M50	KALAMAZOO LAKE WWTP	6449 OLD ALLEGAN ROA	FINDS, ECHO	Lower	6461, 1.224, South
M51	KALAMAZOO LAKE SEWER	6449 OLD ALLEGAN ROA	MI RGA LUST	Lower	6461, 1.224, South
M52	KALAMAZOO LK SEWER &	6449 OLD ALLEGAN RD	MI RGA LUST	Lower	6461, 1.224, South
M53	KALAMAZOO LK SEWER &	6449 OLD ALLEGAN RD	MI LUST, MI UST, MI INVENTORY, MI NPDES, MI WDS	Lower	6461, 1.224, South
54	US DEPT/JUSTICE DEA	6280 136 AVE	MI WDS	Higher	6601, 1.250, ENE
N55	US DEPT/INTERIOR	WATER & LUCY ST	MI WDS	Lower	7089, 1.343, SW
O56	WESTSHORE MARINE INC	841 PARK	MI UST	Lower	7139, 1.352, WSW
O57	WEST SHORE MARINE	841 PARK ST	MI WDS	Lower	7139, 1.352, WSW
N58	GLEASON PROPERTIES	720 BUTLER ST	MI BROWNFIELDS, MI WDS	Lower	7144, 1.353, SW
P59	GLEASON ROAD RES WEL	6280 GLEASON RD	MI INVENTORY, MI PART 201	Higher	7174, 1.359, SE
P60	GLEASON ROAD RES WEL	6280 GLEASON RD	MI RGA PART 201	Higher	7174, 1.359, SE
61	ADAM PIANTKA	822 ALLEGAN ST	MI WDS	Higher	7194, 1.362, SSW
N62		716 WATER ST.	ERNS	Lower	7315, 1.385, SW
63	SAUGATUCK TOWNSHIP C	GLEASON RD/OLD ALLEG	MI INVENTORY, MI PART 201	Higher	7343, 1.391, SE
Q64	GLEASON PROPERTIES	650 WATER ST	MI DEL PART 201, MI WDS	Lower	7401, 1.402, SW
Q65	THE RIVER MARKET	650 WATER ST	MI UST	Lower	7401, 1.402, SW
Q66	GLEASON PROPERTY	650 WATER	MI RGA PART 201	Lower	7401, 1.402, SW
R67	MACATAWA BAY BOAT WO	297 S MAPLE ST	MI WDS	Higher	7408, 1.403, SSW
R68	MACATAWA BAY BOAT WO	297 S MAPLE ST	RCRA-CESQG	Higher	7408, 1.403, SSW
R69	MACATAWA BAY BOAT WO	297 S MAPLE ST	FINDS, ECHO	Higher	7408, 1.403, SSW
S70	MARINA MAN	471 BUTLER ST	MI WDS	Lower	7512, 1.423, SW
S71	MARINA MAN	471 BUTLER ST	RCRA-CESQG	Lower	7512, 1.423, SW
S72	MARINA MAN	471 BUTLER ST	FINDS, ECHO	Lower	7512, 1.423, SW
73	THERESA A SCHOPPE WR	6333 OLD ALLEGAN RD	MI WDS	Higher	7513, 1.423, SE
74		997 ELIZABETH	ERNS	Higher	7635, 1.446, SSW
R75	AHEARN, JAMES	3219 BLUE STAR HWY.	MI RGA LUST	Higher	7655, 1.450, SSW
R76	MILDRED BURKE PR EST	3219 BLUE STAR HWY	MI RGA LUST	Higher	7655, 1.450, SSW
R77	MILDRED BURKE PR EST	3219 BLUE STAR HWY	MI LUST, MI UST, MI WDS	Higher	7655, 1.450, SSW
T78	CITY OF SAUGATUCK	246 BUTLER ST	MI UST	Lower	8053, 1.525, SW

MAPPED SITES SUMMARY

Target Property Address:  
65TH STREET  
SAUGATUCK, MI 49453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">T79</a>		252 BUTLER	MI SPILLS	Lower	8058, 1.526, SW
<a href="#">U80</a>	RICH PRODUCTS CORPOR	350 CULVER	FINDS, ECHO	Lower	8070, 1.528, SW
<a href="#">U81</a>	RICH PRODUCTS COMPAN	350 CULVER ST	MI UST	Lower	8070, 1.528, SW
<a href="#">U82</a>	RICH PRODUCTS	350 CALVER ST	MI WDS	Lower	8114, 1.537, SW
<a href="#">V83</a>	CITY OF SAUGATUCK	102 BUTLER ST	MI WDS	Lower	8439, 1.598, SW
<a href="#">V84</a>	WATER (326 STREET	326 WATER STREET	MI BEA	Lower	8440, 1.598, SW
<a href="#">V85</a>	CULVER ST SITE	201 CULVER ST	MI RGA LUST	Lower	8462, 1.603, SW
<a href="#">V86</a>	CULVER ST SITE	201 CULVER ST	MI LUST, MI INVENTORY, MI BEA	Lower	8462, 1.603, SW
<a href="#">V87</a>	SERGEANT MARINA COND	39 BUTLER ST	MI RGA LUST	Lower	8615, 1.632, SW
<a href="#">V88</a>	SERGEANT MARINA	39 BUTLER	MI RGA LUST	Lower	8615, 1.632, SW
<a href="#">V89</a>	SERGEANT MARINA	39 BUTLER ST	MI RGA LUST	Lower	8615, 1.632, SW
<a href="#">V90</a>	SERGEANT MARINA	39 BUTLER ST	MI LUST, MI UST	Lower	8615, 1.632, SW
<a href="#">V91</a>	SERGEANT MARINA	31 BUTLER ST	MI WDS	Lower	8637, 1.636, SW
<a href="#">V92</a>	SERGEANT'S MARINA	31 BUTLER ST.	MI RGA LUST	Lower	8637, 1.636, SW
<a href="#">93</a>	TOWNSHIP OF LAKETOWN	6576 138TH AVE	MI WDS	Higher	8901, 1.686, NNW
<a href="#">W94</a>	KLSWA LIFT STATION 6	178 PARK ST	RCRA NonGen / NLR	Lower	9223, 1.747, SW
<a href="#">W95</a>	LIFT STATION #6	178 PARK ST	MI LUST, MI UST	Lower	9223, 1.747, SW
<a href="#">W96</a>	KLSWA LIFT STATION 6	178 PARK ST	FINDS, ECHO	Lower	9223, 1.747, SW
<a href="#">W97</a>	KLSWA LIFT STATION 6	178 PARK ST	MI WDS	Lower	9223, 1.747, SW
<a href="#">98</a>	PRO VISION TRANSPORT	6205 BLUE STAR HIGHW	MI NPDES	Higher	9254, 1.753, NE
<a href="#">X99</a>	MICHIGAN DUNES CORRE	6605 W 138 AVE ROUTE	FINDS	Higher	9292, 1.760, NNW
<a href="#">X100</a>	MICH DUNES CORRECTIO	6605 WEST 138TH AVEN	MI RGA LUST	Higher	9292, 1.760, NNW
<a href="#">X101</a>	MICH DUNES CORRECTIO	6605 WEST 138TH AVEN	MI LUST, MI UST	Higher	9292, 1.760, NNW
<a href="#">X102</a>	MICHIGAN DUNES CORRE	6605 W 138 AVE ROUTE	FTTS, HIST FTTS	Higher	9292, 1.760, NNW
<a href="#">103</a>	PRESBYTERIAN CAMPS	631 PERRYMAN ST	MI WDS	Higher	9458, 1.791, WSW
<a href="#">104</a>	WEATHER VAN CLEANERS	102 WASHINGTON ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	10681, 2.023, SSW
<a href="#">Y105</a>	METROPOLITAN TITLE O	25-27 BLUE STAR	MI LUST, MI INVENTORY	Lower	10733, 2.033, SSW
<a href="#">Y106</a>	UNION STREET & BLUE	UNION STREET & BLUE	MI INVENTORY	Lower	10733, 2.033, SSW
<a href="#">Z107</a>	FLEMING OIL CO	30 WASHINGTON ST	MI AUL, MI WDS	Lower	11126, 2.107, SSW
<a href="#">Z108</a>	DOUGLAS SHELL	30 N WASHINGTON	MI LUST, MI UST, MI INVENTORY	Lower	11126, 2.107, SSW
<a href="#">Z109</a>	DOUGLAS SHELL	30 N. WASHINGTON	MI RGA LUST	Lower	11126, 2.107, SSW
<a href="#">Z110</a>	DOUGLAS SHELL	30 N WASHINGTON	MI RGA LUST	Lower	11126, 2.107, SSW
<a href="#">AA111</a>	TOWER MARINE/KALAMAZ	216 ST PETERS DR	MI RGA LUST	Lower	11247, 2.130, SW
<a href="#">AA112</a>	SAUGATUCK YACHT SERV	216 ST.PETERS DR	MI UST	Lower	11247, 2.130, SW
<a href="#">AA113</a>	TOWER MARINE-DOUGLAS	216 ST. PETERS DRIVE	FINDS, ECHO	Lower	11247, 2.130, SW
<a href="#">AA114</a>	TOWER MARINE-DOUGLAS	216 ST PETERS DRIVE	MI NPDES	Lower	11247, 2.130, SW
<a href="#">AA115</a>	TOWER MARINE	216 SAINT PETERS DR	MI WDS	Lower	11247, 2.130, SW
<a href="#">AA116</a>	TOWER MARINE-DOUGLAS	216 ST PETERS DRIVE	MI NPDES	Lower	11247, 2.130, SW
<a href="#">AA117</a>	TOWER MARINE	216 SAINT PETERS DR	RCRA-SQG, FINDS, ECHO	Lower	11247, 2.130, SW

MAPPED SITES SUMMARY

Target Property Address:  
65TH STREET  
SAUGATUCK, MI 49453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">AB118</a>	KALAMAZOO LAKE WTP	22 BAYOU STREET	ECHO	Lower	11306, 2.141, SSW
<a href="#">AB119</a>	KALAMAZOO LAKE WTP	22 BAYOU STREET	MI NPDES	Lower	11306, 2.141, SSW
<a href="#">AB120</a>	KALAMAZOO LAKE WTP	22 BAYOU	FINDS	Lower	11306, 2.141, SSW
<a href="#">Z121</a>	RICHARD QUADE	50 CENTER RD	MI UST	Lower	11340, 2.148, SSW
<a href="#">Z122</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI RGA LUST	Lower	11342, 2.148, SSW
<a href="#">Z123</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI INVENTORY	Lower	11342, 2.148, SSW
<a href="#">Z124</a>	DOUGLAS AMOCO	10 1/2 SOUTH WASHING	MI AUL	Lower	11342, 2.148, SSW
<a href="#">Z125</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI LUST, MI INVENTORY	Lower	11342, 2.148, SSW
<a href="#">126</a>	GAS CENTER	50 CENTER	MI AST	Lower	11520, 2.182, SSW
<a href="#">127</a>	KALICO KITCHEN LTD	312 FERRY STREET	MI INVENTORY	Lower	11589, 2.195, SW
<a href="#">128</a>	AGRI-SCIENCE THECHNO	6135 BLUE STAR HIGHW	MI AIRS	Higher	11634, 2.203, NE
<a href="#">129</a>		219 ST PETERS DR	ERNS	Lower	11800, 2.235, SW
<a href="#">AC130</a>	DOUGLAS MARINE CORP	160 WASHINGTON ST	MI BEA, MI WDS	Lower	11800, 2.235, SSW
<a href="#">AD131</a>	TOWER MARINE	216 PETER'S DRIVE	US BROWNFIELDS, FINDS	Higher	11808, 2.236, SSW
<a href="#">AC132</a>	BOB MEEUWSEN	221 WASHINGTON ST	MI WDS	Lower	11978, 2.269, SSW
<a href="#">AD133</a>	METROPOLITAN TITLE C	25-29 BLUE STAR HIGH	MI BEA	Higher	12098, 2.291, SSW
<a href="#">134</a>	KALICO KITCHEN LTD	312 FERRY ST	MI INVENTORY	Lower	12147, 2.301, SW
<a href="#">135</a>	METALLURGICAL HIGH V	471 WASHINGTON ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	12227, 2.316, SSW
<a href="#">AE136</a>	JOHNSONS STANDARD 28	BLUE STAR HWY & CENT	SEMS-ARCHIVE, RCRA NonGen / NLR	Higher	12239, 2.318, SSW
<a href="#">AE137</a>	JOHNSONS AMOCO SERVI	BLUE STAR HWY & CENT	MI RGA PART 201	Higher	12240, 2.318, SSW
<a href="#">AE138</a>	DEAN JOHNSON	314 FREMONT ST	MI UST	Higher	12330, 2.335, SSW
<a href="#">AE139</a>	CENTER (294) STREET,	294 W. CENTER STREET	MI INVENTORY	Higher	12373, 2.343, SSW
<a href="#">AE140</a>	CENTER (294) STREET,	294 W. CENTER STREET	MI BEA	Higher	12373, 2.343, SSW
<a href="#">141</a>	HOUSE	3040 HARBOR RD	MI UST	Lower	12486, 2.365, South
<a href="#">142</a>	SAUGATUCK PUBLIC SCH	BLUE STAR HIGHWAY	MI UST	Higher	12842, 2.432, SSW
<a href="#">AF143</a>	WEST SHORE GOLF CLUB	14 FERRY ST	MI UST	Lower	12958, 2.454, SW
<a href="#">AF144</a>	MACATAWA BANK	14 FERRY ST	RCRA NonGen / NLR	Lower	12958, 2.454, SW
<a href="#">AF145</a>	FERRY (14) STREET	14 FERRY STREET	MI BEA, MI WDS	Lower	12958, 2.454, SW
<a href="#">AF146</a>	FERRY (14) STREET	14 FERRY STREET	MI INVENTORY	Lower	12958, 2.454, SW
<a href="#">AF147</a>	MACATAWA BANK	14 FERRY ST	FINDS, ECHO	Lower	12958, 2.454, SW
<a href="#">AF148</a>	MI DEQ VILLAGE OF DO	CENTER & FERRY ST	PA MANIFEST	Lower	13033, 2.468, SW
<a href="#">AF149</a>	MI DEPT ENVIRONMENTA	CENTER & FERRY STREE	PA MANIFEST	Lower	13033, 2.468, SW
<a href="#">AF150</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	MI WDS	Lower	13033, 2.468, SW
<a href="#">AF151</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	FINDS, ECHO	Lower	13036, 2.469, SW
<a href="#">AF152</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	RCRA-SQG	Lower	13036, 2.469, SW
<a href="#">AG153</a>	WEATHERVANE PARTNERS	102 BLUE STAR HWY	RCRA NonGen / NLR	Higher	13290, 2.517, SSW
<a href="#">AG154</a>	WEATHERVANE PARTNERS	102 BLUE STAR HWY	MI WDS	Higher	13290, 2.517, SSW
<a href="#">AG155</a>	WEATHERVANE PARTNERS	102 BLUE STAR HWY	FINDS, ECHO	Higher	13290, 2.517, SSW
<a href="#">AH156</a>	BRANCH MAINTENANCE G	486 WATER ST.	MI RGA LUST	Lower	13447, 2.547, SSW

MAPPED SITES SUMMARY

Target Property Address:  
 65TH STREET  
 SAUGATUCK, MI 49453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">AH157</a>	BRANCH MAINTENANCE G	486 WATER ST	MI RGA LUST	Lower	13447, 2.547, SSW
<a href="#">AH158</a>	ALLEGAN CO RD COMMIS	486 WATER ST	MI RGA PART 201	Lower	13447, 2.547, SSW
<a href="#">AG159</a>	JOHN BARNHILL	201 BLUE STAR HWY	MI UST	Higher	13468, 2.551, SSW
<a href="#">AG160</a>		201 BLUE STAR MEM H	EDR Hist Auto	Higher	13468, 2.551, SSW
<a href="#">AH161</a>	INTERURBAN TRANSIT A	100 WILEY ST	RCRA-CESQG	Lower	13481, 2.553, SSW
<a href="#">AH162</a>	INTERURBAN TRANSIT A	100 WILEY ST	FINDS, ECHO	Lower	13481, 2.553, SSW
<a href="#">AI163</a>	DIVERSIFIED SALVAGE	3387 60TH ST	FTTS, HIST FTTS	Higher	13529, 2.562, East
<a href="#">AI164</a>	DIVERSIFIED SALVAGE	3387 60TH ST	MI WDS	Higher	13529, 2.562, East
<a href="#">AI165</a>	DIVERSIFIED SALVAGE	3387 60TH STREET	US AIRS, FINDS, ECHO	Higher	13529, 2.562, East
<a href="#">166</a>		6056 BLUE STAR HWY	EDR Hist Auto	Higher	13669, 2.589, ENE
<a href="#">AJ167</a>	HAWORTH INC	200 BLUE STAR HWY	FINDS, ECHO	Higher	14080, 2.667, SSW
<a href="#">AJ168</a>	VILLAGE OF DOUGLAS C	200 BLUE STAR HWY	MI RGA PART 201	Higher	14080, 2.667, SSW
<a href="#">AJ169</a>	HAWORTH INC	200 BLUE STAR HWY	RCRA-CESQG	Higher	14080, 2.667, SSW
<a href="#">AJ170</a>	VILLAGE OF DOUGLAS C	200 BLUE STAR HWY	MI PART 201, MI INVENTORY, MI WDS	Higher	14080, 2.667, SSW
<a href="#">AJ171</a>	MI DEPT ENVIRONMENTA	200 BLUE STAR HWY	PA MANIFEST	Higher	14080, 2.667, SSW
<a href="#">AJ172</a>	CHASE MFG CO	281 CHASE RD	ICIS, FINDS, ECHO	Higher	14118, 2.674, SSW
<a href="#">AK173</a>	BLUE STAR (2948) HIG	2948 BLUE STAR HIGHW	MI BEA, MI WDS	Higher	14387, 2.725, SSW
<a href="#">AJ174</a>	CHASE MFG CO	281 CHASE RD	SEMS, PRP	Higher	14394, 2.726, SSW
<a href="#">AK175</a>	DOUGLAS	2935 BLUE STAR HWY	MI AST	Higher	14441, 2.735, SSW
<a href="#">176</a>	TOP & ALL METAL RECY	5954 134TH AVENUE	MI AIRS	Higher	14511, 2.748, East

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***State- and tribal - equivalent CERCLIS***

MI SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

### ***State and tribal landfill and/or solid waste disposal site lists***

MI SWF/LF..... Solid Waste Facilities Database

# EXECUTIVE SUMMARY

## ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

## ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
INDIAN UST..... Underground Storage Tanks on Indian Land

## ***State and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

MI SWRCY..... Recycling Facilities  
MI HIST LF..... Inactive Solid Waste Facilities  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
ODI..... Open Dump Inventory  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
IHS OPEN DUMPS..... Open Dumps on Indian Land

### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register  
MI CDL..... Clandestine Drug Lab Listing  
US CDL..... National Clandestine Laboratory Register

### ***Local Land Records***

MI LIENS..... Lien List  
LIENS 2..... CERCLA Lien Information

### ***Other Ascertainable Records***

FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PADS..... PCB Activity Database System  
MLTS..... Material Licensing Tracking System  
COAL ASH DOE..... Steam-Electric Plant Operation Data  
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

## EXECUTIVE SUMMARY

PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US MINES.....	Mines Master Index File
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
MI COAL ASH.....	Coal Ash Disposal Sites
MI DRYCLEANERS.....	Drycleaning Establishments
MI LEAD.....	Lead Safe Housing Registry
MI UIC.....	Underground Injection Wells Database
ABANDONED MINES.....	Abandoned Mines
FUELS PROGRAM.....	EPA Fuels Program Registered Listing

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

MI RGA LF.....	Recovered Government Archive Solid Waste Facilities List
----------------	--

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal CERCLIS list***

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the

## EXECUTIVE SUMMARY

United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 SEMS site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>SSW &gt;2 (2.726 mi.)</b>	<b>AJ174</b>	<b>155</b>

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 SEMS-ARCHIVE site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOHNSONS STANDARD 28</b>	<b>BLUE STAR HWY &amp; CENT</b>	<b>SSW &gt;2 (2.318 mi.)</b>	<b>AE136</b>	<b>110</b>

### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA-SQG sites within approximately 2.75 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TOWER MARINE</b>	<b>216 SAINT PETERS DR</b>	<b>SW &gt;2 (2.130 mi.)</b>	<b>AA117</b>	<b>87</b>
<b>MI DEPT/ENVIRONMENTA</b>	<b>CENTER &amp; FERRY ST</b>	<b>SW &gt;2 (2.469 mi.)</b>	<b>AF152</b>	<b>128</b>



## EXECUTIVE SUMMARY

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 4 RCRA-CESQG sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MACATAWA BAY BOAT WO HAWORTH INC	297 S MAPLE ST 200 BLUE STAR HWY	SSW 1 - 2 (1.403 mi.) SSW >2 (2.667 mi.)	R68 AJ169	53 148
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARINA MAN INTERURBAN TRANSIT A	471 BUTLER ST 100 WILEY ST	SW 1 - 2 (1.423 mi.) SSW >2 (2.553 mi.)	S71 AH161	55 143

### ***Federal ERNS list***

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 09/26/2016 has revealed that there are 4 ERNS sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	997 ELIZABETH	SSW 1 - 2 (1.446 mi.)	74	57
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	3342 BLUE STAR HWY	SSW 1/2 - 1 (0.832 mi.)	G30	28
Not reported	716 WATER ST.	SW 1 - 2 (1.385 mi.)	N62	50
Not reported	219 ST PETERS DR	SW >2 (2.235 mi.)	129	96

### ***State and tribal leaking storage tank lists***

MI LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Leaking Underground Storage Tank (LUST) Database.

A review of the MI LUST list, as provided by EDR, and dated 06/29/2016 has revealed that there are 14 MI LUST sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BLUE STAR SHELL</b> Facility Id: 00018771 Release Status: Closed Substance Release: Gasoline	<b>6380 BLUE STAR HWY</b>	<b>NE 1/2 - 1 (0.818 mi.)</b>	<b>F29</b>	<b>23</b>

## EXECUTIVE SUMMARY

Substance Release: Kerosene,Heating Oil

<b>MILDRED BURKE PR EST</b> Facility Id: 00035051 Release Status: Closed	<b>3219 BLUE STAR HWY</b>	<b>SSW 1 - 2 (1.450 mi.)</b>	<b>R77</b>	<b>58</b>
<b>MICH DUNES CORRECTIO</b> Facility Id: 00001308 Release Status: Closed	<b>6605 WEST 138TH AVEN</b>	<b>NNW 1 - 2 (1.760 mi.)</b>	<b>X101</b>	<b>72</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NAHAL OF SAUGATUCK</b> Facility Id: 00009145 Release Status: Closed Substance Release: Gasoline Substance Release: Diesel	<b>3479 BLUE STAR HWY</b>	<b>WSW 1/4 - 1/2 (0.311 mi.)</b>	<b>C15</b>	<b>14</b>
<b>SAUGATUCK CAMPGROUND</b> Facility Id: 00039100 Release Status: Open Substance Release: Unknown	<b>6473 WASHINGTON</b>	<b>NNE 1/4 - 1/2 (0.379 mi.)</b>	<b>D20</b>	<b>18</b>
<b>DEPT OF PUBLIC WORKS</b> Facility Id: 00020931 Release Status: Open Release Status: Closed Substance Release: Diesel Substance Release: Unknown	<b>3338 BLUE STAR HWY</b>	<b>SSW 1/2 - 1 (0.888 mi.)</b>	<b>G34</b>	<b>32</b>
<b>SAUGATUCK MARINA</b> Facility Id: 00017962 Release Status: Closed Substance Release: Gasoline,Other,Diesel	<b>868 HOLLAND ST</b>	<b>SW 1 - 2 (1.135 mi.)</b>	<b>K44</b>	<b>38</b>
<b>KALAMAZOO LK SEWER &amp;</b> Facility Id: 00034193 Release Status: Open Release Status: Closed Substance Release: Gasoline	<b>6449 OLD ALLEGAN RD</b>	<b>S 1 - 2 (1.224 mi.)</b>	<b>M53</b>	<b>44</b>
<b>CULVER ST SITE</b> Facility Id: 50002605 Release Status: Open Substance Release: Unknown	<b>201 CULVER ST</b>	<b>SW 1 - 2 (1.603 mi.)</b>	<b>V86</b>	<b>63</b>
<b>SERGEANT MARINA</b> Facility Id: 00005096 Release Status: Closed	<b>39 BUTLER ST</b>	<b>SW 1 - 2 (1.632 mi.)</b>	<b>V90</b>	<b>65</b>
<b>LIFT STATION #6</b> Facility Id: 00034194 Release Status: Closed Substance Release: Diesel	<b>178 PARK ST</b>	<b>SW 1 - 2 (1.747 mi.)</b>	<b>W95</b>	<b>69</b>
<b>METROPOLITAN TITLE O</b> Facility Id: 50002327 Release Status: Open Substance Release: Unknown	<b>25-27 BLUE STAR</b>	<b>SSW &gt;2 (2.033 mi.)</b>	<b>Y105</b>	<b>76</b>
<b>DOUGLAS SHELL</b> Facility Id: 00004516	<b>30 N WASHINGTON</b>	<b>SSW &gt;2 (2.107 mi.)</b>	<b>Z108</b>	<b>78</b>

## EXECUTIVE SUMMARY

Release Status: Closed  
 Substance Release: Used Oil  
 Substance Release: Gasoline  
 Substance Release: Unknown

**DOUGLAS AMOCO 28876**                      **10 1/2 S WASHINGTON**                      **SSW >2 (2.148 mi.)**                      **Z125**                      **93**  
 Facility Id: 50001810  
 Release Status: Closed

### **State and tribal registered storage tank lists**

MI UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Michigan UST database.

A review of the MI UST list, as provided by EDR, has revealed that there are 26 MI UST sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PRESBYTERIAN CAMPS Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00010294	PERRYMAN ST	ENE 1/4 - 1/2 (0.434 mi.)	21	19
DUNES VIEW KWIK SHOP Database: UST, Date of Government Version: 06/29/2016 Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00036663	6397 WASHINGTON RD	NE 1/2 - 1 (0.788 mi.)	F26	21
<b>BLUE STAR SHELL</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Currently In Use Tank Status: Removed from Ground Facility Type: ACTIVE Facility Id: 00018771	<b>6380 BLUE STAR HWY</b>	<b>NE 1/2 - 1 (0.818 mi.)</b>	<b>F29</b>	<b>23</b>
<b>MILDRED BURKE PR EST</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00035051	<b>3219 BLUE STAR HWY</b>	<b>SSW 1 - 2 (1.450 mi.)</b>	<b>R77</b>	<b>58</b>
<b>MICH DUNES CORRECTIO</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00001308	<b>6605 WEST 138TH AVEN</b>	<b>NNW 1 - 2 (1.760 mi.)</b>	<b>X101</b>	<b>72</b>
DEAN JOHNSON Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00039423	314 FREMONT ST	SSW >2 (2.335 mi.)	AE138	112
SAUGATUCK PUBLIC SCH Database: UST, Date of Government Version: 06/29/2016	BLUE STAR HIGHWAY	SSW >2 (2.432 mi.)	142	115



## EXECUTIVE SUMMARY

Tank Status: Currently In Use Tank Status: Closed in Ground Facility Type: ACTIVE Facility Id: 00017151					
CITY OF SAUGATUCK	246 BUTLER ST	SW 1 - 2 (1.525 mi.)	T78	59	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00013854					
RICH PRODUCTS COMPAN	350 CULVER ST	SW 1 - 2 (1.528 mi.)	U81	61	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Closed in Ground Facility Type: CLOSED Facility Id: 00008383					
<b>SERGEANT MARINA</b>	<b>39 BUTLER ST</b>	<b>SW 1 - 2 (1.632 mi.)</b>	<b>V90</b>	<b>65</b>	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00005096					
<b>LIFT STATION #6</b>	<b>178 PARK ST</b>	<b>SW 1 - 2 (1.747 mi.)</b>	<b>W95</b>	<b>69</b>	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00034194					
<b>DOUGLAS SHELL</b>	<b>30 N WASHINGTON</b>	<b>SSW &gt;2 (2.107 mi.)</b>	<b>Z108</b>	<b>78</b>	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00004516					
SAUGATUCK YACHT SERV	216 ST.PETERS DR	SW >2 (2.130 mi.)	AA112	83	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00001948					
RICHARD QUADE	50 CENTER RD	SSW >2 (2.148 mi.)	Z121	91	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00039025					
HOUSE	3040 HARBOR RD	S >2 (2.365 mi.)	141	114	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Currently In Use Facility Type: ACTIVE Facility Id: 00040945					
WEST SHORE GOLF CLUB	14 FERRY ST	SW >2 (2.454 mi.)	AF143	116	
Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00033298					

## EXECUTIVE SUMMARY

MI AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Natural Resources' Michigan AST database.

A review of the MI AST list, as provided by EDR, and dated 08/03/2016 has revealed that there are 2 MI AST sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DOUGLAS Facility Id: 92003349 List Status: CLOSED Removed/Closed Date: 07/01/2007 Tank Status: Removed from Premises	2935 BLUE STAR HWY	SSW >2 (2.735 mi.)	AK175	158

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GAS CENTER Facility Id: 92003303 List Status: CLOSED Removed/Closed Date: 02/23/1995 Removed/Closed Date: 04/06/1995 Tank Status: Removed from Premises	50 CENTER	SSW >2 (2.182 mi.)	126	94

### ***State and tribal institutional control / engineering control registries***

MI AUL: A listing of sites with institutional and/or engineering controls in place.

A review of the MI AUL list, as provided by EDR, and dated 09/15/2016 has revealed that there are 4 MI AUL sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BLUE STAR SHELL</b> Facility ID: 00018771	<b>6380 BLUE STAR HWY</b>	<b>NE 1/2 - 1 (0.818 mi.)</b>	<b>F29</b>	<b>23</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BRENNER OIL OF SAUGA Facility ID: 00009145	3475/3479 BLUE STAR	WSW 1/4 - 1/2 (0.323 mi.)	18	16
<b>FLEMING OIL CO</b> Facility ID: 00004516	<b>30 WASHINGTON ST</b>	<b>SSW &gt;2 (2.107 mi.)</b>	<b>Z107</b>	<b>77</b>
DOUGLAS AMOCO Facility ID: 50001810	10 1/2 SOUTH WASHING	SSW >2 (2.148 mi.)	Z124	92

### ***State and tribal Brownfields sites***

MI BROWNFIELDS: Brownfields and USTfield Site Database.

A review of the MI BROWNFIELDS list, as provided by EDR, has revealed that there is 1 MI BROWNFIELDS site within approximately 2.75 miles of the target property.

## EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>GLEASON PROPERTIES</b> Database: BROWNFIELDS, Date of Government Version: 01/15/2016 Ernie Id Number: 03000081	<b>720 BUTLER ST</b>	<b>SW 1 - 2 (1.353 mi.)</b>	<b>N58</b>	<b>49</b>

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Local Brownfield lists**

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 09/20/2016 has revealed that there is 1 US BROWNFIELDS site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TOWER MARINE</b>	<b>216 PETER'S DRIVE</b>	<b>SSW &gt;2 (2.236 mi.)</b>	<b>AD131</b>	<b>97</b>

#### **Local Lists of Hazardous waste / Contaminated Sites**

MI INVENTORY: The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the MI INVENTORY list, as provided by EDR, and dated 07/26/2016 has revealed that there are 25 MI INVENTORY sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SANCTUARY (6530) WAY <b>BLUE STAR SHELL</b> Facility ID: 00018771	6530 SANCTUARY WAY <b>6380 BLUE STAR HWY</b>	NW 0 - 1/8 (0.082 mi.) <b>NE 1/2 - 1 (0.818 mi.)</b>	A1 <b>F29</b>	8 <b>23</b>
<b>GLEASON ROAD RES WEL</b> Facility ID: 03000081	<b>6280 GLEASON RD</b>	<b>SE 1 - 2 (1.359 mi.)</b>	<b>P59</b>	<b>49</b>
<b>SAUGATUCK TOWNSHIP C</b>	<b>GLEASON RD/OLD ALLEG</b>	<b>SE 1 - 2 (1.391 mi.)</b>	<b>63</b>	<b>50</b>



## EXECUTIVE SUMMARY

Facility ID: 03000221				
CENTER (294) STREET, <b>VILLAGE OF DOUGLAS C</b> Facility ID: 03000032	294 W. CENTER STREET <b>200 BLUE STAR HWY</b>	SSW >2 (2.343 mi.) <b>SSW &gt;2 (2.667 mi.)</b>	AE139 <b>AJ170</b>	113 <b>151</b>
<b>Lower Elevation</b>	<b>Address</b>	<b>Direction / Distance</b>	<b>Map ID</b>	<b>Page</b>
BLUE STAR (6541) HIG	6541 BLUE STAR HWY V	WNW 1/8 - 1/4 (0.237 mi.)	B3	8
BLUE STAR (6541) HIG	6541 BLUE STAR HIGHW	WNW 1/8 - 1/4 (0.237 mi.)	B4	9
<b>NAHAL OF SAUGATUCK</b> Facility ID: 00009145	<b>3479 BLUE STAR HWY</b>	<b>WSW 1/4 - 1/2 (0.311 mi.)</b>	<b>C15</b>	<b>14</b>
BRENNER OIL, SAUGATU <b>SAUGATUCK CAMPGROUND</b> Facility ID: 00039100	3479 BLUE STAR HIGHW <b>6473 WASHINGTON</b>	WSW 1/4 - 1/2 (0.311 mi.) <b>NNE 1/4 - 1/2 (0.379 mi.)</b>	C16 <b>D20</b>	16 <b>18</b>
SAUGATUCK CAMPGROUND <b>EXIT 41 LF</b> Facility ID: 03000007	6473 BLUE STAR HIGHW <b>134TH AVE</b>	NNE 1/2 - 1 (0.506 mi.) <b>SE 1/2 - 1 (0.761 mi.)</b>	E23 <b>25</b>	20 <b>21</b>
<b>DEPT OF PUBLIC WORKS</b> Facility ID: 00020931	<b>3338 BLUE STAR HWY</b>	<b>SSW 1/2 - 1 (0.888 mi.)</b>	<b>G34</b>	<b>32</b>
BLUE STAR (3295) HIG <b>KALAMAZOO LK SEWER &amp;</b> Facility ID: 00034193	3295 BLUE STAR HIGHW <b>6449 OLD ALLEGAN RD</b>	SSW 1 - 2 (1.018 mi.) <b>S 1 - 2 (1.224 mi.)</b>	I39 <b>M53</b>	36 <b>44</b>
<b>CULVER ST SITE</b> Facility ID: 50002605	<b>201 CULVER ST</b>	<b>SW 1 - 2 (1.603 mi.)</b>	<b>V86</b>	<b>63</b>
<b>METROPOLITAN TITLE O</b> Facility ID: 50002327	<b>25-27 BLUE STAR</b>	<b>SSW &gt;2 (2.033 mi.)</b>	<b>Y105</b>	<b>76</b>
UNION STREET & BLUE <b>DOUGLAS SHELL</b> Facility ID: 00004516	UNION STREET & BLUE <b>30 N WASHINGTON</b>	SSW >2 (2.033 mi.) <b>SSW &gt;2 (2.107 mi.)</b>	Y106 <b>Z108</b>	77 <b>78</b>
DOUGLAS AMOCO 28876 Facility ID: 50001810	10 1/2 S WASHINGTON	SSW >2 (2.148 mi.)	Z123	92
<b>DOUGLAS AMOCO 28876</b> KALICO KITCHEN LTD KALICO KITCHEN LTD Facility ID: 00042503	<b>10 1/2 S WASHINGTON</b> 312 FERRY STREET 312 FERRY ST	<b>SSW &gt;2 (2.148 mi.)</b> SW >2 (2.195 mi.) SW >2 (2.301 mi.)	<b>Z125</b> 127 134	<b>93</b> 95 108
FERRY (14) STREET	14 FERRY STREET	SW >2 (2.454 mi.)	AF146	119

MI PART 201: A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

A review of the MI PART 201 list, as provided by EDR, and dated 10/01/2013 has revealed that there are 4 MI PART 201 sites within approximately 2.75 miles of the target property.

<b>Equal/Higher Elevation</b>	<b>Address</b>	<b>Direction / Distance</b>	<b>Map ID</b>	<b>Page</b>
<b>GLEASON ROAD RES WEL</b>	<b>6280 GLEASON RD</b>	<b>SE 1 - 2 (1.359 mi.)</b>	<b>P59</b>	<b>49</b>

## EXECUTIVE SUMMARY

Facility Status: Interim Response conducted - No further activities anticipated  
 Facility ID: 3000081

<b>SAUGATUCK TOWNSHIP C</b>	<b>GLEASON RD/OLD ALLEG</b>	<b>SE 1 - 2 (1.391 mi.)</b>	<b>63</b>	<b>50</b>
Facility Status: Interim Response in progress				
Facility ID: 3000221				

<b>VILLAGE OF DOUGLAS C</b>	<b>200 BLUE STAR HWY</b>	<b>SSW &gt;2 (2.667 mi.)</b>	<b>AJ170</b>	<b>151</b>
Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring)				
Facility ID: 3000032				

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>EXIT 41 LF</b>	<b>134TH AVE</b>	<b>SE 1/2 - 1 (0.761 mi.)</b>	<b>25</b>	<b>21</b>
Facility Status: Evaluation conducted				
Facility ID: 3000007				

MI DEL PART 201: A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion. A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

A review of the MI DEL PART 201 list, as provided by EDR, and dated 08/01/2013 has revealed that there is 1 MI DEL PART 201 site within approximately 2.75 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>GLEASON PROPERTIES</b>	<b>650 WATER ST</b>	<b>SW 1 - 2 (1.402 mi.)</b>	<b>Q64</b>	<b>51</b>
Facility Id: 03000035				

### **Records of Emergency Release Reports**

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 06/27/2016 has revealed that there is 1 HMIRS site within approximately 2.75 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
3483 BLUE STAR HIGHW	3483 BLUE STAR HIGHW	WSW 1/4 - 1/2 (0.261 mi.)	C8	10

MI SPILLS: Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

A review of the MI SPILLS list, as provided by EDR, and dated 07/01/2016 has revealed that there are 2 MI SPILLS sites within approximately 2.75 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	868 HOLLAND ST.	SW 1 - 2 (1.135 mi.)	K45	40
Not reported	252 BUTLER	SW 1 - 2 (1.526 mi.)	T79	60

## EXECUTIVE SUMMARY

### **Other Ascertainable Records**

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there are 10 RCRA NonGen / NLR sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOHNSONS STANDARD 28</b>	<b>BLUE STAR HWY &amp; CENT</b>	<b>SSW &gt;2 (2.318 mi.)</b>	<b>AE136</b>	<b>110</b>
WEATHERVANE PARTNERS	102 BLUE STAR HWY	SSW >2 (2.517 mi.)	AG153	139
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SAUGATUCK CAMPGROUND</b>	<b>6743 WASHINGTON RD</b>	<b>W 1/4 - 1/2 (0.289 mi.)</b>	<b>C9</b>	<b>10</b>
BROWARD MARINE INC	66TH ST AND 135TH AV	SW 1/2 - 1 (0.861 mi.)	H31	28
COASTAL REAL ESTATE	3295 BLUE STAR HWY	SSW 1 - 2 (1.018 mi.)	I36	34
SAUGATUCK PUBLIC SCH	401 ELIZABETH ST	SW 1 - 2 (1.207 mi.)	L47	41
KLSWA LIFT STATION 6	178 PARK ST	SW 1 - 2 (1.747 mi.)	W94	68
<b>WEATHER VAN CLEANERS</b>	<b>102 WASHINGTON ST</b>	<b>SSW &gt;2 (2.023 mi.)</b>	<b>104</b>	<b>75</b>
<b>METALLURGICAL HIGH V</b>	<b>471 WASHINGTON ST</b>	<b>SSW &gt;2 (2.316 mi.)</b>	<b>135</b>	<b>108</b>
MACATAWA BANK	14 FERRY ST	SW >2 (2.454 mi.)	AF144	117

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 PRP site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>SSW &gt;2 (2.726 mi.)</b>	<b>AJ174</b>	<b>155</b>

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 07/27/2016 has revealed that there is 1 ICIS site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>SSW &gt;2 (2.674 mi.)</b>	<b>AJ172</b>	<b>153</b>

FTTS: FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act) over the previous five years. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS list, as provided by EDR, has revealed that there are 3 FTTS sites within

## EXECUTIVE SUMMARY

approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BLAKE VALLEAU Database: FTTS INSP, Date of Government Version: 04/09/2009	2500 63RD ST	ESE 1 - 2 (1.109 mi.)	J41	37
<b>MICHIGAN DUNES CORRE</b> Database: FTTS INSP, Date of Government Version: 04/09/2009	<b>6605 W 138 AVE ROUTE</b>	<b>NNW 1 - 2 (1.760 mi.)</b>	<b>X102</b>	<b>74</b>
<b>DIVERSIFIED SALVAGE</b> Database: FTTS INSP, Date of Government Version: 04/09/2009	<b>3387 60TH ST</b>	<b>E &gt;2 (2.562 mi.)</b>	<b>AI163</b>	<b>145</b>

HIST FTTS: A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

A review of the HIST FTTS list, as provided by EDR, has revealed that there are 2 HIST FTTS sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MICHIGAN DUNES CORRE</b> Database: HIST FTTS INSP, Date of Government Version: 10/19/2006	<b>6605 W 138 AVE ROUTE</b>	<b>NNW 1 - 2 (1.760 mi.)</b>	<b>X102</b>	<b>74</b>
<b>DIVERSIFIED SALVAGE</b> Database: HIST FTTS INSP, Date of Government Version: 10/19/2006	<b>3387 60TH ST</b>	<b>E &gt;2 (2.562 mi.)</b>	<b>AI163</b>	<b>145</b>

US AIRS: The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DIVERSIFIED SALVAGE</b> Database: US AIRS MINOR, Date of Government Version: 06/30/2016	<b>3387 60TH STREET</b>	<b>E &gt;2 (2.562 mi.)</b>	<b>AI165</b>	<b>146</b>

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/15/2016 has revealed that there are 24

## EXECUTIVE SUMMARY

FINDS sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BLAKE VALLEAU	2500 63RD ST	ESE 1 - 2 (1.109 mi.)	J42	38
<b>MACATAWA BAY BOAT WO</b>	<b>297 S MAPLE ST</b>	<b>SSW 1 - 2 (1.403 mi.)</b>	<b>R69</b>	<b>54</b>
MICHIGAN DUNES CORRE	6605 W 138 AVE ROUTE	NNW 1 - 2 (1.760 mi.)	X99	71
<b>TOWER MARINE</b>	<b>216 PETER'S DRIVE</b>	<b>SSW &gt;2 (2.236 mi.)</b>	<b>AD131</b>	<b>97</b>
<b>WEATHERVANE PARTNERS</b>	<b>102 BLUE STAR HWY</b>	<b>SSW &gt;2 (2.517 mi.)</b>	<b>AG155</b>	<b>140</b>
<b>DIVERSIFIED SALVAGE</b>	<b>3387 60TH STREET</b>	<b>E &gt;2 (2.562 mi.)</b>	<b>AI165</b>	<b>146</b>
<b>HAWORTH INC</b>	<b>200 BLUE STAR HWY</b>	<b>SSW &gt;2 (2.667 mi.)</b>	<b>AJ167</b>	<b>147</b>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>SSW &gt;2 (2.674 mi.)</b>	<b>AJ172</b>	<b>153</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SAUGATUCK CAMPGROUND</b>	<b>6743 WASHINGTON RD</b>	<b>W 1/4 - 1/2 (0.289 mi.)</b>	<b>C9</b>	<b>10</b>
DOUGLAS GAS & OIL	3479 BLUE STAR HWY	WSW 1/4 - 1/2 (0.311 mi.)	C14	13
<b>COASTAL REAL ESTATE</b>	<b>3295 BLUE STAR HWY</b>	<b>SSW 1 - 2 (1.018 mi.)</b>	<b>I38</b>	<b>36</b>
<b>SAUGATUCK PUBLIC SCH</b>	<b>401 ELIZABETH ST</b>	<b>SW 1 - 2 (1.207 mi.)</b>	<b>L48</b>	<b>42</b>
<b>KALAMAZOO LAKE WWTP</b>	<b>6449 OLD ALLEGAN ROA</b>	<b>S 1 - 2 (1.224 mi.)</b>	<b>M50</b>	<b>43</b>
<b>MARINA MAN</b>	<b>471 BUTLER ST</b>	<b>SW 1 - 2 (1.423 mi.)</b>	<b>S72</b>	<b>56</b>
<b>RICH PRODUCTS CORPOR</b>	<b>350 CULVER</b>	<b>SW 1 - 2 (1.528 mi.)</b>	<b>U80</b>	<b>61</b>
<b>KLSWA LIFT STATION 6</b>	<b>178 PARK ST</b>	<b>SW 1 - 2 (1.747 mi.)</b>	<b>W96</b>	<b>70</b>
<b>WEATHER VAN CLEANERS</b>	<b>102 WASHINGTON ST</b>	<b>SSW &gt;2 (2.023 mi.)</b>	<b>104</b>	<b>75</b>
<b>TOWER MARINE-DOUGLAS</b>	<b>216 ST. PETERS DRIVE</b>	<b>SW &gt;2 (2.130 mi.)</b>	<b>AA113</b>	<b>85</b>
<b>TOWER MARINE</b>	<b>216 SAINT PETERS DR</b>	<b>SW &gt;2 (2.130 mi.)</b>	<b>AA117</b>	<b>87</b>
KALAMAZOO LAKE WTP	22 BAYOU	SSW >2 (2.141 mi.)	AB120	91
<b>METALLURGICAL HIGH V</b>	<b>471 WASHINGTON ST</b>	<b>SSW &gt;2 (2.316 mi.)</b>	<b>135</b>	<b>108</b>
<b>MACATAWA BANK</b>	<b>14 FERRY ST</b>	<b>SW &gt;2 (2.454 mi.)</b>	<b>AF147</b>	<b>120</b>
<b>MI DEPT/ENVIRONMENTA</b>	<b>CENTER &amp; FERRY ST</b>	<b>SW &gt;2 (2.469 mi.)</b>	<b>AF151</b>	<b>128</b>
<b>INTERURBAN TRANSIT A</b>	<b>100 WILEY ST</b>	<b>SSW &gt;2 (2.553 mi.)</b>	<b>AH162</b>	<b>144</b>

MI AIRS: Permit and emissions inventory data.

A review of the MI AIRS list, as provided by EDR, and dated 09/21/2016 has revealed that there are 2 MI AIRS sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AGRI-SCIENCE THECHNO State Registration Id: P0718	6135 BLUE STAR HIGHW	NE >2 (2.203 mi.)	128	95
TOP & ALL METAL RECY State Registration Id: N0970	5954 134TH AVENUE	E >2 (2.748 mi.)	176	158

MI BEA: A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the MI BEA list, as provided by EDR, and dated 08/21/2013 has revealed that there are 12 MI BEA sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SANCTUARY (6530) WAY	6530 SANCTUARY WAY	NW 0 - 1/8 (0.082 mi.)	A2	8
METROPOLITAN TITLE C	25-29 BLUE STAR HIGH	SSW >2 (2.291 mi.)	AD133	107

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CENTER (294) STREET, <b>BLUE STAR (2948) HIG</b>	294 W. CENTER STREET <b>2948 BLUE STAR HIGHW</b>	SSW >2 (2.343 mi.) <b>SSW &gt;2 (2.725 mi.)</b>	AE140 <b>AK173</b>	114 <b>155</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BLUE STAR (6541) HIG	6541 BLUE STAR HWY	WNW 1/8 - 1/4 (0.238 mi.)	B5	9
BRENNER OIL, SAUGATU	3479 BLUE STAR HIGHW	WSW 1/4 - 1/2 (0.311 mi.)	C11	12
BLUE STAR (6473) HIG	6473 BLUE STAR HIGHW	NNE 1/2 - 1 (0.506 mi.)	E22	20
<b>BLUE STAR (3295) HIG</b>	<b>3295 BLUE STAR HIGHW</b>	<b>SSW 1 - 2 (1.018 mi.)</b>	<b>I37</b>	<b>35</b>
WATER (326 STREET	326 WATER STREET	SW 1 - 2 (1.598 mi.)	V84	63
<b>CULVER ST SITE</b>	<b>201 CULVER ST</b>	<b>SW 1 - 2 (1.603 mi.)</b>	<b>V86</b>	<b>63</b>
<b>DOUGLAS MARINE CORP</b>	<b>160 WASHINGTON ST</b>	<b>SSW &gt;2 (2.235 mi.)</b>	<b>AC130</b>	<b>96</b>
<b>FERRY (14) STREET</b>	<b>14 FERRY STREET</b>	<b>SW &gt;2 (2.454 mi.)</b>	<b>AF145</b>	<b>118</b>

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 12/31/2015 has revealed that there are 3 PA MANIFEST sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MI DEPT ENVIRONMENTA Generator EPA Id: MIK679614198	200 BLUE STAR HWY	SSW >2 (2.667 mi.)	AJ171	152
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MI DEQ VILLAGE OF DO Generator EPA Id: MIK679614198	CENTER & FERRY ST	SW >2 (2.468 mi.)	AF148	121
MI DEPT ENVIRONMENTA Generator EPA Id: MIK679614198	CENTER & FERRY STREE	SW >2 (2.468 mi.)	AF149	121

MI NPDES: General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

A review of the MI NPDES list, as provided by EDR, and dated 05/04/2016 has revealed that there are 6 MI NPDES sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PRO VISION TRANSPORT Permit Number: GW1520027	6205 BLUE STAR HIGHW	NE 1 - 2 (1.753 mi.)	98	71
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SAUGATUCK MARINA</b> Permit Number: MIS110343	<b>868 HOLLAND ST</b>	<b>SW 1 - 2 (1.135 mi.)</b>	<b>K44</b>	<b>38</b>
<b>KALAMAZOO LK SEWER &amp;</b> Permit Number: MI0056324	<b>6449 OLD ALLEGAN RD</b>	<b>S 1 - 2 (1.224 mi.)</b>	<b>M53</b>	<b>44</b>
TOWER MARINE-DOUGLAS Permit Number: MIG690005	216 ST PETERS DRIVE	SW >2 (2.130 mi.)	AA114	85
TOWER MARINE-DOUGLAS	216 ST PETERS DRIVE	SW >2 (2.130 mi.)	AA116	86



## EXECUTIVE SUMMARY

Site Id: MIT270011521

**BLUE STAR (2948) HIG**

WMD Id: 398190

Site Id: MID103472577

**2948 BLUE STAR HIGHW**

**SSW >2 (2.725 mi.)**

**AK173**

**155**

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
IHLES SERVICE WMD Id: 421647 Site Id: MIG000061765	6525 BLUE STAR HWY	NW 1/4 - 1/2 (0.261 mi.)	7	10
SAUGATUCK CAMPGROUND WMD Id: 413483 Site Id: MIR000043331	6743 WASHINGTON RD	W 1/4 - 1/2 (0.289 mi.)	C10	12
CITY OF SAUGATUCK WMD Id: 452691 Site Id: MIG000020961	338 WASHINGTON RD	SW 1/2 - 1 (0.875 mi.)	H32	31
<b>BLUE STAR (3295) HIG</b> WMD Id: 390514 Site Id: MI0000118646	<b>3295 BLUE STAR HIGHW</b>	<b>SSW 1 - 2 (1.018 mi.)</b>	<b>I37</b>	<b>35</b>
SAUGATUCK PUBLIC SCH WMD Id: 463560 Site Id: MIK136322948	401 ELIZABETH ST	SW 1 - 2 (1.207 mi.)	L49	43
<b>KALAMAZOO LK SEWER &amp;</b> WMD Id: 444351 Site Id: MIG000037979	<b>6449 OLD ALLEGAN RD</b>	<b>S 1 - 2 (1.224 mi.)</b>	<b>M53</b>	<b>44</b>
US DEPT/INTERIOR WMD Id: 444225 Site Id: MIG000038401	WATER & LUCY ST	SW 1 - 2 (1.343 mi.)	N55	47
WEST SHORE MARINE WMD Id: 447821 Site Id: MIG000029676	841 PARK ST	WSW 1 - 2 (1.352 mi.)	O57	48
<b>GLEASON PROPERTIES</b> WMD Id: 438341 Site Id: MIG000049999	<b>720 BUTLER ST</b>	<b>SW 1 - 2 (1.353 mi.)</b>	<b>N58</b>	<b>49</b>
<b>GLEASON PROPERTIES</b> WMD Id: 441011 Site Id: MIG000045165	<b>650 WATER ST</b>	<b>SW 1 - 2 (1.402 mi.)</b>	<b>Q64</b>	<b>51</b>
MARINA MAN WMD Id: 417700 Site Id: MIK132871120	471 BUTLER ST	SW 1 - 2 (1.423 mi.)	S70	54
RICH PRODUCTS WMD Id: 454579 Site Id: MIG000017219	350 CALVER ST	SW 1 - 2 (1.537 mi.)	U82	62
CITY OF SAUGATUCK WMD Id: 458625 Site Id: MIG000003853	102 BUTLER ST	SW 1 - 2 (1.598 mi.)	V83	62
SERGEANT MARINA WMD Id: 439974 Site Id: MIG000046913	31 BUTLER ST	SW 1 - 2 (1.636 mi.)	V91	67
KLSWA LIFT STATION 6	178 PARK ST	SW 1 - 2 (1.747 mi.)	W97	70



## EXECUTIVE SUMMARY

WMD Id: 481639 Site Id: MIK811411669				
<b>FLEMING OIL CO</b> WMD Id: 443993 Site Id: MIG000038594	<b>30 WASHINGTON ST</b>	<b>SSW &gt;2 (2.107 mi.)</b>	<b>Z107</b>	<b>77</b>
TOWER MARINE WMD Id: 395969 Site Id: MID050951474	216 SAINT PETERS DR	SW >2 (2.130 mi.)	AA115	86
<b>DOUGLAS MARINE CORP</b> WMD Id: 397755 Site Id: MID089964613	<b>160 WASHINGTON ST</b>	<b>SSW &gt;2 (2.235 mi.)</b>	<b>AC130</b>	<b>96</b>
BOB MEEUWSEN WMD Id: 416927 Site Id: MIG000038368	221 WASHINGTON ST	SSW >2 (2.269 mi.)	AC132	107
<b>FERRY (14) STREET</b> WMD Id: 488793 Site Id: MIK612445361	<b>14 FERRY STREET</b>	<b>SW &gt;2 (2.454 mi.)</b>	<b>AF145</b>	<b>118</b>
MI DEPT/ENVIRONMENTA WMD Id: 473345 Site Id: MIK679614198	CENTER & FERRY ST	SW >2 (2.468 mi.)	AF150	127

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/18/2016 has revealed that there are 20 ECHO sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MACATAWA BAY BOAT WO</b>	<b>297 S MAPLE ST</b>	<b>SSW 1 - 2 (1.403 mi.)</b>	<b>R69</b>	<b>54</b>
<b>WEATHERVANE PARTNERS</b>	<b>102 BLUE STAR HWY</b>	<b>SSW &gt;2 (2.517 mi.)</b>	<b>AG155</b>	<b>140</b>
<b>DIVERSIFIED SALVAGE</b>	<b>3387 60TH STREET</b>	<b>E &gt;2 (2.562 mi.)</b>	<b>AI165</b>	<b>146</b>
<b>HAWORTH INC</b>	<b>200 BLUE STAR HWY</b>	<b>SSW &gt;2 (2.667 mi.)</b>	<b>AJ167</b>	<b>147</b>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>SSW &gt;2 (2.674 mi.)</b>	<b>AJ172</b>	<b>153</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SAUGATUCK CAMPGROUND</b>	<b>6743 WASHINGTON RD</b>	<b>W 1/4 - 1/2 (0.289 mi.)</b>	<b>C9</b>	<b>10</b>
<b>COASTAL REAL ESTATE</b>	<b>3295 BLUE STAR HWY</b>	<b>SSW 1 - 2 (1.018 mi.)</b>	<b>I38</b>	<b>36</b>
<b>SAUGATUCK PUBLIC SCH</b>	<b>401 ELIZABETH ST</b>	<b>SW 1 - 2 (1.207 mi.)</b>	<b>L48</b>	<b>42</b>
<b>KALAMAZOO LAKE WWTP</b>	<b>6449 OLD ALLEGAN ROA</b>	<b>S 1 - 2 (1.224 mi.)</b>	<b>M50</b>	<b>43</b>
<b>MARINA MAN</b>	<b>471 BUTLER ST</b>	<b>SW 1 - 2 (1.423 mi.)</b>	<b>S72</b>	<b>56</b>
<b>RICH PRODUCTS CORPOR</b>	<b>350 CULVER</b>	<b>SW 1 - 2 (1.528 mi.)</b>	<b>U80</b>	<b>61</b>
<b>KLSWA LIFT STATION 6</b>	<b>178 PARK ST</b>	<b>SW 1 - 2 (1.747 mi.)</b>	<b>W96</b>	<b>70</b>
<b>WEATHER VAN CLEANERS</b>	<b>102 WASHINGTON ST</b>	<b>SSW &gt;2 (2.023 mi.)</b>	<b>104</b>	<b>75</b>
<b>TOWER MARINE-DOUGLAS</b>	<b>216 ST. PETERS DRIVE</b>	<b>SW &gt;2 (2.130 mi.)</b>	<b>AA113</b>	<b>85</b>
<b>TOWER MARINE</b>	<b>216 SAINT PETERS DR</b>	<b>SW &gt;2 (2.130 mi.)</b>	<b>AA117</b>	<b>87</b>
<b>KALAMAZOO LAKE WTP</b>	<b>22 BAYOU STREET</b>	<b>SSW &gt;2 (2.141 mi.)</b>	<b>AB118</b>	<b>90</b>
<b>METALLURGICAL HIGH V</b>	<b>471 WASHINGTON ST</b>	<b>SSW &gt;2 (2.316 mi.)</b>	<b>135</b>	<b>108</b>
<b>MACATAWA BANK</b>	<b>14 FERRY ST</b>	<b>SW &gt;2 (2.454 mi.)</b>	<b>AF147</b>	<b>120</b>
<b>MI DEPT/ENVIRONMENTA</b>	<b>CENTER &amp; FERRY ST</b>	<b>SW &gt;2 (2.469 mi.)</b>	<b>AF151</b>	<b>128</b>
<b>INTERURBAN TRANSIT A</b>	<b>100 WILEY ST</b>	<b>SSW &gt;2 (2.553 mi.)</b>	<b>AH162</b>	<b>144</b>

## EXECUTIVE SUMMARY

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 3 EDR Hist Auto sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	201 BLUE STAR MEM H	SSW >2 (2.551 mi.)	AG160	143
Not reported	6056 BLUE STAR HWY	ENE >2 (2.589 mi.)	166	147
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	3295 BLUE STAR HWY	SSW 1 - 2 (1.018 mi.)	I40	37

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

MI RGA PART 201: The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

A review of the MI RGA PART 201 list, as provided by EDR, has revealed that there are 5 MI RGA PART 201 sites within approximately 2.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GLEASON ROAD RES WEL Facility ID: 3000081	6280 GLEASON RD	SE 1 - 2 (1.359 mi.)	P60	50
JOHNSONS AMOCO SERVI Facility ID: 30013	BLUE STAR HWY & CENT	SSW >2 (2.318 mi.)	AE137	112
VILLAGE OF DOUGLAS C Facility ID: 3000032	200 BLUE STAR HWY	SSW >2 (2.667 mi.)	AJ168	148
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GLEASON PROPERTY Facility ID: 3000035	650 WATER	SW 1 - 2 (1.402 mi.)	Q66	52



## EXECUTIVE SUMMARY

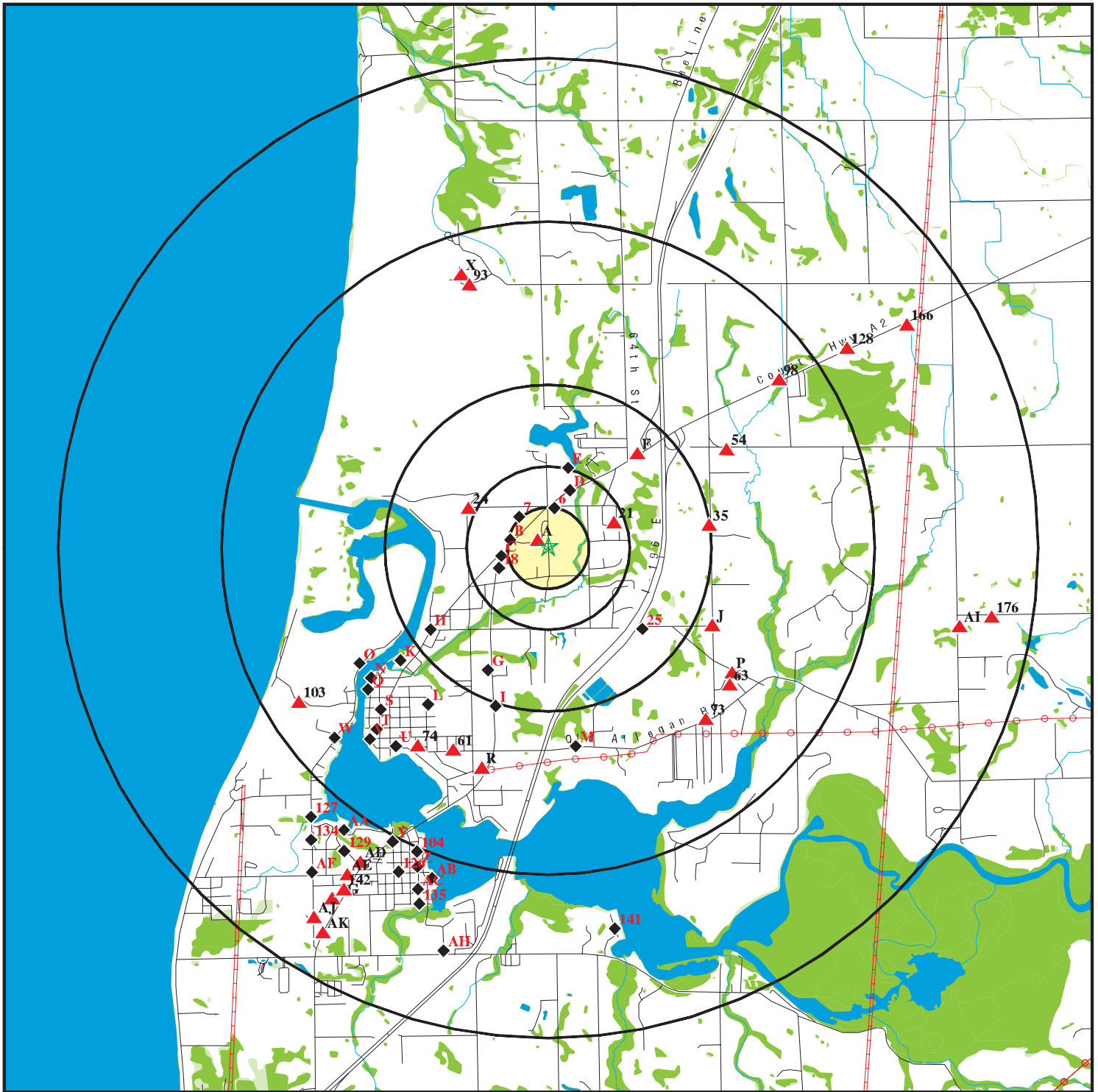
Facility ID: 0-034193 KALAMAZOO LK SEWER & Facility ID: 00034193 Facility ID: 34193 Facility ID: 0-034193	6449 OLD ALLEGAN RD	S 1 - 2 (1.224 mi.)	M52	44
CULVER ST SITE Facility ID: 5-002605 Facility ID: 50002605	201 CULVER ST	SW 1 - 2 (1.603 mi.)	V85	63
SERGEANT MARINA COND Facility ID: 00005096 Facility ID: 5096	39 BUTLER ST	SW 1 - 2 (1.632 mi.)	V87	64
SERGEANT MARINA Facility ID: 0-005096	39 BUTLER	SW 1 - 2 (1.632 mi.)	V88	65
SERGEANT MARINA Facility ID: 0-005096	39 BUTLER ST	SW 1 - 2 (1.632 mi.)	V89	65
SERGEANT'S MARINA DOUGLAS SHELL Facility ID: 0-004516	31 BUTLER ST. 30 N. WASHINGTON	SW 1 - 2 (1.636 mi.) SSW >2 (2.107 mi.)	V92 Z109	67 82
DOUGLAS SHELL Facility ID: 00004516 Facility ID: 4516 Facility ID: 0-004516	30 N WASHINGTON	SSW >2 (2.107 mi.)	Z110	82
TOWER MARINE/KALAMAZ Facility ID: 0-017962	216 ST PETERS DR	SW >2 (2.130 mi.)	AA111	83
DOUGLAS AMOCO 28876 Facility ID: 5-001810 Facility ID: 50001810	10 1/2 S WASHINGTON	SSW >2 (2.148 mi.)	Z122	92
BRANCH MAINTENANCE G Facility ID: 0-006446	486 WATER ST.	SSW >2 (2.547 mi.)	AH156	141
BRANCH MAINTENANCE G Facility ID: 00006446 Facility ID: 0-006446 Facility ID: 6446	486 WATER ST	SSW >2 (2.547 mi.)	AH157	141

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.

<u>Site Name</u>	<u>Database(s)</u>
WESTSHORE RECYCLING AND TRANSFER S	MI SWF/LF, MI WDS
CHEVRON CHEMICAL COMPANY	SEMS-ARCHIVE
CHEVRON CHEMICAL COMPANY	SEMS-ARCHIVE
LEIGHTON TOWNSHIP DUMPSITE	SEMS-ARCHIVE
SAUGATUCK TOWNSHIP LANDFILL	SEMS-ARCHIVE
BRINK FARMS INC	MI LUST, MI UST

# OVERVIEW MAP - 4808622.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- ▨ Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Pipelines
- National Wetland Inventory
- State Wetlands

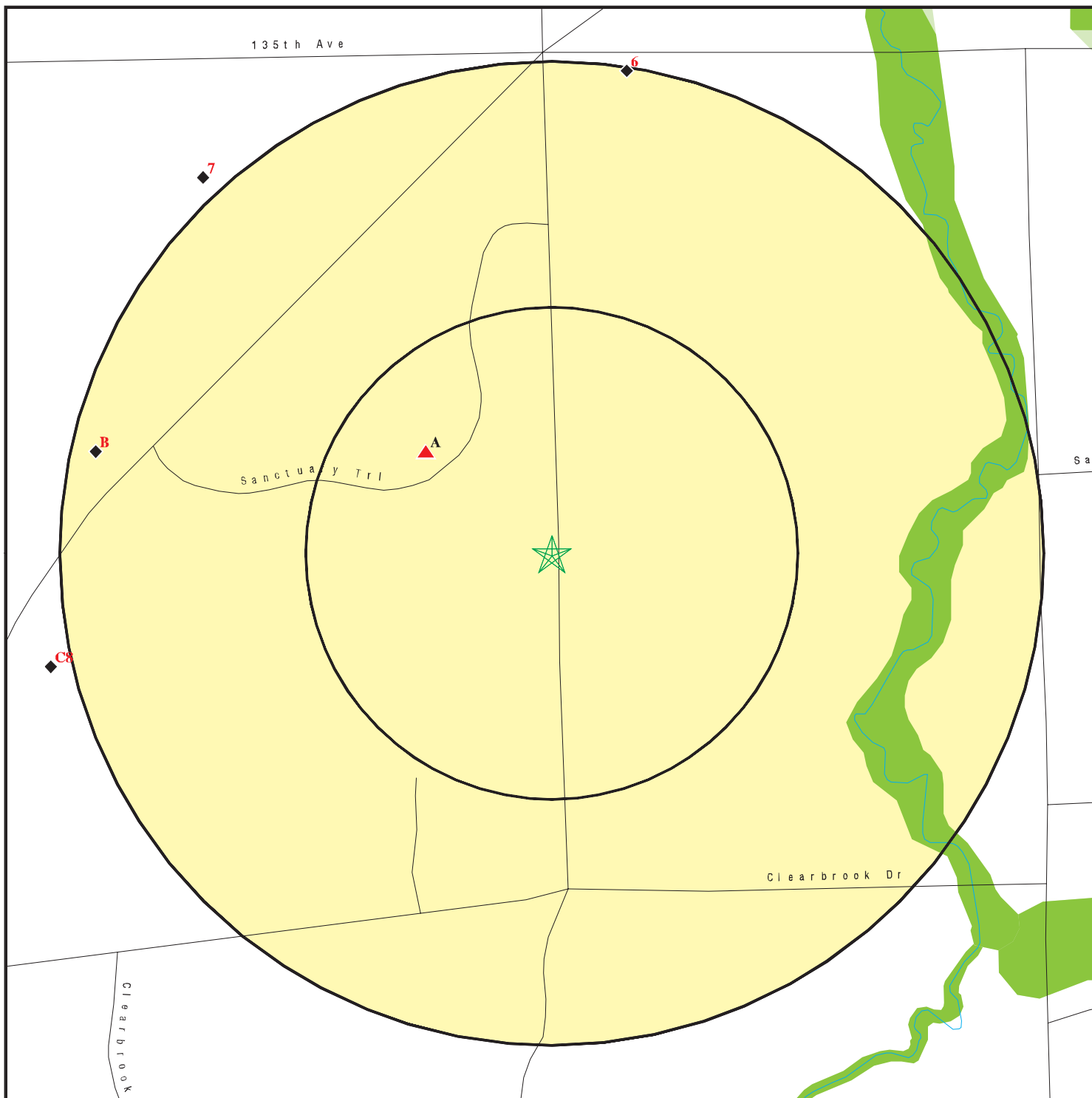


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: KLSWA North  
 ADDRESS: 65th Street  
 Saugatuck MI 49453  
 LAT/LONG: 42.672561 / 86.183832

CLIENT: Fleis and VandenBrink Eng.  
 CONTACT: Amber Jane Schneider  
 INQUIRY #: 4808622.2s  
 DATE: December 20, 2016 4:11 pm

# DETAIL MAP - 4808622.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ⚡ Sensitive Receptors
- ☒ National Priority List Sites
- ☒ Dept. Defense Sites

- ☒ Indian Reservations BIA
  - National Wetland Inventory
  - State Wetlands
- 0 1/16 1/8 1/4 Miles
- N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: KLSWA North  
 ADDRESS: 65th Street  
 Saugatuck MI 49453  
 LAT/LONG: 42.672561 / 86.183832

CLIENT: Fleis and VandenBrink Eng.  
 CONTACT: Amber Jane Schneider  
 INQUIRY #: 4808622.2s  
 DATE: December 20, 2016 4:11 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	2.750		0	0	0	0	0	0
Proposed NPL	2.750		0	0	0	0	0	0
NPL LIENS	2.750		0	0	0	0	0	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	2.750		0	0	0	0	0	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	2.750		0	0	0	0	0	0
SEMS	2.750		0	0	0	0	1	1
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	2.750		0	0	0	0	1	1
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	2.750		0	0	0	0	0	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	2.750		0	0	0	0	0	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	2.750		0	0	0	0	0	0
RCRA-SQG	2.750		0	0	0	0	2	2
RCRA-CESQG	2.750		0	0	0	0	4	4
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	2.750		0	0	0	0	0	0
US ENG CONTROLS	2.750		0	0	0	0	0	0
US INST CONTROL	2.750		0	0	0	0	0	0
<b><i>Federal ERNS list</i></b>								
ERNS	2.750		0	0	0	1	3	4
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
MI SHWS	2.750		0	0	0	0	0	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
MI SWF/LF	2.750		0	0	0	0	0	0
<b><i>State and tribal leaking storage tank lists</i></b>								
MI LUST	2.750		0	0	2	2	10	14
INDIAN LUST	2.750		0	0	0	0	0	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	2.750		0	0	0	0	0	0



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MI UST	2.750		0	1	3	3	19	26
MI AST	2.750		0	0	0	0	2	2
INDIAN UST	2.750		0	0	0	0	0	0
<b>State and tribal institutional control / engineering control registries</b>								
MI AUL	2.750		0	0	1	1	2	4
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	2.750		0	0	0	0	0	0
<b>State and tribal Brownfields sites</b>								
MI BROWNFIELDS	2.750		0	0	0	0	1	1
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	2.750		0	0	0	0	1	1
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
MI SWRCY	2.750		0	0	0	0	0	0
MI HIST LF	2.750		0	0	0	0	0	0
INDIAN ODI	2.750		0	0	0	0	0	0
ODI	2.750		0	0	0	0	0	0
DEBRIS REGION 9	2.750		0	0	0	0	0	0
IHS OPEN DUMPS	2.750		0	0	0	0	0	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	2.750		0	0	0	0	0	0
MI INVENTORY	2.750		1	2	3	4	15	25
MI PART 201	2.750		0	0	0	1	3	4
MI CDL	2.750		0	0	0	0	0	0
MI DEL PART 201	2.750		0	0	0	0	1	1
US CDL	2.750		0	0	0	0	0	0
<b>Local Land Records</b>								
MI LIENS	2.750		0	0	0	0	0	0
LIENS 2	2.750		0	0	0	0	0	0
<b>Records of Emergency Release Reports</b>								
HMIRS	2.750		0	0	1	0	0	1
MI SPILLS	2.750		0	0	0	0	2	2
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	2.750		0	0	1	1	8	10
FUDS	2.750		0	0	0	0	0	0
DOD	2.750		0	0	0	0	0	0
SCRD DRYCLEANERS	2.750		0	0	0	0	0	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	2.750		0	0	0	0	0	0
EPA WATCH LIST	2.750		0	0	0	0	0	0
2020 COR ACTION	2.750		0	0	0	0	0	0
TSCA	2.750		0	0	0	0	0	0
TRIS	2.750		0	0	0	0	0	0
SSTS	2.750		0	0	0	0	0	0
ROD	2.750		0	0	0	0	0	0
RMP	2.750		0	0	0	0	0	0
RAATS	2.750		0	0	0	0	0	0
PRP	2.750		0	0	0	0	1	1
PADS	2.750		0	0	0	0	0	0
ICIS	2.750		0	0	0	0	1	1
FTTS	2.750		0	0	0	0	3	3
MLTS	2.750		0	0	0	0	0	0
COAL ASH DOE	2.750		0	0	0	0	0	0
COAL ASH EPA	2.750		0	0	0	0	0	0
PCB TRANSFORMER	2.750		0	0	0	0	0	0
RADINFO	2.750		0	0	0	0	0	0
HIST FTTS	2.750		0	0	0	0	2	2
DOT OPS	2.750		0	0	0	0	0	0
CONSENT	2.750		0	0	0	0	0	0
INDIAN RESERV	2.750		0	0	0	0	0	0
FUSRAP	2.750		0	0	0	0	0	0
UMTRA	2.750		0	0	0	0	0	0
LEAD SMELTERS	2.750		0	0	0	0	0	0
US AIRS	2.750		0	0	0	0	1	1
US MINES	2.750		0	0	0	0	0	0
FINDS	2.750		0	0	2	0	22	24
DOCKET HWC	2.750		0	0	0	0	0	0
UXO	2.750		0	0	0	0	0	0
MI AIRS	2.750		0	0	0	0	2	2
MI BEA	2.750		1	1	1	1	8	12
MI COAL ASH	2.750		0	0	0	0	0	0
MI DRYCLEANERS	2.750		0	0	0	0	0	0
MI LEAD	2.750		0	0	0	0	0	0
PA MANIFEST	2.750		0	0	0	0	3	3
MI NPDES	2.750		0	0	0	0	6	6
MI UIC	2.750		0	0	0	0	0	0
MI WDS	2.750		0	0	2	4	29	35
ABANDONED MINES	2.750		0	0	0	0	0	0
FUELS PROGRAM	2.750		0	0	0	0	0	0
ECHO	2.750		0	0	1	0	19	20

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP	2.750		0	0	0	0	0	0
EDR Hist Auto	2.750		0	0	0	0	3	3
EDR Hist Cleaner	2.750		0	0	0	0	0	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

MI RGA PART 201	2.750		0	0	0	0	5	5
-----------------	-------	--	---	---	---	---	---	---

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
MI RGA LF	2.750		0	0	0	0	0	0
MI RGA LUST	2.750		0	0	4	2	17	23
- Totals --		0	2	4	21	20	197	244

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1**  
**NW**  
 < 1/8  
 0.082 mi.  
 435 ft.

**SANCTUARY (6530) WAY**  
**6530 SANCTUARY WAY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY**    **S114038418**  
 N/A

**Site 1 of 2 in cluster A**

**Relative:**  
**Higher**

INVENTORY:  
 Bea Number: 201201732PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**628 ft.**

**A2**  
**NW**  
 < 1/8  
 0.082 mi.  
 435 ft.

**SANCTUARY (6530) WAY**  
**6530 SANCTUARY WAY**  
**SAUGATUCK, MI 49453**

**MI BEA**    **S111832714**  
 N/A

**Site 2 of 2 in cluster A**

**Relative:**  
**Higher**

BEA:  
 Secondary Address: Not reported  
 BEA Number: 1732  
 District: Kalamazoo  
 Date Received: 05/10/2012  
 Submitter Name: Coastal Real Estate Holdings IV, LLC  
 Petition Determination: No Request  
 Petition Disclosure: 0  
 Category: Not reported  
 Determination 20107A: No Request  
 Reviewer: zimontb  
 Division Assigned: RD

**Actual:**  
**628 ft.**

**B3**  
**WNW**  
 1/8-1/4  
 0.237 mi.  
 1253 ft.

**BLUE STAR (6541) HIGHWAY**  
**6541 BLUE STAR HWY VACANT HOOTEN INN PROPERTY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY**    **S114032928**  
 N/A

**Site 1 of 3 in cluster B**

**Relative:**  
**Lower**

INVENTORY:  
 Bea Number: 201001542PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**625 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**B4**  
**WNW**  
**1/8-1/4**  
**0.237 mi.**  
**1253 ft.**

**BLUE STAR (6541) HIGHWAY**  
**6541 BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY** **S114564940**  
**N/A**

**Site 2 of 3 in cluster B**

**Relative:**  
**Lower**

**INVENTORY:**  
Bea Number: 201301925PL  
Township: Saugatuck  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Actual:**  
**625 ft.**

**B5**  
**WNW**  
**1/8-1/4**  
**0.238 mi.**  
**1257 ft.**

**BLUE STAR (6541) HIGHWAY**  
**6541 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**MI BEA** **S110748287**  
**N/A**

**Site 3 of 3 in cluster B**

**Relative:**  
**Lower**

**BEA:**  
Secondary Address: Vacant Hooten Inn Property  
BEA Number: 1542  
District: Kalamazoo  
Date Received: 11/30/2010  
Submitter Name: PBT RE Holdings I, LLC  
Petition Determination: Affirmed  
Petition Disclosure: 1  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

**Actual:**  
**625 ft.**

**6**  
**North**  
**1/8-1/4**  
**0.248 mi.**  
**1310 ft.**

**CLEARBROOK CORP**  
**6494 135TH AVE**  
**SAUGATUCK, MI 49453**

**MI UST** **U000249286**  
**N/A**

**Relative:**  
**Lower**

**UST:**  
Facility ID: 00034832  
Facility Type: CLOSED  
Owner Name: CLEARBROOK CORP  
Owner Address: 6494 135TH AVE  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-1766  
Contact: JIM JELTEMA  
Contact Phone: (616) 857-1766  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number

**Actual:**  
**625 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CLEARBROOK CORP (Continued)**

**U000249286**

Latitude: 42.67603  
 Longitude: -86.18368

Tank ID: 1  
**Tank Status: Removed from Ground**  
 Capacity: 500  
 Product: Gasoline  
 Install Date: 01/01/1987  
 Remove Date: 03/20/1991  
 Tank Release Detection: Not reported  
 Pipe Release Detection: Not reported  
 Piping Material: Galvanized Steel  
 Piping Type: Not reported  
 Construction Material: Unknown  
 Impressed Device: No

**7**  
**NW**  
**1/4-1/2**  
**0.261 mi.**  
**1376 ft.**

**IHLES SERVICE**  
**6525 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**MI WDS S111950092**  
**N/A**

**Relative:**  
**Lower**

WDS:  
 Site Id: MIG000061765  
 WMD Id: 421647  
 Site Specific Name: IHLES SERVICE  
 Mailing Address: 6525 BLUE STAR HWY  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:**  
**627 ft.**

**C8**  
**WSW**  
**1/4-1/2**  
**0.261 mi.**  
**1378 ft.**

**3483 BLUE STAR HIGHWAY**  
**3483 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI**  
**Site 1 of 10 in cluster C**

**HMIRS 2005708579**  
**N/A**

**Relative:**  
**Lower**

[Click this hyperlink](#) while viewing on your computer to access additional HMIRS detail in the EDR Site Report.

**Actual:**  
**622 ft.**  
**C9**

**SAUGATUCK CAMPGROUND**  
**6743 WASHINGTON RD**  
**SAUGATUCK, MI 49453**  
**Site 2 of 10 in cluster C**

**RCRA NonGen / NLR 1001817609**  
**FINDS MIR000043331**  
**ECHO**

**Relative:**  
**Lower**

RCRA NonGen / NLR:  
 Date form received by agency: 12/01/2001  
 Facility name: SAUGATUCK CAMPGROUND  
 Facility address: 6743 WASHINGTON RD  
 SAUGATUCK, MI 49453  
 EPA ID: MIR000043331  
 Mailing address: 6743 WASHINGTON  
 SAUGATUCK, MI 49453  
 Contact: THOMAS ZUIDEMA  
 Contact address: 6743 WASHINGTON RD

**Actual:**  
**621 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK CAMPGROUND (Continued)**

**1001817609**

SAUGATUCK, MI 49453  
Contact country: US  
Contact telephone: (616) 857-2528  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 12/02/2001  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 12/02/2001  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 11/23/1999  
Site name: SAUGATUCK CAMPGROUND  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SAUGATUCK CAMPGROUND (Continued)**

**1001817609**

Date form received by agency: 11/01/1999  
 Site name: SAUGATUCK CAMPGROUND  
 Classification: Not a generator, verified

Waste code: D001  
 Waste name: IGNITABLE WASTE

Violation Status: No violations found

**FINDS:**

Registry ID: 110003712509

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1001817609  
 Registry ID: 110003712509  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003712509](http://echo.epa.gov/detailed_facility_report?fid=110003712509)

**C10**  
**West**  
**1/4-1/2**  
**0.289 mi.**  
**1526 ft.**

**SAUGATUCK CAMPGROUND**  
**6743 WASHINGTON RD**  
**SAUGATUCK, MI 49453**  
**Site 3 of 10 in cluster C**

**MI WDS S111945034**  
**N/A**

**Relative:**  
**Lower**

**WDS:**  
 Site Id: MIR000043331  
 WMD Id: 413483  
 Site Specific Name: SAUGATUCK CAMPGROUND  
 Mailing Address: 6743 WASHINGTON  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:**  
**621 ft.**

**C11**  
**WSW**  
**1/4-1/2**  
**0.311 mi.**  
**1643 ft.**

**BRENNER OIL, SAUGATUCK**  
**3479 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49453**  
**Site 4 of 10 in cluster C**

**MI BEA S107031507**  
**N/A**

**Relative:**  
**Lower**

**BEA:**  
 Secondary Address: Not reported  
 BEA Number: 895  
 District: Kalamazoo  
 Date Received: 07/29/2005  
 Submitter Name: Nahal of Saugatuck, Inc.  
 Petition Determination: No Request  
 Petition Disclosure: 0  
 Category: Same Hazardous Substance(s)

**Actual:**  
**620 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BRENNER OIL, SAUGATUCK (Continued)**

**S107031507**

Determination 20107A: No Request  
Reviewer: powella  
Division Assigned: Environmental Response Division

Secondary Address: Not reported  
BEA Number: 896  
District: Kalamazoo  
Date Received: 07/29/2005  
Submitter Name: Nahal Properties, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Same Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: powella  
Division Assigned: Environmental Response Division

**C12 NAHAL OF SAUGATUCK**  
**WSW 3479 BLUE STAR HWY**  
**1/4-1/2 SAUGATUCK, MI**  
**0.311 mi.**  
**1643 ft. Site 5 of 10 in cluster C**

**MI RGA LUST S115687846**  
**N/A**

**Relative:** RGA LUST:  
**Lower** 2012 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
2011 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
**Actual:** 2010 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
**620 ft.** 2009 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
2008 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
2007 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY  
2006 NAHAL OF SAUGATUCK 3479 BLUE STAR HWY

**C13 BRENNER OIL CO OF SAUGATUCK**  
**WSW 3479 BLUE STAR HWY**  
**1/4-1/2 SAUGATUCK, MI**  
**0.311 mi.**  
**1643 ft. Site 6 of 10 in cluster C**

**MI RGA LUST S115667613**  
**N/A**

**Relative:** RGA LUST:  
**Lower** 2005 BRENNER OIL CO OF SAUGATUCK 3479 BLUE STAR HWY  
2004 BRENNER OIL CO OF SAUGATUCK 3479 BLUE STAR HWY  
**Actual:** 2003 BRENNER OIL CO OF SAUGATUCK 3479 BLUE STAR HWY  
**620 ft.** 2001 BRENNER OIL CO OF SAUGATUCK 3479 BLUE STAR HWY

**C14 DOUGLAS GAS & OIL**  
**WSW 3479 BLUE STAR HWY**  
**1/4-1/2 SAUGATUCK, MI 49453**  
**0.311 mi.**  
**1643 ft. Site 7 of 10 in cluster C**

**FINDS 1015889922**  
**N/A**

**Relative:** FINDS:  
**Lower** Registry ID: 110045664027  
**Actual:** Environmental Interest/Information System  
**620 ft.** SPCC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**C15** NAHAL OF SAUGATUCK  
**WSW** 3479 BLUE STAR HWY  
**1/4-1/2** SAUGATUCK, MI 49453  
**0.311 mi.**  
**1643 ft.** Site 8 of 10 in cluster C

**MI LUST** U000249196  
**MI UST** N/A  
**MI INVENTORY**

**Relative:**  
**Lower**

LUST:

**Actual:**  
**620 ft.**

Facility ID: 00009145  
Source: STATE OF MICHIGAN  
Owner Name: TJ Nahal  
Owner Address: 15877 Lake Michigan Dr  
Owner City,St,Zip: Grand Haven, MI 49417  
Owner Contact: Not reported  
Owner Phone: (616) 842-3420  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Brenner Oil, Saugatuck  
Latitude: 42.67091  
Longitude: -86.18948  
Date of Collection: 10/05/2004  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

Leak Number: C-1124-98  
Release Date: 11/11/1998  
Substance Released: Gasoline  
Release Status: Closed  
Release Closed Date: 06/16/2005

Leak Number: C-1261-98  
Release Date: 12/14/1998  
Substance Released: Diesel  
Release Status: Closed  
Release Closed Date: 06/16/2005

UST:

Facility ID: 00009145  
Facility Type: ACTIVE  
Owner Name: TJ NAHAL  
Owner Address: 15877 LAKE MICHIGAN DR  
Owner City,St,Zip: GRAND HAVEN, MI 49417  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 842-3420  
Contact: Tajinder Nahal  
Contact Phone: (616) 510-1820  
Date of Collection: 10/05/2004  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.67091  
Longitude: -86.18948

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

NAHAL OF SAUGATUCK (Continued)

U000249196

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/15/1978  
Remove Date: 11/09/1998  
Tank Release Detection: Automatic Tank Gauging,Manual Tank Gauging,Tank Tightness Testing  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status:** **Removed from Ground**  
Capacity: 10000  
Product: Gasoline  
Install Date: 04/15/1978  
Remove Date: 11/09/1998  
Tank Release Detection: Automatic Tank Gauging,Manual Tank Gauging,Tank Tightness Testing  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: Bare Steel  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status:** **Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 04/15/1981  
Remove Date: 11/09/1998  
Tank Release Detection: Automatic Tank Gauging,Manual Tank Gauging,Tank Tightness Testing  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: No Valve At Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 4  
**Tank Status:** **Currently In Use**  
Capacity: 25000  
Product: UNK  
Install Date: 11/13/1998  
Remove Date: Not reported  
Tank Release Detection: Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors,Interstitial Monitoring Double Walled Piping  
Piping Material: Double Walled,Secondary Containment  
Piping Type: Pressure  
Construction Material: Composite(Steel w/Fiberglass)  
Impressed Device: No

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**NAHAL OF SAUGATUCK (Continued)**

**U000249196**

INVENTORY:

Bea Number: Not reported  
 Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.67092  
 Longitude: -86.18949

**C16**  
**WSW**  
**1/4-1/2**  
**0.311 mi.**  
**1643 ft.**

**BRENNER OIL, SAUGATUCK**  
**3479 BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY S114032998**  
**N/A**

**Site 9 of 10 in cluster C**

**Relative:**  
**Lower**

INVENTORY:

Bea Number: 200500895PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**620 ft.**

Bea Number: 200500896PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**C17**  
**WSW**  
**1/4-1/2**  
**0.311 mi.**  
**1643 ft.**

**BRENNER OIL COMPANY OF SAUGATUCK**  
**3479 BLUE STAR HWY**  
**SAUGATUCK, MI**

**MI RGA LUST S115667614**  
**N/A**

**Site 10 of 10 in cluster C**

**Relative:**  
**Lower**

RGA LUST:

2000 BRENNER OIL COMPANY OF SAUGATUCK 3479 BLUE STAR HWY  
 1999 BRENNER OIL COMPANY OF SAUGATUCK 3479 BLUE STAR HWY

**Actual:**  
**620 ft.**

**18**  
**WSW**  
**1/4-1/2**  
**0.323 mi.**  
**1708 ft.**

**BRENNER OIL OF SAUGATUCK, INC.**  
**3475/3479 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49408**

**MI AUL S109845795**  
**N/A**

**Relative:**  
**Lower**

AUL:

Status: Recorded  
 Site Name: Not reported  
 Property: Brenner Oil of Saugatuck, Inc.  
 Land Use Restriction Type: RC  
 Program Type: Part 213  
 Program Support Assigned User: Nicholas Ekel  
 Program Support Assigned Date: 01/13/2011  
 Legal Description Of Property: Migrated  
 Based On The Deq Ref #: 11121305085

**Actual:**  
**620 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BRENNER OIL OF SAUGATUCK, INC. (Continued)**

**S109845795**

MDEQ Reference Number: RC-RRD-213-05-085  
 Property Or Description Restricted Area: Migrated  
 Lead Division: STD  
 File Name Of Hyperlinked Legal Doc: U:\KERMIT\11121305085.PDF  
 Mapped Polygons Area In Acres: 0.749900000000000001  
 Mapped Polygons Area In Square Miles: 1.1000000000000001E-3  
 Date Data Entry Started: 02/04/2011  
 Date Data Entry Finished: 02/04/2011  
 Individual Or Staff Assoc With The Mapping: Nicholas Ekel  
 Program Used To Map Restricted Features: ArcINFO 9.3 & IcoMAP 4.2  
 Date Legal Paperwork Stamped/Filed/Register Of Deeds: 04/04/2005  
 Commercial I Land Use Restriction: 0  
 Commercial Ii Land Use Restriction: 0  
 Commercial Iii Land Use Restriction: 0  
 Commercial Iv Land Use Restriction: 0  
 Industrial Land Use Restriction: 0  
 Residential Land Use Restriction: 0  
 Recreational Land Use Restriction: 0  
 Multiple Land-Use Restrictions: 0  
 Site Specific Restrictions: 0  
 Groundwater Consumption Restrictions: 1  
 Groundwater Contact Restrictions: 1  
 Special Well Construction Requirements: 0  
 Special Building Restrictions: 0  
 Excavation And Soil Movement Restrictions: 0  
 Soil Movement Requirements: 0  
 There Is A Restriction On All Construction: 0  
 Monitoring Well Protected, No Tampering Or Removal: 0  
 There Is An Exposure Barrier In Place: 0  
 There Is A Health And Safety Plan: 0  
 There Is A Permanent Marker On The Site: 0  
 Map Comments: 20110113 - LRUR is NOT mapped in KERMIT - Nick Ekel  
 mapped in KERMIT - Nick Ekel  
 Comment: Request received on 6/15/2005

**D19**  
**NNE**  
**1/4-1/2**  
**0.379 mi.**  
**1999 ft.**

**SAUGATUCK CAMPGROUND**  
**6473 WASHINGTON**  
**SAUGATUCK, MI**  
**Site 1 of 2 in cluster D**

**MI RGA LUST S115692839**  
**N/A**

**Relative:**  
**Lower**

RGA LUST:

**Actual:**  
**620 ft.**

2012	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2011	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2010	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2009	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2008	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2007	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2006	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2005	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2004	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2003	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2001	SAUGATUCK CAMPGROUND	6473 WASHINGTON
2000	SAUGATUCK CAMPGROUND	6473 WASHINGTON

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**D20 SAUGATUCK CAMPGROUND**  
**NNE 6473 WASHINGTON**  
**1/4-1/2 SAUGATUCK, MI 49453**  
**0.379 mi.**  
**1999 ft. Site 2 of 2 in cluster D**

**MI LUST U003211835**  
**MI UST N/A**  
**MI INVENTORY**

**Relative:**  
**Lower**

**LUST:**  
Facility ID: 00039100  
Source: STATE OF MICHIGAN  
Owner Name: Saugatuck Campground  
Owner Address: 6473 WASHINGTON  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Contact: Not reported  
Owner Phone: (616) 857-2528  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Saugatuck Campground  
Latitude: 42.67791  
Longitude: -86.18104  
Date of Collection: 01/02/2007  
Method of Collection: Interpolation-Map  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

**Actual:**  
**620 ft.**

Leak Number: C-1228-99  
Release Date: 11/29/1999  
Substance Released: Unknown  
Release Status: Open  
Release Closed Date: Not reported

**UST:**  
Facility ID: 00039100  
Facility Type: CLOSED  
Owner Name: SAUGATUCK CAMPGROUND  
Owner Address: 6473 WASHINGTON  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2528  
Contact: THOMAS D ZUIDEMA  
Contact Phone: (616) 857-2528  
Date of Collection: 01/02/2007  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Interpolation-Map  
Latitude: 42.67791  
Longitude: -86.18104

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 4000  
Product: Gasoline  
Install Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SAUGATUCK CAMPGROUND (Continued)**

**U003211835**

Remove Date: 11/29/1999  
 Tank Release Detection: Not reported  
 Pipe Realease Detection: Not reported  
 Piping Material: Bare Steel  
 Piping Type: Suction: Valve at Tank  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
 Capacity: 4000  
 Product: Gasoline  
 Install Date: Not reported  
 Remove Date: 11/29/1999  
 Tank Release Detection: Not reported  
 Pipe Realease Detection: Not reported  
 Piping Material: Bare Steel  
 Piping Type: Suction: Valve at Tank  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

**INVENTORY:**

Bea Number: Not reported  
 Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.67792  
 Longitude: -86.18105

21  
 ENE  
 1/4-1/2  
 0.434 mi.  
 2292 ft.

**PRESBYTERIAN CAMPS  
 PERRYMAN ST  
 SAUGATUCK, MI 49453**

**MI UST U000249347  
 N/A**

**Relative:  
 Higher**

UST:  
 Facility ID: 00010294  
 Facility Type: CLOSED  
 Owner Name: PRESBYTERIAN CAMPS  
 Owner Address: PERRYMAN ST  
 Owner City,St,Zip: SAUGATUCK, MI 49453  
 Owner Country: USA  
 Owner Contact: Not reported  
 Owner Phone: (616) 857-2531  
 Contact: MARK LANKTON-LENZO  
 Contact Phone: (616) 857-2531  
 Date of Collection: Not reported  
 Accuracy: Not reported  
 Accuracy Value Unit: Not reported  
 Horizontal Datum: Not reported  
 Source: Not reported  
 Point Line Area: Not reported  
 Desc Category: Not reported  
 Method of Collection: Not reported  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:  
 629 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRESBYTERIAN CAMPS (Continued)**

**U000249347**

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 200  
Product: Gasoline  
Install Date: 04/30/1974  
Remove Date: 06/01/1990  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**E22**  
**NNE**  
**1/2-1**  
**0.506 mi.**  
**2673 ft.**

**BLUE STAR (6473) HIGHWAY**  
**6473 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49406**

**MI BEA S106174256**  
**N/A**

**Site 1 of 2 in cluster E**

**Relative:**  
**Lower**

**BEA:**  
Secondary Address: Not reported  
BEA Number: 729  
District: Kalamazoo  
Date Received: 04/16/2004  
Submitter Name: TEE2GREEN INVESTMENTS, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: clarkds  
Division Assigned: Storage Tank Division

**Actual:**  
**617 ft.**

Secondary Address: Not reported  
BEA Number: 1058  
District: Kalamazoo  
Date Received: 01/30/2007  
Submitter Name: 6473 Blue Star, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: powella  
Division Assigned: Storage Tank Division

**E23**  
**NNE**  
**1/2-1**  
**0.506 mi.**  
**2673 ft.**

**SAUGATUCK CAMPGROUND**  
**6473 BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY S114038436**  
**N/A**

**Site 2 of 2 in cluster E**

**Relative:**  
**Lower**

**INVENTORY:**  
Bea Number: 200400729PL  
Township: Saugatuck  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported

**Actual:**  
**617 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK CAMPGROUND (Continued)**

S114038436

Longitude: Not reported

24  
WNW  
1/2-1  
0.546 mi.  
2882 ft.

**BROWARD MARINE INC**  
**66TH ST AND 135TH AVE N**  
**SAUGATUCK, MI 49453**

MI WDS S111935654  
N/A

Relative:  
Higher

WDS:  
Site Id: MID097815302  
WMD Id: 398036  
Site Specific Name: BROWARD MARINE INC  
Mailing Address: 66TH ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

Actual:  
629 ft.

25  
SE  
1/2-1  
0.761 mi.  
4016 ft.

**EXIT 41 LF**  
**134TH AVE**  
**SAUGATUCK, MI 49453**

MI INVENTORY S103085910  
MI PART 201 N/A

Relative:  
Lower

INVENTORY:  
Bea Number: Not reported  
Township: Saugatuck Township  
District: Kalamazoo  
Data Source: Part 201  
Latitude: 42.66538  
Longitude: -86.1725

Actual:  
625 ft.

PART 201:  
Facility ID: 3000007  
**Facility Status: Evaluation conducted**  
Source: Refuse Systems  
SAM Score: 14  
SAM Score Date: 08/31/2004  
Township: 03N  
Range: 16W  
Section: 11  
Quarter: NW  
Quarter/Quarter: Not reported  
Pollutants: Diethyl ether

F26  
NE  
1/2-1  
0.788 mi.  
4158 ft.

**DUNES VIEW KWIK SHOP**  
**6397 WASHINGTON RD**  
**SAUGATUCK, MI 49453**

MI UST U001148074  
N/A

Site 1 of 4 in cluster F

Relative:  
Higher

UST:  
Facility ID: 00036663  
Facility Type: ACTIVE  
Owner Name: DUNES VIEW KWIK SHOP INC  
Owner Address: 6397 WASHINGTON RD

Actual:  
647 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DUNES VIEW KWIK SHOP (Continued)**

**U001148074**

Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-1010  
Contact: Chris Zawila  
Contact Phone: (269) 857-1010  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.67342  
Longitude: -86.18822

Tank ID: 1  
**Tank Status: Currently In Use**  
Capacity: 12000  
Product: Gasoline  
Install Date: 10/06/1991  
Remove Date: Not reported  
Tank Release Detection: Inter Monitoring Double Walled Tank,Inter Monitoring/Second Containment,Inventory Control,Manual Tank Gauging  
Pipe Release Detection: Automatic Line Leak Detectors  
Piping Material: Double Walled,Fiberglass reinforced plastic,Secondary Containment  
Piping Type: Gravity Fed?,Suction: Valve at Tank  
Construction Material: Composite(Steel w/Fiberglass),Double Walled,Epoxy Coated Steel,Fiberglass Reinforced plastic  
Impressed Device: No

Tank ID: 2  
**Tank Status: Currently In Use**  
Capacity: 15000  
Product: Gasoline  
Install Date: 10/06/1991  
Remove Date: Not reported  
Tank Release Detection: Inter Monitoring Double Walled Tank,Inter Monitoring/Second Containment,Inventory Control,Manual Tank Gauging  
Pipe Release Detection: Line Tightness Testing  
Piping Material: Double Walled,Fiberglass reinforced plastic,Secondary Containment  
Piping Type: Gravity Fed?,Suction: Valve at Tank  
Construction Material: Composite(Steel w/Fiberglass),Double Walled,Epoxy Coated Steel,Fiberglass Reinforced plastic  
Impressed Device: No

Tank ID: 3  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Diesel,Kerosene  
Install Date: 06/15/1993  
Remove Date: Not reported  
Tank Release Detection: Inter Monitoring Double Walled Tank,Inventory Control  
Pipe Release Detection: Automatic Line Leak Detectors,GroundWater Monitoring

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DUNES VIEW KWIK SHOP (Continued)**

**U001148074**

Piping Material: Double Walled,Fiberglass reinforced plastic  
 Piping Type: Pressure  
 Construction Material: Composite(Steel w/Fiberglass),Double Walled  
 Impressed Device: No

**F27**  
**NE**  
**1/2-1**  
**0.798 mi.**  
**4216 ft.**

**T N T ROOFING**  
**6305 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**MI WDS S111953918**  
**N/A**

**Site 2 of 4 in cluster F**

**Relative:**  
**Higher**

WDS:  
 Site Id: MIG000055088  
 WMD Id: 428937  
 Site Specific Name: T N T ROOFING  
 Mailing Address: 6305 BLUE STAR HWY  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:**  
**648 ft.**

**F28**  
**NE**  
**1/2-1**  
**0.818 mi.**  
**4320 ft.**

**BLUE STAR SHELL**  
**6380 BLUE STAR HWY**  
**SAUGATUCK, MI**

**MI RGA LUST S115667104**  
**N/A**

**Site 3 of 4 in cluster F**

**Relative:**  
**Higher**

RGA LUST:

2012	BLUE STAR SHELL	6380 BLUE STAR HWY
2011	BLUE STAR SHELL	6380 BLUE STAR HWY
2010	BLUE STAR SHELL	6380 BLUE STAR HWY
2009	BLUE STAR SHELL	6380 BLUE STAR HWY
2008	BLUE STAR SHELL	6380 BLUE STAR HWY
2007	BLUE STAR SHELL	6380 BLUE STAR HWY
2006	BLUE STAR SHELL	6380 BLUE STAR HWY
2005	BLUE STAR SHELL	6380 BLUE STAR HWY
2004	BLUE STAR SHELL	6380 BLUE STAR HWY
2003	BLUE STAR SHELL	6380 BLUE STAR HWY
2001	BLUE STAR SHELL	6380 BLUE STAR HWY
2000	BLUE STAR SHELL	6380 BLUE STAR HWY
1999	BLUE STAR SHELL	6380 BLUE STAR HWY
1998	BLUE STAR SHELL	6380 BLUE STAR HWY
1997	BLUE STAR SHELL	6380 BLUE STAR HWY

**Actual:**  
**650 ft.**

**F29**  
**NE**  
**1/2-1**  
**0.818 mi.**  
**4320 ft.**

**BLUE STAR SHELL**  
**6380 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**MI LUST U000249282**  
**MI UST N/A**  
**MI AUL**  
**MI INVENTORY**

**Site 4 of 4 in cluster F**

**Relative:**  
**Higher**

LUST:  
 Facility ID: 00018771  
 Source: STATE OF MICHIGAN  
 Owner Name: Fleming Brothers Oil Co  
 Owner Address: 6912-109th Avenue  
 Owner City,St,Zip: South Haven, MI 49090  
 Owner Contact: Not reported  
 Owner Phone: (269) 637-5255

**Actual:**  
**650 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR SHELL (Continued)**

**U000249282**

Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Blue Star Shell  
Latitude: 42.68045  
Longitude: -86.17383  
Date of Collection: 10/05/2004  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

Leak Number: C-1206-94  
Release Date: 10/11/1994  
Substance Released: Gasoline  
Release Status: Closed  
Release Closed Date: 10/22/2008

Leak Number: C-1273-94  
Release Date: 10/26/1994  
Substance Released: Kerosene,Heating Oil  
Release Status: Closed  
Release Closed Date: 10/22/2008

**UST:**

Facility ID: 00018771  
Facility Type: ACTIVE  
Owner Name: FLEMING BROTHERS OIL CO  
Owner Address: 6912-109TH AVENUE  
Owner City,St,Zip: SOUTH HAVEN, MI 49090  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 637-5255  
Contact: Andrew Fleming  
Contact Phone: (269) 637-5255  
Date of Collection: 10/05/2004  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.68045  
Longitude: -86.17383

Tank ID: 1  
**Tank Status: Currently In Use**  
Capacity: 8000  
Product: Gasoline  
Install Date: 04/19/1980  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Lined

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR SHELL (Continued)**

**U000249282**

Impressed Device: Interior  
Yes

Tank ID: 2  
**Tank Status: Currently In Use**  
Capacity: 8000  
Product: Gasoline  
Install Date: 04/19/1980  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Lined  
Interior  
Impressed Device: Yes

Tank ID: 3  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1969  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Lined  
Interior  
Impressed Device: Yes

Tank ID: 4  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1969  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing  
Piping Material: Double Walled, Flexible Piping  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Fiberglass  
Reinforced Plastic  
Impressed Device: Yes

Tank ID: 5  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1969  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR SHELL (Continued)**

**U000249282**

Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Lined Interior  
Impressed Device: Yes

Tank ID: 6  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Diesel  
Install Date: 04/19/1969  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Realease Detection: Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel, Cathodically Protected Steel, Lined Interior  
Impressed Device: Yes

Tank ID: 7  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Kerosene  
Install Date: 04/19/1984  
Remove Date: 12/16/1994  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 8  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: #1 FUEL OIL  
Install Date: 04/19/1984  
Remove Date: 12/16/1994  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 9  
**Tank Status: Removed from Ground**  
Capacity: 560  
Product: Used Oil  
Install Date: 04/19/1969  
Remove Date: 06/01/1990  
Tank Release Detection: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR SHELL (Continued)**

**U000249282**

Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 10  
**Tank Status: Currently In Use**  
Capacity: 2000  
Product: Kerosene  
Install Date: 12/14/1994  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging  
Pipe Release Detection: Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Suction: No Valve At Tank  
Construction Material: Fiberglass Reinforced Plastic, Double Walled  
Impressed Device: Yes

**AUL:**

Status: Recorded  
Site Name: Not reported  
Property: On-site location  
Land Use Restriction Type: RC  
Program Type: Part 213  
Program Support Assigned User: Nicholas Swartz  
Program Support Assigned Date: 11/04/2009  
Legal Description Of Property: Not reported  
Based On The Deq Ref #: 11121308150  
MDEQ Reference Number: RC-RRD-213-08-150  
Property Or Description Restricted Area: Not reported  
Lead Division: RRD  
File Name Of Hyperlinked Legal Doc: U:\KERMIT\11121308150.PDF  
Mapped Polygons Area In Acres: 0.8858000000000003  
Mapped Polygons Area In Square Miles: 0.0014  
Date Data Entry Started: 11/19/2009  
Date Data Entry Finished: 11/19/2009  
Individual Or Staff Assoc With The Mapping: Nicholas Swartz  
Program Used To Map Restricted Features: ArcInfo 9.3 and IcoMap 4.2  
Date Legal Paperwork Stamped/Filed/Register Of Deeds: 09/30/2008  
Commercial I Land Use Restriction: 1  
Commercial Ii Land Use Restriction: 0  
Commercial Iii Land Use Restriction: 0  
Commercial Iv Land Use Restriction: 0  
Industrial Land Use Restriction: 0  
Residential Land Use Restriction: 1  
Recreational Land Use Restriction: 0  
Multiple Land-Use Restrictions: 0  
Site Specific Restrictions: 1  
Groundwater Consumption Restrictions: 1  
Groundwater Contact Restrictions: 0  
Special Well Construction Requirements: 0  
Special Building Restrictions: 0  
Excavation And Soil Movement Restrictions: 0  
Soil Movement Requirements: 0  
There Is A Restriction On All Construction: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR SHELL (Continued)**

**U000249282**

Monitoring Well Protected, No Tampering Or Removal: 0  
There Is An Exposure Barrier In Place: 0  
There Is A Health And Safety Plan: 0  
There Is A Permanent Marker On The Site: 0  
Map Comments: 20091104 - Restriction is NOT mapped in KERMIT - Nick EkelLUR is mapped in KERMIT as of 20091119 - Nick Swartz  
Comment: 9/15/08, QC requested on-site RC. 8/27/09, district sent copy of recorded 2008 RC.

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.68046  
Longitude: -86.17384

**G30**  
**SSW**  
**1/2-1**  
**0.832 mi.**  
**4395 ft.**

**3342 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**  
**Site 1 of 3 in cluster G**

**ERNS 2016140764**  
**N/A**

**Relative:**  
**Lower**

[Click this hyperlink](#) while viewing on your computer to access additional ERNS detail in the EDR Site Report.

**Actual:**  
**612 ft.**  
**H31**  
**SW**  
**1/2-1**  
**0.861 mi.**  
**4545 ft.**

**BROWARD MARINE INC**  
**66TH ST AND 135TH AVE N**  
**SAUGATUCK, MI 49453**  
**Site 1 of 2 in cluster H**

**RCRA NonGen / NLR 1000435158**  
**MID097815302**

**Relative:**  
**Lower**

RCRA NonGen / NLR:

Date form received by agency: 12/31/2001  
Facility name: BROWARD MARINE INC  
Facility address: 66TH ST AND 135TH AVE N  
SAUGATUCK, MI 49453  
EPA ID: MID097815302  
Mailing address: 66TH ST  
SAUGATUCK, MI 49453  
Contact: DON NASH  
Contact address: 66TH ST AND 135TH AVE N  
SAUGATUCK, MI 49453  
Contact country: US  
Contact telephone: (616) 857-2166  
Contact email: Not reported  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:**  
**617 ft.**

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROWARD MARINE INC (Continued)**

**1000435158**

Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/2002  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported

Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 03/24/1987  
Site name: BROWARD MARINE INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 03/22/1993  
Date achieved compliance: 06/09/1993  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 03/22/1993  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROWARD MARINE INC (Continued)**

**1000435158**

Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 07/20/1989  
Date achieved compliance: 03/31/1990  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/28/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 03/22/1989  
Date achieved compliance: 06/05/1989  
Violation lead agency: State  
Enforcement action: INITIAL 3008(A) COMPLIANCE  
Enforcement action date: 04/04/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: LDR - General  
Date violation determined: 03/22/1989  
Date achieved compliance: 06/05/1989  
Violation lead agency: State  
Enforcement action: INITIAL 3008(A) COMPLIANCE  
Enforcement action date: 04/04/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:  
Evaluation date: 03/16/1993  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 06/09/1993  
Evaluation lead agency: State

Evaluation date: 07/20/1989  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 03/31/1990  
Evaluation lead agency: State

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BROWARD MARINE INC (Continued)**

**1000435158**

Evaluation date: 03/22/1989  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: LDR - General  
 Date achieved compliance: 06/05/1989  
 Evaluation lead agency: State

Evaluation date: 03/22/1989  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Generators - General  
 Date achieved compliance: 06/05/1989  
 Evaluation lead agency: State

**H32  
 SW  
 1/2-1  
 0.875 mi.  
 4618 ft.**

**CITY OF SAUGATUCK  
 338 WASHINGTON RD  
 SAUGATUCK, MI 49453**  
 Site 2 of 2 in cluster H

**MI WDS S111966453  
 N/A**

**Relative:  
 Lower**

WDS:  
 Site Id: MIG000020961  
 WMD Id: 452691  
 Site Specific Name: CITY OF SAUGATUCK  
 Mailing Address: 338 WASHINGTON RD  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:  
 614 ft.**

**G33  
 SSW  
 1/2-1  
 0.888 mi.  
 4691 ft.**

**DEPT OF PUBLIC WORKS  
 3338 BLUE STAR HWY  
 SAUGATUCK, MI**  
 Site 2 of 3 in cluster G

**MI RGA LUST S115672722  
 N/A**

**Relative:  
 Lower**

RGA LUST:

2012	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2011	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2010	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2009	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2008	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2007	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2006	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2005	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2004	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2003	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2001	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
2000	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY
1999	DEPT OF PUBLIC WORKS	3338 BLUE STAR HWY

**Actual:  
 613 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**G34** DEPT OF PUBLIC WORKS  
**SSW** 3338 BLUE STAR HWY  
**1/2-1** SAUGATUCK, MI 49453  
**0.888 mi.**  
**4691 ft.** Site 3 of 3 in cluster G

**MI LUST** U000249193  
**MI UST** N/A  
**MI INVENTORY**

**Relative:**  
**Lower**

**LUST:**  
Facility ID: 00020931  
Source: STATE OF MICHIGAN  
Owner Name: City of Saugatuck  
Owner Address: 102 Butler Street PO Box 86  
Owner City,St,Zip: Saugatuck, MI 49453  
Owner Contact: Not reported  
Owner Phone: (269) 857-2603  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Saugatuck Public Works  
Latitude: 42.66350  
Longitude: -86.19087  
Date of Collection: 01/11/2001  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

**Actual:**  
**613 ft.**

Leak Number: C-0058-16  
Release Date: 04/26/2016  
Substance Released: Diesel  
Release Status: Open  
Release Closed Date: Not reported

Leak Number: C-1344-98  
Release Date: 12/30/1998  
Substance Released: Unknown  
Release Status: Closed  
Release Closed Date: 02/25/1999

**UST:**  
Facility ID: 00020931  
Facility Type: CLOSED  
Owner Name: CITY OF SAUGATUCK  
Owner Address: 102 BUTLER STREET PO BOX 86  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 857-2603  
Contact: Peter Stanislawski  
Contact Phone: (269) 857-2603  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.66350  
Longitude: -86.19087

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEPT OF PUBLIC WORKS (Continued)

U000249193

Tank ID: 1  
**Tank Status:** Removed from Ground  
Capacity: 1000  
Product: Gasoline  
Install Date: Not reported  
Remove Date: 04/19/2016  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment  
Piping Material: APT NON METALLIC, Double Walled  
Piping Type: Suction: No Valve At Tank  
Construction Material: Cathodically Protected Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status:** Removed from Ground  
Capacity: 1000  
Product: Diesel  
Install Date: 01/01/1986  
Remove Date: 04/19/2016  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment  
Piping Material: APT NON METALLIC, Double Walled  
Piping Type: Suction: No Valve At Tank  
Construction Material: Cathodically Protected Steel  
Impressed Device: No

INVENTORY:

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.66351  
Longitude: -86.19088

35  
East  
1/2-1  
0.996 mi.  
5258 ft.

SHORELINE MACHINE  
3516 63RD ST  
SAUGATUCK, MI 49453

MI WDS S111955010  
N/A

Relative:  
Higher

WDS:  
Site Id: MIG000053931  
WMD Id: 436594  
Site Specific Name: SHORELINE MACHINE  
Mailing Address: 3516 63RD ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

Actual:  
669 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

I36  
SSW  
> 1  
1.018 mi.  
5374 ft.

COASTAL REAL ESTATE HOLDINGS 1 LLC  
3295 BLUE STAR HWY  
SAUGATUCK, MI 49453

RCRA NonGen / NLR

1000865670  
MI0000118646

Site 1 of 5 in cluster I

Relative:  
Lower

RCRA NonGen / NLR:

Actual:  
613 ft.

Date form received by agency: 10/28/2010  
Facility name: COASTAL REAL ESTATE HOLDINGS 1 LLC  
Facility address: 3295 BLUE STAR HWY  
SAUGATUCK, MI 49453  
EPA ID: MI0000118646  
Mailing address: PO BOX 3119  
HOLLAND, MI 49422  
Contact: RICK VANDENBERG  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: (616) 494-1405  
Contact email: RVANDENBERG@COASTAL-REALESTATE.NET  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 10/29/2010  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 10/29/2010  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**COASTAL REAL ESTATE HOLDINGS 1 LLC (Continued)**

**1000865670**

Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 12/08/2009  
Site name: COASTAL REAL ESTATE HOLDINGS 1 LLC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 01/17/1994  
Site name: COASTAL REAL ESTATE HOLDINGS 1 LLC  
Classification: Not a generator, verified

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 04/06/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

**I37**  
**SSW**  
**> 1**  
**1.018 mi.**  
**5374 ft.**

**BLUE STAR (3295) HIGHWAY**  
**3295 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49453**

**MI BEA S110482899**  
**MI WDS N/A**

**Site 2 of 5 in cluster I**

**Relative:**  
**Lower**

BEA:  
Secondary Address: Not reported  
BEA Number: 1487  
District: Kalamazoo  
Date Received: 05/28/2010  
Submitter Name: Coastal Real Estate Holdings I, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

**Actual:**  
**613 ft.**

Secondary Address: Not reported  
BEA Number: 1529  
District: Kalamazoo  
Date Received: 10/20/2010  
Submitter Name: Tim Bindon  
Petition Determination: No Request  
Petition Disclosure: 0

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BLUE STAR (3295) HIGHWAY (Continued)**

**S110482899**

Category: Different Hazardous Substance(s)  
 Determination 20107A: No Request  
 Reviewer: zimontb  
 Division Assigned: RRD

WDS:

Site Id: MI0000118646  
 WMD Id: 390514  
 Site Specific Name: FORMERLY UNWIN'S SAUGATUCK AUTO CO  
 Mailing Address: PO BOX 3119  
 Mailing City/State/Zip: 49422  
 Mailing County: OTTAWA

**I38**  
**SSW**  
**> 1**  
**1.018 mi.**  
**5374 ft.**

**COASTAL REAL ESTATE HOLDINGS 1 LLC**  
**3295 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**FINDS 1015908781**  
**ECHO N/A**

**Site 3 of 5 in cluster I**

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110044972946

**Actual:**  
**613 ft.**

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1015908781  
 Registry ID: 110044972946  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110044972946](http://echo.epa.gov/detailed_facility_report?fid=110044972946)

**I39**  
**SSW**  
**> 1**  
**1.018 mi.**  
**5374 ft.**

**BLUE STAR (3295) HIGHWAY**  
**3295 BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY S114032925**  
**N/A**

**Site 4 of 5 in cluster I**

**Relative:**  
**Lower**

**INVENTORY:**

Bea Number: 201001487PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**613 ft.**

Bea Number: 201001529PL  
 Township: Saugatuck  
 District: Kalamazoo  
 Data Source: BEA



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BLUE STAR (3295) HIGHWAY (Continued)**

**S114032925**

Latitude: Not reported  
Longitude: Not reported

**I40**  
**SSW**  
**> 1**  
**1.018 mi.**  
**5374 ft.**

**3295 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**EDR Hist Auto 1015428814**  
**N/A**

**Site 5 of 5 in cluster I**

**Relative:**  
**Lower**

EDR Historical Auto Stations:

Name: UNWINS SAUGATUCK AUTO CO  
Year: 2003  
Address: 3295 BLUE STAR HWY

**Actual:**  
**613 ft.**

Name: UNWINS SAUGATUCK AUTO CO  
Year: 2004  
Address: 3295 BLUE STAR HWY

Name: UNWINS SAUGATUCK AUTO CO INC  
Year: 2007  
Address: 3295 BLUE STAR HWY

Name: UNWINS SAUGATUCK AUTO CO  
Year: 2008  
Address: 3295 BLUE STAR HWY

Name: UNWINS SAUGATUCK AUTO CO  
Year: 2009  
Address: 3295 BLUE STAR HWY

**J41**  
**ESE**  
**> 1**  
**1.109 mi.**  
**5855 ft.**

**BLAKE VALLEAU**  
**2500 63RD ST**  
**SAGATUCK, MI 49453**

**FTTS 1010001478**  
**N/A**

**Site 1 of 2 in cluster J**

**Relative:**  
**Higher**

FTTS INSP:

Inspection Number: 19890628MI017 1  
Region: 05  
Inspection Date: 06/28/89  
Inspector: SPITZLEY  
Violation occurred: No  
Investigation Type: Section 6 PCB State Conducted  
Investigation Reason: Neutral Scheme, State  
Legislation Code: TSCA  
Facility Function: User

**Actual:**  
**663 ft.**

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

<b>J42</b> <b>ESE</b> <b>&gt; 1</b> <b>1.109 mi.</b> <b>5855 ft.</b>	<b>BLAKE VALLEAU</b> <b>2500 63RD ST</b> <b>SAUGATUCK, MI 49453</b>  <b>Site 2 of 2 in cluster J</b>	<b>FINDS</b>	<b>1006280700</b> <b>N/A</b>
--	--	--------------	---------------------------------

<b>Relative:</b> <b>Higher</b>	<b>FINDS:</b>  Registry ID: 110011592473  Environmental Interest/Information System NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.		
-----------------------------------	--	--	--

<b>K43</b> <b>SW</b> <b>&gt; 1</b> <b>1.135 mi.</b> <b>5995 ft.</b>	<b>SAUGATUCK YACHT SERVICE</b> <b>868 HOLLAND ST</b> <b>SAUGATUCK, MI</b>  <b>Site 1 of 4 in cluster K</b>	<b>MI RGA LUST</b>	<b>S115692840</b> <b>N/A</b>
---	--	--------------------	---------------------------------

<b>Relative:</b> <b>Lower</b>	<b>RGA LUST:</b>  <table border="0" style="width: 100%;"> <tr><td style="width: 10%;">2012</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2011</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2010</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2009</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2008</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2007</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2006</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2005</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2004</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> <tr><td>2003</td><td>SAUGATUCK YACHT SERVICE</td><td>868 HOLLAND ST</td></tr> </table>	2012	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2011	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2010	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2009	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2008	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2007	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2006	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2005	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2004	SAUGATUCK YACHT SERVICE	868 HOLLAND ST	2003	SAUGATUCK YACHT SERVICE	868 HOLLAND ST		
2012	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2011	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2010	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2009	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2008	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2007	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2006	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2005	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2004	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															
2003	SAUGATUCK YACHT SERVICE	868 HOLLAND ST																															

<b>K44</b> <b>SW</b> <b>&gt; 1</b> <b>1.135 mi.</b> <b>5995 ft.</b>	<b>SAUGATUCK MARINA</b> <b>868 HOLLAND ST</b> <b>SAUGATUCK, MI 49406</b>  <b>Site 2 of 4 in cluster K</b>	<b>MI LUST</b> <b>MI UST</b> <b>MI NPDES</b>	<b>U003867599</b> <b>N/A</b>
---	---	--	---------------------------------

<b>Relative:</b> <b>Lower</b>	<b>LUST:</b> Facility ID: 00017962 Source: STATE OF MICHIGAN Owner Name: Tower Marine/Kalamazoo Ferry Co Owner Address: 216 St. Peters Dr Owner City,St,Zip: Douglas, MI 49406 Owner Contact: Not reported Owner Phone: (616) 857-2151 Country: USA District: Region 3 - Kalamazoo District Office Site Name: Saugatuck Yacht Services Latitude: 42.66309 Longitude: -86.20185 Date of Collection: 10/05/2004 Method of Collection: GPS Code Meas. Standard Positioning Service SA Off Accuracy: 10 Accuracy Value Unit: METERS		
----------------------------------	---	--	--

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK MARINA (Continued)**

**U003867599**

Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Not reported  
  
Leak Number: C-1596-93  
Release Date: 12/22/1993  
Substance Released: Gasoline,Other,Diesel  
Release Status: Closed  
Release Closed Date: 05/11/1994

**UST:**

Facility ID: 00017962  
Facility Type: ACTIVE  
Owner Name: TOWER MARINE/KALAMAZOO FERRY CO  
Owner Address: 216 ST. PETERS DR  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2151  
Contact: Marlene R. Dalman  
Contact Phone: (269) 857-2151  
Date of Collection: 10/05/2004  
Accuracy: 10  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Latitude: 42.66309  
Longitude: -86.20185

Tank ID: 2  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline,Diesel  
Install Date: 07/05/1994  
Remove Date: Not reported  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Automatic Line Leak Detectors,Line Tightness Testing  
Piping Material: Double Walled,Fiberglass reinforced plastic  
Piping Type: Pressure  
Construction Material: Composite(Steel w/Fiberglass),Double Walled  
Impressed Device: No

**MI NPDES:**

Permit Number: MIS110343  
Permittee PO Box: N  
Permittee Email: nancy@towermarine.com  
Issue Date: 10/19/2011  
Effective Date: 10/19/2011  
Expiration Date: 04/01/2016  
Permittee Name: Saugatuck Yacht Service  
Permittee Address: 868 Holland Street  
Permittee Addr2: Not reported  
Permittee City,St,Zip: Saugatuck, MI 49453  
Permit Type: NPDES Certificate of Coverage under General Permit (COC)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK MARINA (Continued)**

**U003867599**

Facility Name 2: Not reported  
Facility Name 3: Not reported  
Facility Name 4: Not reported  
Designed Name: Saugatuck Yacht Service  
Latitude: 42.663055  
Lat Direction: N  
Lat Type Code: LAT  
Longitude: -86.203611  
Lon Direction: W  
Lon Type Code: LON  
Hydrologic Unit Code: 4050003  
Permit Status: Extended  
COC Permit Category: SW-Industrial CY1  
DEQ District Email: Kalamazoo  
DEQ Permit Compliance Manager: Janelle Hohm  
DEQ Permit Compliance Manager Email: hohmj@michigan.gov

**K45**  
**SW**  
**> 1**  
**1.135 mi.**  
**5995 ft.**

**868 HOLLAND ST.**  
**SAUGATUCK, MI**  
**Site 3 of 4 in cluster K**

**MI SPILLS S106914725**  
**N/A**

**Relative:**  
**Lower**

**PEAS:**

**Actual:**  
**588 ft.**

Incident Date: 04/29/2005  
Office Status: Not reported  
Initials of Incoming Operator: Not reported  
Time Received by DNRE Staff: Not reported  
Time Occur: Not reported  
Date Of PEAS Call: Not reported  
Complainant / Company: Not reported  
Complainant Address: Not reported  
Company Involved: Unknown  
DEQ Division Involved: Not reported  
Incident Description: Not reported  
Description: Diesel fuel was spilled into Kalamazoo River, source unknown.  
Date Discovered: Not reported  
Time Discovered: Not reported  
Office/After Hours: Not reported  
Party Involved - Phone 1: Not reported  
Party Involved - Phone 2: Not reported  
Ongoing?: Not reported  
Release Secured: Not reported  
Source: Not reported  
Lead Division 2: Not reported

**K46**  
**SW**  
**> 1**  
**1.146 mi.**  
**6052 ft.**

**LIFT STATION #1**  
**851 HOLLAND ST**  
**SAUGATUCK, MI 49453**  
**Site 4 of 4 in cluster K**

**MI UST U000249315**  
**N/A**

**Relative:**  
**Lower**

**UST:**

**Actual:**  
**591 ft.**

Facility ID: 00034195  
Facility Type: CLOSED  
Owner Name: KALAMAZOO LAKE SEWER & WATER AUTHORITY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LIFT STATION #1 (Continued)**

**U000249315**

Owner Address: PO BOX 789  
Owner City,St,Zip: SAUGATUCK, MI 49453-0789  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2709  
Contact: Thomas Desmet  
Contact Phone: (616) 857-2709  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.66214  
Longitude: -86.20063

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 500  
Product: Diesel  
Install Date: 01/01/1979  
Remove Date: 09/09/2005  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping  
Piping Material: Fiberglass reinforced plastic  
Piping Type: Not reported  
Construction Material: Fiberglass Reinforced plastic  
Impressed Device: No

**L47**  
**SW**  
**> 1**  
**1.207 mi.**  
**6371 ft.**

**SAUGATUCK PUBLIC SCHOOLS**  
**401 ELIZABETH ST**  
**SAUGATUCK, MI 49453**

**RCRA NonGen / NLR**

**1007096040**  
**MIK136322948**

**Site 1 of 3 in cluster L**

**Relative:**  
**Lower**

RCRA NonGen / NLR:  
Date form received by agency: 05/23/2001  
Facility name: SAUGATUCK PUBLIC SCHOOLS  
Facility address: 401 ELIZABETH ST  
SAUGATUCK, MI 49453  
EPA ID: MIK136322948  
Contact: BRAD SMIT  
Contact address: 401 ELIZABETH ST  
SAUGATUCK, MI 49453  
Contact country: US  
Contact telephone: (616) 857-2133  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:**  
**611 ft.**

Owner/Operator Summary:

Owner/operator name: SAUGATUCK PUBLIC SCHOOLS  
Owner/operator address: Not reported  
Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK PUBLIC SCHOOLS (Continued)**

**1007096040**

Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: District  
Owner/Operator Type: Operator  
Owner/Op start date: 05/23/2001  
Owner/Op end date: Not reported

Owner/operator name: SAUGATUCK PUBLIC SCHOOLS  
Owner/operator address: Not reported

Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: District  
Owner/Operator Type: Owner  
Owner/Op start date: 05/23/2001  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

L48  
SW  
> 1  
1.207 mi.  
6371 ft.

**SAUGATUCK PUBLIC SCHOOLS  
401 ELIZABETH ST  
SAUGATUCK, MI 49453**

**Site 2 of 3 in cluster L**

**FINDS 1007142773  
ECHO N/A**

**Relative:  
Lower**

FINDS:

Registry ID: 110015911842

**Actual:  
611 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK PUBLIC SCHOOLS (Continued)**

**1007142773**

ECHO:

Envid: 1007142773  
Registry ID: 110015911842  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015911842](http://echo.epa.gov/detailed_facility_report?fid=110015911842)

**L49**  
**SW**  
**> 1**  
**1.207 mi.**  
**6371 ft.**

**SAUGATUCK PUBLIC SCHOOLS**  
**401 ELIZABETH ST**  
**SAUGATUCK, MI 49453**

**MI WDS S111139750**  
**N/A**

**Site 3 of 3 in cluster L**

**Relative:**  
**Lower**

WDS:

Site Id: MIK136322948  
WMD Id: 463560

**Actual:**  
**611 ft.**

Site Specific Name: SAUGATUCK PUBLIC SCHOOLS  
Mailing Address: 401 ELIZABETH ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**M50**  
**South**  
**> 1**  
**1.224 mi.**  
**6461 ft.**

**KALAMAZOO LAKE WWTP**  
**6449 OLD ALLEGAN ROAD**  
**SAUGATUCK, MI 49453**

**FINDS 1006224685**  
**ECHO N/A**

**Site 1 of 4 in cluster M**

**Relative:**  
**Lower**

FINDS:

Registry ID: 110009911462

**Actual:**  
**613 ft.**

Environmental Interest/Information System  
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

ECHO:

Envid: 1006224685  
Registry ID: 110009911462  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110009911462](http://echo.epa.gov/detailed_facility_report?fid=110009911462)





Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KALAMAZOO LK SEWER & WATER AUTH (Continued)**

**U000249284**

Release Date: 07/01/2002  
Substance Released: Gasoline  
Release Status: Open  
Release Closed Date: Not reported

Leak Number: C-1281-98  
Release Date: 12/15/1998  
Substance Released: Gasoline  
Release Status: Closed  
Release Closed Date: 02/09/1999

UST:

Facility ID: 00034193  
Facility Type: CLOSED  
Owner Name: KALAMAZOO LAKE SEWER & WATER AUTHORITY  
Owner Address: PO BOX 789  
Owner City,St,Zip: SAUGATUCK, MI 49453-0789  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2709  
Contact: THOMAS DESMET  
Contact Phone: (269) 857-2709  
Date of Collection: 01/16/2007  
Accuracy: 10  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Interpolation-Map  
Latitude: 42.65840  
Longitude: -86.17814

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 01/01/1979  
Remove Date: 11/30/1998  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: COATED STEEL  
Piping Type: Not reported  
Construction Material: Fiberglass Reinforced plastic  
Impressed Device: No

Tank ID: 2  
**Tank Status:** **Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 01/01/1979  
Remove Date: 07/01/2002  
Tank Release Detection: Inventory Control, Manual Tank Gauging  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Suction: Valve at Tank  
Construction Material: Epoxy Coated Steel

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KALAMAZOO LK SEWER & WATER AUTH (Continued)**

**U000249284**

Impressed Device: No

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.6584  
Longitude: -86.17814

**MI NPDES:**

Permit Number: MI0056324  
Permittee PO Box: N  
Permittee Email: Not reported  
Issue Date: 03/21/2011  
Effective Date: 05/01/2011  
Expiration Date: 10/01/2015  
Permittee Name: Kalamazoo Lake Sewer & Water Authority  
Permittee Address: 6449 Old Allegan Road  
Permittee Addr2: Not reported  
Permittee City,St,Zip: Saugatuck, MI 49453  
Permit Type: NPDES Individual Permit  
Facility Name 2: Not reported  
Facility Name 3: Not reported  
Facility Name 4: Not reported  
Designed Name: Kalamazoo Lake WWTP  
Latitude: 42.656111  
Lat Direction: N  
Lat Type Code: LAT  
Longitude: -86.178888  
Lon Direction: W  
Lon Type Code: LON  
Hydrologic Unit Code: 4050003  
Permit Status: Extended  
COC Permit Category: Not reported  
DEQ District Email: Kalamazoo  
DEQ Permit Compliance Manager: Ryan Blazic  
DEQ Permit Compliance Manager Email: blazicr@michigan.gov

**WDS:**

Site Id: MIG000037979  
WMD Id: 444351  
Site Specific Name: CITY OF KALAMAZOO  
Mailing Address: 6449 OLD ALLEGAN RD  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
54 ENE > 1 1.250 mi. 6601 ft.	<b>US DEPT/JUSTICE DEA 6280 136 AVE SAUGATUCK, MI 49453</b>	MI WDS	S111965106 N/A
<b>Relative: Higher</b>	WDS: Site Id: MIG000024986 WMD Id: 450729		
<b>Actual: 690 ft.</b>	Site Specific Name: US DEPT/JUSTICE DEA Mailing Address: 65 MONROE CTR NW Mailing City/State/Zip: 49503 Mailing County: KENT		
N55 SW > 1 1.343 mi. 7089 ft.	<b>US DEPT/INTERIOR WATER &amp; LUCY ST SAUGATUCK, MI 49453</b>	MI WDS	S111960556 N/A
	Site 1 of 3 in cluster N		
<b>Relative: Lower</b>	WDS: Site Id: MIG000038401 WMD Id: 444225		
<b>Actual: 585 ft.</b>	Site Specific Name: US DEPT/INTERIOR Mailing Address: WATER & LUCY STREET Mailing City/State/Zip: 49453 Mailing County: ALLEGAN		
O56 WSW > 1 1.352 mi. 7139 ft.	<b>WESTSHORE MARINE INC 841 PARK SAUGATUCK, MI 49453</b>	MI UST	U000249314 N/A
	Site 1 of 2 in cluster O		
<b>Relative: Lower</b>	UST: Facility ID: 00020005 Facility Type: CLOSED		
<b>Actual: 608 ft.</b>	Owner Name: WESTSHORE MARINE INC Owner Address: 841 PARK ST Owner City,St,Zip: SAUGATUCK, MI 49453 Owner Country: USA Owner Contact: Not reported Owner Phone: (616) 857-2181 Contact: CHRIS WENTZELL Contact Phone: (616) 847-2181 Date of Collection: 01/11/2001 Accuracy: 100 Accuracy Value Unit: FEET Horizontal Datum: NAD83 Source: STATE OF MICHIGAN Point Line Area: POINT Desc Category: Plant Entrance (Freight) Method of Collection: Address Matching-House Number Latitude: 42.65133 Longitude: -86.21233		
	Tank ID: 1 <b>Tank Status: Removed from Ground</b>		

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WESTSHORE MARINE INC (Continued)**

**U000249314**

Capacity: 1000  
Product: Gasoline  
Install Date: 05/09/1971  
Remove Date: 06/01/1987  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 05/09/1971  
Remove Date: 06/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**  
Capacity: 2200  
Product: Gasoline  
Install Date: 06/27/1988  
Remove Date: 03/27/2000  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Suction: Valve at Tank  
Construction Material: Double Walled  
Impressed Device: No

**O57**  
**WSW**  
**> 1**  
**1.352 mi.**  
**7139 ft.**

**WEST SHORE MARINE**  
**841 PARK ST**  
**SAUGATUCK, MI 49453**  
**Site 2 of 2 in cluster O**

**MI WDS S111963075**  
**N/A**

**Relative:**  
**Lower**

WDS:  
Site Id: MIG000029676  
WMD Id: 447821  
Site Specific Name: WEST SHORE MARINE  
Mailing Address: 841 PARK ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**Actual:**  
**608 ft.**

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**N58**      **GLEASON PROPERTIES**  
**SW**      **720 BUTLER ST**  
**> 1**      **SAUGATUCK, MI 49453**  
**1.353 mi.**  
**7144 ft.**      **Site 2 of 3 in cluster N**

**MI BROWNFIELDS**      **S108416866**  
**MI WDS**      **N/A**

**Relative:**      BROWNFIELDS:  
**Lower**      Facility ID:      Not reported  
      Region:      1  
**Actual:**      Status:      Not reported  
**585 ft.**      Property Use:      Not reported  
      BEA:      No  
      Ernie Id Number:      03000081

WDS:  
Site Id:      MIG000049999  
WMD Id:      438341  
Site Specific Name:      GLEASON PROPERTIES  
Mailing Address:      650 WATER ST  
Mailing City/State/Zip:      49453  
Mailing County:      ALLEGAN

**P59**      **GLEASON ROAD RES WELL**  
**SE**      **6280 GLEASON RD**  
**> 1**      **SAUGATUCK, MI 49453**  
**1.359 mi.**  
**7174 ft.**      **Site 1 of 2 in cluster P**

**MI INVENTORY**      **S110300588**  
**MI PART 201**      **N/A**

**Relative:**      INVENTORY:  
**Higher**      Bea Number:      Not reported  
      Township:      Saugatuck Township  
**Actual:**      District:      Kalamazoo  
**652 ft.**      Data Source:      Part 201  
      Latitude:      42.66141  
      Longitude:      -86.16043

PART 201:  
Facility ID:      3000081  
**Facility Status:**      **Interim Response conducted - No further activities anticipated**  
Source:      Unknown  
SAM Score:      23  
SAM Score Date:      06/11/2004  
Township:      03N  
Range:      16W  
Section:      11  
Quarter:      NE  
Quarter/Quarter:      SW  
Pollutants:      TCE



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

SAUGATUCK TOWNSHIP CONTAMINATION (Continued)

S109697852

Quarter/Quarter: Not reported  
Pollutants: TCE

Q64  
SW  
> 1  
1.402 mi.  
7401 ft.

GLEASON PROPERTIES  
650 WATER ST  
SAUGATUCK, MI 49453

MI DEL PART 201  
MI WDS

S105965741  
N/A

Site 1 of 3 in cluster Q

Relative:  
Lower

DEL\_PART201:  
Facility ID: 03000035  
Status: Delisted - no longer meets criteria specified in rules

Actual:  
585 ft.

WDS:  
Site Id: MIG000045165  
WMD Id: 441011  
Site Specific Name: GLEASON PROPERTIES  
Mailing Address: 650 WATER ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

Q65  
SW  
> 1  
1.402 mi.  
7401 ft.

THE RIVER MARKET  
650 WATER ST  
SAUGATUCK, MI 49453

MI UST

U000249287  
N/A

Site 2 of 3 in cluster Q

Relative:  
Lower

UST:  
Facility ID: 00017151  
Facility Type: ACTIVE  
Owner Name: GLEASON MARINA  
Owner Address: PO BOX 272  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-4729  
Contact: James Bieke  
Contact Phone: (269) 857-8899  
Date of Collection: 01/11/2001  
Accuracy: 10  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Latitude: 42.65988  
Longitude: -86.20544

Actual:  
585 ft.

Tank ID: 1  
Tank Status: Currently In Use  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/02/1983  
Remove Date: Not reported  
Tank Release Detection: Inventory Control,Tank Tightness Testing

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**THE RIVER MARKET (Continued)**

**U000249287**

Pipe Realease Detection: Line Tightness Testing  
 Piping Material: Cathodically Protected, Galvanized Steel  
 Piping Type: Suction: Valve at Tank  
 Construction Material: Cathodically Protected Steel, Lined Interior  
 Impressed Device: Yes

Tank ID: 2  
**Tank Status: Closed in Ground**

Capacity: 1000  
 Product: Gasoline  
 Install Date: Not reported  
 Remove Date: 12/12/1998  
 Tank Release Detection: Inventory Control, Tank Tightness Testing  
 Pipe Realease Detection: Line Tightness Testing  
 Piping Material: Cathodically Protected, Galvanized Steel  
 Piping Type: Suction: Valve at Tank  
 Construction Material: Cathodically Protected Steel, Lined Interior  
 Impressed Device: Yes

**Q66**  
**SW**  
 > 1  
 1.402 mi.  
 7401 ft.

**GLEASON PROPERTY**  
**650 WATER**  
**SAUGATUCK, MI**  
 Site 3 of 3 in cluster Q

**MI RGA PART 201** **S115658078**  
 N/A

**Relative:**  
**Lower**  
  
**Actual:**  
**585 ft.**

RGA PART 201:			
2002	GLEASON PROPERTY	650 WATER	
2001	GLEASON PROPERTY	650 WATER	
1998	GLEASON PROPERTY	650 WATER	
1997	GLEASON PROPERTY	650 WATER	
1996	GLEASON PROPERTY	650 WATER	
1995	GLEASON PROPERTY	650 WATER	
1994	GLEASON PROPERTY	650 WATER	
1993	GLEASON PROPERTY	650 WATER	
1991	GLEASON PROPERTY	650 WATER	

**R67**  
**SSW**  
 > 1  
 1.403 mi.  
 7408 ft.

**MACATAWA BAY BOAT WORKS LLC**  
**297 S MAPLE ST**  
**SAUGATUCK, MI 49453**  
 Site 1 of 6 in cluster R

**MI WDS** **S111972140**  
 N/A

**Relative:**  
**Higher**  
  
**Actual:**  
**632 ft.**

WDS:  
 Site Id: MIK455433581  
 WMD Id: 467602  
 Site Specific Name: MACATAWA BAY BOAT WORKS LLC  
 Mailing Address: 297 S MAPLE ST  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

R68  
SSW  
> 1  
1.403 mi.  
7408 ft.

MACATAWA BAY BOAT WORKS LLC  
297 S MAPLE ST  
SAUGATUCK, MI 49453

RCRA-CESQG 1007098066  
MIK455433581

Site 2 of 6 in cluster R

Relative:  
Higher

RCRA-CESQG:

Date form received by agency: 10/30/2001

Facility name: MACATAWA BAY BOAT WORKS LLC

Facility address: 297 S MAPLE ST  
SAUGATUCK, MI 49453

EPA ID: MIK455433581

Contact: STEVEN BUSHOUSE

Contact address: 297 S MAPLE ST  
SAUGATUCK, MI 49453

Contact country: US

Contact telephone: (616) 857-4556

Contact email: Not reported

EPA Region: 05

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: STEPHEN R NORTHUIS

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 10/30/2001

Owner/Op end date: Not reported

Owner/operator name: STEPHEN R NORTHUIS

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 10/30/2001

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MACATAWA BAY BOAT WORKS LLC (Continued)**

**1007098066**

Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

**R69**  
**SSW**  
**> 1**  
**1.403 mi.**  
**7408 ft.**

**MACATAWA BAY BOAT WORKS LLC**  
**297 S MAPLE ST**  
**SAUGATUCK, MI 49453**

**FINDS 1007135202**  
**ECHO N/A**

**Site 3 of 6 in cluster R**

**Relative:**  
**Higher**

**FINDS:**

Registry ID: 110015831634

**Actual:**  
**632 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1007135202  
Registry ID: 110015831634  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015831634](http://echo.epa.gov/detailed_facility_report?fid=110015831634)

**S70**  
**SW**  
**> 1**  
**1.423 mi.**  
**7512 ft.**

**MARINA MAN**  
**471 BUTLER ST**  
**SAUGATUCK, MI 49453**

**MI WDS S111947456**  
**N/A**

**Site 1 of 3 in cluster S**

**Relative:**  
**Lower**

**WDS:**

Site Id: MIK132871120  
WMD Id: 417700  
Site Specific Name: MARINA BOAT REPAIR  
Mailing Address: PO BOX 169  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

**Actual:**  
**596 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

S71  
SW  
> 1  
1.423 mi.  
7512 ft.

**MARINA MAN**  
**471 BUTLER ST**  
**SAUGATUCK, MI 49453**

**RCRA-CESQG** **1007096019**  
**MIK132871120**

**Site 2 of 3 in cluster S**

**Relative:**  
**Lower**

RCRA-CESQG:

Date form received by agency: 09/15/2003  
Facility name: MARINA MAN  
Facility address: 471 BUTLER ST  
SAUGATUCK, MI 49453  
EPA ID: MIK132871120  
Mailing address: PO BOX 169  
DOUGLAS, MI 49406  
Contact: CLIFFORD ASBEL  
Contact address: 471 BUTLER ST  
SAUGATUCK, MI 49453

**Actual:**  
**596 ft.**

Contact country: US  
Contact telephone: (269) 857-7529  
Contact email: Not reported  
EPA Region: 05  
Classification: Conditionally Exempt Small Quantity Generator  
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: CLIFFORD ASBEL  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 04/01/1997  
Owner/Op end date: Not reported

Owner/operator name: MARINAMAN  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 04/01/1997  
Owner/Op end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MARINA MAN (Continued)**

**1007096019**

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 01/01/1980  
Site name: MARINA MAN  
Classification: Not a generator, verified

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

S72  
SW  
> 1  
1.423 mi.  
7512 ft.

**MARINA MAN  
471 BUTLER ST  
SAUGATUCK, MI 49453**

**FINDS 1007142757  
ECHO N/A**

**Site 3 of 3 in cluster S**

**Relative:  
Lower**

FINDS:

Registry ID: 110015911682

**Actual:  
596 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1007142757  
Registry ID: 110015911682  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015911682](http://echo.epa.gov/detailed_facility_report?fid=110015911682)

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

<b>73</b> <b>SE</b> > 1 1.423 mi. 7513 ft.	<b>THERESA A SCHOPPE WRIGHT</b> <b>6333 OLD ALLEGAN RD</b> <b>SAUGATUCK, MI 49453</b>	<b>MI WDS</b>	<b>S111982448</b> <b>N/A</b>
--	---	---------------	---------------------------------

<b>Relative:</b> <b>Higher</b>	WDS: Site Id: Not reported WMD Id: 486932	
<b>Actual:</b> <b>628 ft.</b>	Site Specific Name: THERESA A SCHOPPE WRIGHT Mailing Address: 3748 126TH AVENUE Mailing City/State/Zip: 49010 Mailing County: ALLEGAN	

<b>74</b> <b>SSW</b> > 1 1.446 mi. 7635 ft.	<b>997 ELIZABETH</b> <b>SAUGATUCK, MI</b>	<b>ERNS</b>	<b>2014079800</b> <b>N/A</b>
---	--	-------------	---------------------------------

**Relative:** [Click this hyperlink](#) while viewing on your computer to access additional ERNS detail in the EDR Site Report.

<b>Actual:</b> <b>630 ft.</b> <b>R75</b> <b>SSW</b> > 1 1.450 mi. 7655 ft.	<b>AHEARN, JAMES</b> <b>3219 BLUE STAR HWY.</b> <b>SAUGATUCK, MI</b> Site 4 of 6 in cluster R	<b>MI RGA LUST</b>	<b>S115663742</b> <b>N/A</b>
--	--	--------------------	---------------------------------

<b>Relative:</b> <b>Higher</b>	RGA LUST: 1991 AHEARN, JAMES 3219 BLUE STAR HWY.
-----------------------------------	--

**Actual:**  
637 ft.

<b>R76</b> <b>SSW</b> > 1 1.450 mi. 7655 ft.	<b>MILDRED BURKE PR EST J AHEARN</b> <b>3219 BLUE STAR HWY</b> <b>SAUGATUCK, MI</b> Site 5 of 6 in cluster R	<b>MI RGA LUST</b>	<b>S115686213</b> <b>N/A</b>
--	---	--------------------	---------------------------------

<b>Relative:</b> <b>Higher</b>	RGA LUST: <table border="0" style="width: 100%; margin-left: 20px;"> <tr><td>2012</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2011</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2010</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2009</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2008</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2007</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2006</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2005</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2004</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2003</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2001</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>2000</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>1999</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>1998</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> <tr><td>1997</td><td>MILDRED BURKE PR EST J AHEARN</td><td>3219 BLUE STAR HWY</td></tr> </table>	2012	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2011	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2010	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2009	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2008	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2007	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2006	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2005	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2004	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2003	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2001	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	2000	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	1999	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	1998	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY	1997	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY
2012	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2011	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2010	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2009	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2008	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2007	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2006	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2005	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2004	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2003	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2001	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
2000	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
1999	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
1998	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												
1997	MILDRED BURKE PR EST J AHEARN	3219 BLUE STAR HWY																																												

**Actual:**  
637 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

R77  
SSW  
> 1  
1.450 mi.  
7655 ft.

**MILDRED BURKE PR EST J AHEARN**  
**3219 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**  
**Site 6 of 6 in cluster R**

**MI LUST U000714789**  
**MI UST N/A**  
**MI WDS**

**Relative:**  
**Higher**

LUST:

**Actual:**  
**637 ft.**

Facility ID: 00035051  
Source: STATE OF MICHIGAN  
Owner Name: Mildred Burke Pr Est J Ahearn  
Owner Address: 121 S WAVERLY  
Owner City,St,Zip: HOLLAND, MI 49423  
Owner Contact: Not reported  
Owner Phone: (616) 392-9762  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Ahearn, James (Mildred Burke)  
Latitude: 42.65133  
Longitude: -86.19239  
Date of Collection: 01/11/2001  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
  
Leak Number: C-0651-91  
Release Date: 04/11/1991  
Substance Released: Not reported  
Release Status: Closed  
Release Closed Date: 01/29/1992

UST:

Facility ID: 00035051  
Facility Type: CLOSED  
Owner Name: MILDRED BURKE PR EST J AHEARN  
Owner Address: 121 S WAVERLY  
Owner City,St,Zip: HOLLAND, MI 49423  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 392-9762  
Contact: MILDRED BURKE IPR  
Contact Phone: (616) 392-9762  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.65133  
Longitude: -86.19239

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 01/01/1955

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MILDRED BURKE PR EST J AHEARN (Continued)**

**U000714789**

Remove Date: 04/01/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Unknown  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 01/01/1955  
Remove Date: 04/01/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Unknown  
Impressed Device: No

WDS:  
Site Id: MIG000025902  
WMD Id: 450079  
Site Specific Name: LYNDA HOLMES  
Mailing Address: 3219 BLUE STAR HWY  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**T78**  
**SW**  
**> 1**  
**1.525 mi.**  
**8053 ft.**

**CITY OF SAUGATUCK**  
**246 BUTLER ST**  
**SAUGATUCK, MI 49453**  
**Site 1 of 2 in cluster T**

**MI UST U000249161**  
**N/A**

**Relative:**  
**Lower**

UST:  
Facility ID: 00013854  
Facility Type: CLOSED  
Owner Name: CITY OF SAUGATUCK  
Owner Address: 102 BUTLER STREET PO BOX 86  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 857-2603  
Contact: BRUCE SIMONSON  
Contact Phone: (616) 857-2603  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.65605  
Longitude: -86.20430

**Actual:**  
**598 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CITY OF SAUGATUCK (Continued)**

**U000249161**

Tank ID: 1  
**Tank Status: Removed from Ground**  
 Capacity: 1100  
 Product: Gasoline  
 Install Date: 03/06/1973  
 Remove Date: 08/07/1990  
 Tank Release Detection: Not reported  
 Pipe Realease Detection: Not reported  
 Piping Material: Galvanized Steel  
 Piping Type: Not reported  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
 Capacity: 560  
 Product: Gasoline  
 Install Date: 03/06/1976  
 Remove Date: 08/07/1990  
 Tank Release Detection: Not reported  
 Pipe Realease Detection: Not reported  
 Piping Material: Galvanized Steel  
 Piping Type: Not reported  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

**T79  
 SW  
 > 1  
 1.526 mi.  
 8058 ft.**

**252 BUTLER  
 SAUGATUCK, MI  
 Site 2 of 2 in cluster T**

**MI SPILLS S112087870  
 N/A**

**Relative:  
 Lower**

**PEAS:**

Incident Date: 06/19/2012  
 Office Status: OFFICE HOURS  
 Initials of Incoming Operator: LLM  
 Time Received by DNRE Staff: 830  
 Time Occur: Not reported  
 Date Of PEAS Call: Not reported  
 Complainant / Company: Not reported  
 Complainant Address: 252 BUTLER  
 Company Involved: TUCKS OF SAUGATUCK  
 DEQ Division Involved: KALAMAZOO  
 Incident Description: THEY ARE SANDING LEAD PAINT OFF AN OLD TWO STORY BUILDING WITHOUT ANYPROTECTION. THIS IS RIGHT IN THE CENTER OF TOWN (RESORT TOWN).THERE ARE LEAD PARTICLES IN THE AIR.(TUCKS OF SAUGATUCK: 269-857-4594)

**Actual:  
 597 ft.**

Description: Not reported  
 Date Discovered: 6/18/2012  
 Time Discovered: 1200  
 Office/After Hours: Not reported  
 Party Involved - Phone 1: Not reported  
 Party Involved - Phone 2: Not reported  
 Ongoing?: Not reported  
 Release Secured: Not reported  
 Source: Not reported  
 Lead Division 2: Not reported



MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

<b>U80</b> <b>SW</b> > 1 1.528 mi. 8070 ft.	<b>RICH PRODUCTS CORPORATION</b> <b>350 CULVER</b> <b>SAUGATUCK, MI 49453</b>  <b>Site 1 of 3 in cluster U</b>	<b>FINDS</b> <b>ECHO</b>	<b>1004534525</b> <b>N/A</b>
---	--	-----------------------------	---------------------------------

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110001300146

**Actual:**  
**594 ft.**

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR SYNTHETIC MINOR

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

**ECHO:**

Envid: 1004534525  
 Registry ID: 110001300146  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110001300146](http://echo.epa.gov/detailed_facility_report?fid=110001300146)

<b>U81</b> <b>SW</b> > 1 1.528 mi. 8070 ft.	<b>RICH PRODUCTS COMPANY</b> <b>350 CULVER ST</b> <b>SAUGATUCK, MI 49452</b>  <b>Site 2 of 3 in cluster U</b>	<b>MI UST</b>	<b>U003835465</b> <b>N/A</b>
---	---	---------------	---------------------------------

**Relative:**  
**Lower**

**UST:**

Facility ID: 00008383  
 Facility Type: CLOSED  
 Owner Name: RICH PRODUCTS CO  
 Owner Address: 350 CULVER ST  
 Owner City,St,Zip: SAUGATUCK, MI 49452  
 Owner Country: USA  
 Owner Contact: Not reported  
 Owner Phone: (616) 857-1423  
 Contact: GORDON BOSCH  
 Contact Phone: (616) 857-1423  
 Date of Collection: 01/11/2001  
 Accuracy: 100

**Actual:**  
**594 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RICH PRODUCTS COMPANY (Continued)**

**U003835465**

Accuracy Value Unit: FEET  
 Horizontal Datum: NAD83  
 Source: STATE OF MICHIGAN  
 Point Line Area: POINT  
 Desc Category: Plant Entrance (Freight)  
 Method of Collection: Address Matching-House Number  
 Latitude: 42.65490  
 Longitude: -86.20200

Tank ID: 1  
**Tank Status: Closed in Ground**  
 Capacity: 935  
 Product: Hazardous Substance  
 Install Date: 03/27/1966  
 Remove Date: 02/07/1993  
 Tank Release Detection: Not reported  
 Pipe Release Detection: Not reported  
 Piping Material: Bare Steel,Unknown  
 Piping Type: Suction: No Valve At Tank  
 Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
 Impressed Device: No

**U82**  
**SW**  
 > 1  
 1.537 mi.  
 8114 ft.

**RICH PRODUCTS**  
**350 CALVER ST**  
**SAUGATUCK, MI 49453**  
 Site 3 of 3 in cluster U

**MI WDS S111967760**  
**N/A**

**Relative:**  
**Lower**

WDS:  
 Site Id: MIG000017219  
 WMD Id: 454579  
 Site Specific Name: RICH PRODUCTS  
 Mailing Address: 350 CALVER ST  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:**  
**593 ft.**

**V83**  
**SW**  
 > 1  
 1.598 mi.  
 8439 ft.

**CITY OF SAUGATUCK**  
**102 BUTLER ST**  
**SAUGATUCK, MI 49453**  
 Site 1 of 10 in cluster V

**MI WDS S111970548**  
**N/A**

**Relative:**  
**Lower**

WDS:  
 Site Id: MIG000003853  
 WMD Id: 458625  
 Site Specific Name: CITY OF SAUGATUCK  
 Mailing Address: 102 BUTLER ST  
 Mailing City/State/Zip: 49453  
 Mailing County: ALLEGAN

**Actual:**  
**592 ft.**

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

<b>V84</b> <b>SW</b> > 1 1.598 mi. 8440 ft.	<b>WATER (326 STREET</b> <b>326 WATER STREET</b> <b>SAUGATUCK, MI</b>  Site 2 of 10 in cluster V	<b>MI BEA</b>  S108236836 N/A
---	--	--

<b>Relative:</b> <b>Lower</b>  <b>Actual:</b> 591 ft.	BEA: Secondary Address: Not reported BEA Number: 1032 District: Kalamazoo Date Received: 11/20/2006 Submitter Name: Water Street Marina, LLC Petition Determination: No Request Petition Disclosure: 0 Category: No Hazardous Substance(s) Determination 20107A: No Request Reviewer: weaverc1 Division Assigned: Environmental Response Division
---	--

<b>V85</b> <b>SW</b> > 1 1.603 mi. 8462 ft.	<b>CULVER ST SITE</b> <b>201 CULVER ST</b> <b>SAUGATUCK, MI</b>  Site 3 of 10 in cluster V	<b>MI RGA LUST</b>  S115671950 N/A
---	--	---

<b>Relative:</b> <b>Lower</b>  <b>Actual:</b> 592 ft.	RGA LUST: <table border="0" style="width: 100%;"> <tr><td style="width: 10%;">2012</td><td style="width: 30%;">CULVER ST SITE</td><td style="width: 10%;">201</td><td style="width: 50%;">CULVER ST</td></tr> <tr><td>2011</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2010</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2009</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2008</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2007</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2006</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2005</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2004</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2003</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> <tr><td>2001</td><td>CULVER ST SITE</td><td>201</td><td>CULVER ST</td></tr> </table>	2012	CULVER ST SITE	201	CULVER ST	2011	CULVER ST SITE	201	CULVER ST	2010	CULVER ST SITE	201	CULVER ST	2009	CULVER ST SITE	201	CULVER ST	2008	CULVER ST SITE	201	CULVER ST	2007	CULVER ST SITE	201	CULVER ST	2006	CULVER ST SITE	201	CULVER ST	2005	CULVER ST SITE	201	CULVER ST	2004	CULVER ST SITE	201	CULVER ST	2003	CULVER ST SITE	201	CULVER ST	2001	CULVER ST SITE	201	CULVER ST
2012	CULVER ST SITE	201	CULVER ST																																										
2011	CULVER ST SITE	201	CULVER ST																																										
2010	CULVER ST SITE	201	CULVER ST																																										
2009	CULVER ST SITE	201	CULVER ST																																										
2008	CULVER ST SITE	201	CULVER ST																																										
2007	CULVER ST SITE	201	CULVER ST																																										
2006	CULVER ST SITE	201	CULVER ST																																										
2005	CULVER ST SITE	201	CULVER ST																																										
2004	CULVER ST SITE	201	CULVER ST																																										
2003	CULVER ST SITE	201	CULVER ST																																										
2001	CULVER ST SITE	201	CULVER ST																																										

<b>V86</b> <b>SW</b> > 1 1.603 mi. 8462 ft.	<b>CULVER ST SITE</b> <b>201 CULVER ST</b> <b>SAUGATUCK, MI 49453</b>  Site 4 of 10 in cluster V	<b>MI LUST</b> <b>MI INVENTORY</b> <b>MI BEA</b>  S104872658 N/A
---	--	---

<b>Relative:</b> <b>Lower</b>  <b>Actual:</b> 592 ft.	LUST: Facility ID: 50002605 Source: STATE OF MICHIGAN Owner Name: Nrt Owner Owner Address: Unknown Owner City,St,Zip: Unknown, MI 99999 Owner Contact: Not reported Owner Phone: Not reported Country: USA District: Region 3 - Kalamazoo District Office Site Name: Culver Street Latitude: 42.65439 Longitude: -86.20377 Date of Collection: 12/23/2006 Method of Collection: Interpolation-Map
---	---

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CULVER ST SITE (Continued)**

**S104872658**

Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

Leak Number: C-0335-00  
Release Date: 03/15/2000  
Substance Released: Unknown  
Release Status: Open  
Release Closed Date: Not reported

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.65439  
Longitude: -86.20377

**BEA:**

Secondary Address: Not reported  
BEA Number: 354  
District: Kalamazoo  
Date Received: 03/22/2000  
Submitter Name: Sunil Patel  
Petition Determination: Affirmed  
Petition Disclosure: 1  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: kieslinb  
Division Assigned: Storage Tank Division

V87  
SW  
> 1  
1.632 mi.  
8615 ft.

**SERGEANT MARINA CONDO ASSOC**  
**39 BUTLER ST**  
**SAUGATUCK, MI**  
**Site 5 of 10 in cluster V**

**MI RGA LUST S115693206**  
**N/A**

**Relative:**  
**Lower**

**RGA LUST:**

**Actual:**  
**590 ft.**

2012	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2011	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2010	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2009	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2008	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2007	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2006	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2005	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2004	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST
2003	SERGEANT MARINA CONDO ASSOC	39 BUTLER ST



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SERGEANT MARINA (Continued)**

**U003914258**

Owner Address: PO BOX 316  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 837-2873  
Contact: Kyle Ritsema  
Contact Phone: (269) 857-2873  
Date of Collection: 01/11/2001  
Accuracy: 10  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Latitude: 42.65438  
Longitude: -86.23929

Tank ID: 1  
**Tank Status: Currently In Use**  
Capacity: 2000  
Product: Diesel  
Install Date: 04/10/1972  
Remove Date: Not reported  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment  
Piping Material: Galvanized Steel, APT  
Piping Type: Gravity Fed?, Suction: Valve at Tank  
Construction Material: Asphalt Coated or Bare Steel, Lined Interior  
Impressed Device: No

Tank ID: 2  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/10/1972  
Remove Date: Not reported  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment  
Piping Material: Double Walled, Galvanized Steel  
Piping Type: Gravity Fed?, Suction: Valve at Tank  
Construction Material: Asphalt Coated or Bare Steel, Lined Interior  
Impressed Device: No

Tank ID: 3  
**Tank Status: Currently In Use**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/10/1972  
Remove Date: Not reported  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SERGEANT MARINA (Continued)**

**U003914258**

Piping Material: Galvanized Steel  
Piping Type: Gravity Fed?, Suction: Valve at Tank  
Construction Material: Asphalt Coated or Bare Steel, Lined Interior  
Impressed Device: No

**V91**  
**SW**  
**> 1**  
**1.636 mi.**  
**8637 ft.**

**SERGEANT MARINA**  
**31 BUTLER ST**  
**SAUGATUCK, MI 49453**  
**Site 9 of 10 in cluster V**

**MI WDS S111957523**  
**N/A**

**Relative:**  
**Lower**

WDS:  
Site Id: MIG000046913  
WMD Id: 439974  
Site Specific Name: SERGEANT MARINA  
Mailing Address: 31 BUTLER ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**Actual:**  
**590 ft.**

**V92**  
**SW**  
**> 1**  
**1.636 mi.**  
**8637 ft.**

**SERGEANT'S MARINA**  
**31 BUTLER ST.**  
**SAUGATUCK, MI**  
**Site 10 of 10 in cluster V**

**MI RGA LUST S115693209**  
**N/A**

**Relative:**  
**Lower**

RGA LUST:  
1991 SERGEANT'S MARINA 31 BUTLER ST.

**Actual:**  
**590 ft.**

**93**  
**NNW**  
**> 1**  
**1.686 mi.**  
**8901 ft.**

**TOWNSHIP OF LAKETOWN**  
**6576 138TH AVE**  
**HOLLAND, MI 49423**

**MI WDS S111957257**  
**N/A**

**Relative:**  
**Higher**

WDS:  
Site Id: MIG000047295  
WMD Id: 439615  
Site Specific Name: LAKETOWN TOWNSHIP  
Mailing Address: 6576 138TH AVE  
Mailing City/State/Zip: 49423  
Mailing County: ALLEGAN

**Actual:**  
**646 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

W94  
SW  
> 1  
1.747 mi.  
9223 ft.

**KLSWA LIFT STATION 6**  
**178 PARK ST**  
**SAUGATUCK, MI 49453**  
**Site 1 of 4 in cluster W**

**RCRA NonGen / NLR**    **1010320960**  
**MIK811411669**

**Relative:**  
**Lower**

RCRA NonGen / NLR:

Date form received by agency: 10/09/2006  
Facility name: KLSWA LIFT STATION 6  
Facility address: 178 PARK ST  
SAUGATUCK, MI 49453  
EPA ID: MIK811411669  
Mailing address: PO BOX 789  
SAUGATUCK, MI 49453  
Contact: TOM DESMET  
Contact address: 178 PARK ST  
SAUGATUCK, MI 49453  
Contact country: US  
Contact telephone: (269) 857-2709  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:**  
**592 ft.**

**Owner/Operator Summary:**

Owner/operator name: KALAMAZOO LAKE SEWER & WATER AUTHOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1979  
Owner/Op end date: Not reported

Owner/operator name: KALAMAZOO LAKE SEWER & WATER AUTHOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1979  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KLSWA LIFT STATION 6 (Continued)**

**1010320960**

Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE  
  
Violation Status: No violations found

**W95 LIFT STATION #6**  
**SW 178 PARK ST**  
**> 1 SAUGATUCK, MI 49453**  
**1.747 mi.**  
**9223 ft. Site 2 of 4 in cluster W**

**MI LUST U000249141**  
**MI UST N/A**

**Relative:**  
**Lower**

**LUST:**  
Facility ID: 00034194  
Source: STATE OF MICHIGAN  
Owner Name: Kalamazoo Lake Sewer & Water Authority  
Owner Address: Po Box 789  
Owner City,St,Zip: Saugatuck, MI 49453-0789  
Owner Contact: Not reported  
Owner Phone: (616) 857-2709  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Lift Station #6  
Latitude: 42.66336  
Longitude: -86.20437  
Date of Collection: 01/11/2001  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
  
Leak Number: C-0317-06  
Release Date: 10/27/2006  
Substance Released: Diesel  
Release Status: Closed  
Release Closed Date: 04/17/2007

**UST:**

Facility ID: 00034194  
Facility Type: CLOSED  
Owner Name: KALAMAZOO LAKE SEWER & WATER AUTHORITY  
Owner Address: PO BOX 789  
Owner City,St,Zip: SAUGATUCK, MI 49453-0789  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2709  
Contact: Thomas Desmet  
Contact Phone: (616) 857-2709  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LIFT STATION #6 (Continued)**

**U000249141**

Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.66336  
Longitude: -86.20437  
  
Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 500  
Product: Diesel  
Install Date: 01/01/1979  
Remove Date: 10/17/2006  
Tank Release Detection: Automatic Tank Gauging  
Pipe Release Detection: Interstitial Monitoring Double Walled Piping  
Piping Material: Copper  
Piping Type: Not reported  
Construction Material: Lined Interior  
Impressed Device: No

**W96**  
**SW**  
**> 1**  
**1.747 mi.**  
**9223 ft.**

**KLSWA LIFT STATION 6**  
**178 PARK ST**  
**SAUGATUCK, MI 49453**  
**Site 3 of 4 in cluster W**

**FINDS 1010438153**  
**ECHO N/A**

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110031356547

**Actual:**  
**592 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1010438153  
Registry ID: 110031356547  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110031356547](http://echo.epa.gov/detailed_facility_report?fid=110031356547)

**W97**  
**SW**  
**> 1**  
**1.747 mi.**  
**9223 ft.**

**KLSWA LIFT STATION 6**  
**178 PARK ST**  
**SAUGATUCK, MI 49453**  
**Site 4 of 4 in cluster W**

**MI WDS S111978776**  
**N/A**

**Relative:**  
**Lower**

**WDS:**

Site Id: MIK811411669  
WMD Id: 481639  
Site Specific Name: KLSWA LIFT STATION 6  
Mailing Address: PO BOX 789  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**Actual:**  
**592 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**98**  
**NE**  
 > 1  
 1.753 mi.  
 9254 ft.

**PRO VISION TRANSPORT INC**  
**6205 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49453**

**MI NPDES S117977255**  
**N/A**

**Relative:**  
**Higher**

MI NPDES:

**Actual:**  
**720 ft.**

Permit Number: GW1520027  
 Permittee PO Box: N  
 Permittee Email: judidraisma@hotmail.com  
 Issue Date: 06/11/2015  
 Effective Date: 06/11/2015  
 Expiration Date: 04/01/2020  
 Permittee Name: Pro Vision Transport, Inc.  
 Permittee Address: 6205 Blue Star Highway  
 Permittee Addr2: Not reported  
 Permittee City,St,Zip: Saugatuck, MI 49453  
 Permit Type: Rule 2215 Authorization  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Pro Vision Transport Inc  
 Latitude: 42.68812  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.15628  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: Not reported  
 Permit Status: In Effect  
 COC Permit Category: 2215-10-2 - Vehicle Wash (Not open to public)  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Ryan Blazic  
 DEQ Permit Compliance Manager Email: blazicr@michigan.gov

**X99**  
**NNW**  
 > 1  
 1.760 mi.  
 9292 ft.

**MICHIGAN DUNES CORRECTIONAL FACILITY**  
**6605 W 138 AVE ROUTE 1**  
**HOLLAND, MI 49423**

**FINDS 1016299008**  
**N/A**

**Site 1 of 4 in cluster X**

**Relative:**  
**Higher**

FINDS:

**Actual:**  
**660 ft.**

Registry ID: 110011884817  
 Environmental Interest/Information System  
 NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**X100**  
**NNW**  
 > 1  
 1.760 mi.  
 9292 ft.

**MICH DUNES CORRECTIONAL FACILITY**  
**6605 WEST 138TH AVENUE**  
**HOLLAND, MI**

**MI RGA LUST**

**S115685641**  
**N/A**

**Site 2 of 4 in cluster X**

**Relative:**  
**Higher**

RGA LUST:

2012	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2011	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2010	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2009	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2008	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2007	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2006	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2005	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2004	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2003	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2001	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
2000	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
1999	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
1998	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE
1997	MICH DUNES CORRECTIONAL FACILITY	6605 WEST 138TH AVENUE

**Actual:**  
**660 ft.**

**X101**  
**NNW**  
 > 1  
 1.760 mi.  
 9292 ft.

**MICH DUNES CORRECTIONAL FACILITY**  
**6605 WEST 138TH AVENUE**  
**HOLLAND, MI 49442**

**MI LUST**  
**MI UST**

**U003080886**  
**N/A**

**Site 3 of 4 in cluster X**

**Relative:**  
**Higher**

LUST:

Facility ID: 00001308  
 Source: STATE OF MICHIGAN  
 Owner Name: MDOC - Muskegon Correctional Facility  
 Owner Address: 2400 S Sheridan Rd  
 Owner City,St,Zip: Muskegon, MI 49442  
 Owner Contact: Maintenance Dept  
 Owner Phone: (616) 773-3201  
 Country: USA  
 District: Region 3 - Kalamazoo District Office  
 Site Name: Michigan Dunes Correctional Faci  
 Latitude: 42.69582  
 Longitude: -86.18882  
 Date of Collection: 01/11/2001  
 Method of Collection: Address Matching-House Number  
 Accuracy: 100  
 Accuracy Value Unit: FEET  
 Horizontal Data: NAD83  
 Point Line Area: POINT  
 Desc Category: Plant Entrance (Freight)

Leak Number: C-1217-85  
 Release Date: 12/22/1992  
 Substance Released: Not reported  
 Release Status: Closed  
 Release Closed Date: 02/22/1993

UST:

Facility ID: 00001308  
 Facility Type: ACTIVE  
 Owner Name: MDOC - MUSKEGON CORRECTIONAL FACILITY  
 Owner Address: 2400 S SHERIDAN RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MICH DUNES CORRECTIONAL FACILITY (Continued)**

**U003080886**

Owner City,St,Zip: MUSKEGON, MI 49442  
Owner Country: USA  
Owner Contact: Maintenance Dept  
Owner Phone: (616) 773-3201  
Contact: DARREL COOK  
Contact Phone: (616) 773-3201  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.69582  
Longitude: -86.18882

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 1000  
Product: Gasoline  
Install Date: 01/01/1979  
Remove Date: 08/02/1990  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status:** **Removed from Ground**  
Capacity: 1000  
Product: Diesel  
Install Date: 01/01/1980  
Remove Date: 10/22/1992  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Fiberglass Reinforced plastic  
Impressed Device: No

Tank ID: 3  
**Tank Status:** **Currently In Use**  
Capacity: 6000  
Product: Diesel  
Install Date: 01/01/1963  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MICH DUNES CORRECTIONAL FACILITY (Continued)**

**U003080886**

Tank ID: 4  
**Tank Status: Currently In Use**  
Capacity: 4000  
Product: Diesel  
Install Date: 01/01/1964  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**X102**  
**NNW**  
**> 1**  
**1.760 mi.**  
**9292 ft.**

**MICHIGAN DUNES CORRECTIONAL FACILITY**  
**6605 W 138 AVE ROUTE 1**  
**HOLLAND, MI 49423**

**FTTS 1004533906**  
**HIST FTTS N/A**

**Site 4 of 4 in cluster X**

**Relative:**  
**Higher**

**FTTS INSP:**

Inspection Number: 19900427MI018 1  
Region: 05  
Inspection Date: 04/27/90  
Inspector: VAN RIPER  
Violation occurred: No  
Investigation Type: Section 6 PCB State Conducted  
Investigation Reason: Neutral Scheme, State  
Legislation Code: TSCA  
Facility Function: User

**Actual:**  
**660 ft.**

**HIST FTTS INSP:**

Inspection Number: 19900427MI018 1  
Region: 05  
Inspection Date: Not reported  
Inspector: VAN RIPER  
Violation occurred: No  
Investigation Type: Section 6 PCB State Conducted  
Investigation Reason: Neutral Scheme, State  
Legislation Code: TSCA  
Facility Function: User

**103**  
**WSW**  
**> 1**  
**1.791 mi.**  
**9458 ft.**

**PRESBYTERIAN CAMPS**  
**631 PERRYMAN ST**  
**SAUGATUCK, MI 49453**

**MI WDS S111954976**  
**N/A**

**Relative:**  
**Higher**

**WDS:**

Site Id: MIG000054491  
WMD Id: 436548  
Site Specific Name: PRESBYTERIAN CAMPS  
Mailing Address: 631 PERRYMAN ST  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**Actual:**  
**636 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

104  
SSW  
> 1  
2.023 mi.  
10681 ft.

**WEATHER VAN CLEANERS**  
**102 WASHINGTON ST**  
**DOUGLAS, MI 49406**

**RCRA NonGen / NLR**  
**FINDS**  
**ECHO**

**1000408551**  
**MID982424491**

**Relative:**  
**Lower**

RCRA NonGen / NLR:

**Actual:**  
**591 ft.**

Date form received by agency: 03/07/1988  
Facility name: WEATHER VAN CLEANERS  
Facility address: 102 WASHINGTON ST  
DOUGLAS, MI 49406  
EPA ID: MID982424491  
Mailing address: 102 S WASHINGTON  
DOUGLAS, MI 49406  
Contact: DORI COMPTON  
Contact address: 102 WASHINGTON ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (616) 857-2905  
Contact email: Not reported  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/03/1970  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/03/1970  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WEATHER VAN CLEANERS (Continued)**

**1000408551**

Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No

. Waste code: D001  
 . Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/22/1989  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

FINDS:

Registry ID: 110003629119

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000408551  
 Registry ID: 110003629119  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003629119](http://echo.epa.gov/detailed_facility_report?fid=110003629119)

Y105  
 SSW  
 > 1  
 2.033 mi.  
 10733 ft.

**METROPOLITAN TITLE OFFICE**  
**25-27 BLUE STAR**  
**SAUGATUCK, MI 99999**  
 Site 1 of 2 in cluster Y

**MI LUST S103724109**  
**MI INVENTORY N/A**

**Relative:**  
**Lower**  
  
**Actual:**  
**599 ft.**

LUST:  
 Facility ID: 50002327  
 Source: Not reported  
 Owner Name: Nrt Owner  
 Owner Address: Unknown  
 Owner City,St,Zip: Unknown, MI 99999  
 Owner Contact: Not reported  
 Owner Phone: Not reported  
 Country: USA  
 District: Region 3 - Kalamazoo District Office  
 Site Name: Texaco Gas Station  
 Latitude: 42.64380  
 Longitude: -86.20633  
 Date of Collection: 01/02/2007  
 Method of Collection: Interpolation-Map  
 Accuracy: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METROPOLITAN TITLE OFFICE (Continued)**

**S103724109**

Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: Not reported  
Desc Category: Not reported

Leak Number: C-0022-99  
Release Date: 01/08/1999  
Substance Released: Unknown  
Release Status: Open  
Release Closed Date: Not reported

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.64381  
Longitude: -86.20633

**Y106**  
**SSW**  
**> 1**  
**2.033 mi.**  
**10733 ft.**

**UNION STREET & BLUE STAR HIGHWAY**  
**UNION STREET & BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49406**

**MI INVENTORY S117731969**  
**N/A**

**Site 2 of 2 in cluster Y**

**Relative:**  
**Lower**

**INVENTORY:**

Bea Number: 201502162PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Actual:**  
**599 ft.**

Bea Number: 201502163PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Z107**  
**SSW**  
**> 1**  
**2.107 mi.**  
**11126 ft.**

**FLEMING OIL CO**  
**30 WASHINGTON ST**  
**DOUGLAS, MI 49406**

**MI AUL S108958253**  
**MI WDS N/A**

**Site 1 of 9 in cluster Z**

**Relative:**  
**Lower**

**AUL:**

Status: Recorded  
Site Name: Not reported  
Property: 30 N. Washington, Douglas  
Land Use Restriction Type: RC  
Program Type: Part 213  
Program Support Assigned User: Nicholas Swartz  
Program Support Assigned Date: 05/20/2009  
Legal Description Of Property: Migrated  
Based On The Deq Ref #: 11121307004  
MDEQ Reference Number: RC-RRD-213-07-004

**Actual:**  
**595 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FLEMING OIL CO (Continued)**

**S108958253**

Property Or Description Restricted Area: Migrated  
 Lead Division: STD  
 File Name Of Hyperlinked Legal Doc: U:\Kermit\11121307004.pdf  
 Mapped Polygons Area In Acres: 0.69079999999999997  
 Mapped Polygons Area In Square Miles: 1.1000000000000001E-3  
 Date Data Entry Started: 05/20/2009  
 Date Data Entry Finished: 05/20/2009  
 Individual Or Staff Assoc With The Mapping: Nicholas Swartz  
 Program Used To Map Restricted Features: ArcInfo 9.3 and IcoMap 4.2  
 Date Legal Paperwork Stamped/Filed/Register Of Deeds: 08/07/2006  
 Commercial I Land Use Restriction: 0  
 Commercial Ii Land Use Restriction: 0  
 Commercial Iii Land Use Restriction: 0  
 Commercial Iv Land Use Restriction: 0  
 Industrial Land Use Restriction: 0  
 Residential Land Use Restriction: 0  
 Recreational Land Use Restriction: 0  
 Multiple Land-Use Restrictions: 0  
 Site Specific Restrictions: 1  
 Groundwater Consumption Restrictions: 1  
 Groundwater Contact Restrictions: 0  
 Special Well Construction Requirements: 0  
 Special Building Restrictions: 0  
 Excavation And Soil Movement Restrictions: 0  
 Soil Movement Requirements: 0  
 There Is A Restriction On All Construction: 0  
 Monitoring Well Protected, No Tampering Or Removal: 0  
 There Is An Exposure Barrier In Place: 0  
 There Is A Health And Safety Plan: 0  
 There Is A Permanent Marker On The Site: 0  
 Map Comments: Restriction is NOT mapped in Kermit as of 12262007.LUR is mapped in KERMIT as of 20090520 - Nick Swartz  
 Comment: Request received on 2/6/2007. 10/16/07 recorded copy received.

WDS:

Site Id: MIG000038594  
 WMD Id: 443993  
 Site Specific Name: FLEMING OIL CO  
 Mailing Address: 30 N WASHINGTON ST  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

Z108  
 SSW  
 > 1  
 2.107 mi.  
 11126 ft.

**DOUGLAS SHELL**  
**30 N WASHINGTON**  
**DOUGLAS, MI 49090**  
**Site 2 of 9 in cluster Z**

**MI LUST U000249177**  
**MI UST N/A**  
**MI INVENTORY**

Relative:  
 Lower

LUST:  
 Facility ID: 00004516  
 Source: STATE OF MICHIGAN  
 Owner Name: Fleming Brothers Oil Co  
 Owner Address: 6912-109th Avenue  
 Owner City,St,Zip: South Haven, MI 49090  
 Owner Contact: Not reported  
 Owner Phone: (269) 637-5255  
 Country: USA

Actual:  
 595 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

District: Region 3 - Kalamazoo District Office  
Site Name: Douglas Shell  
Latitude: 42.64411  
Longitude: -86.20699  
Date of Collection: 10/17/2009  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Accuracy: 10  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Not reported

Leak Number: C-0423-92  
Release Date: 03/19/1992  
Substance Released: Used Oil  
Release Status: Closed  
Release Closed Date: 01/30/2007

Leak Number: C-0631-95  
Release Date: 06/01/1995  
Substance Released: Gasoline  
Release Status: Closed  
Release Closed Date: 01/30/2007

Leak Number: C-1582-91  
Release Date: 07/30/1991  
Substance Released: Unknown  
Release Status: Closed  
Release Closed Date: 01/30/2007

**UST:**

Facility ID: 00004516  
Facility Type: ACTIVE  
Owner Name: FLEMING BROTHERS OIL CO  
Owner Address: 6912-109TH AVENUE  
Owner City,St,Zip: SOUTH HAVEN, MI 49090  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 637-5255  
Contact: Tom Fleming  
Contact Phone: (269) 637-5255  
Date of Collection: 10/17/2009  
Accuracy: 10  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Latitude: 42.64411  
Longitude: -86.20699

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO-FLEX TOTAL CO,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**

Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**

Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 4  
**Tank Status: Removed from Ground**

Capacity: 4000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 5  
**Tank Status: Removed from Ground**

Capacity: 270  
Product: Used Oil  
Install Date: 04/19/1974  
Remove Date: 09/01/1991  
Tank Release Detection: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Cathodically Protected Steel,Lined Interior,Polyethylene Tank Jacket  
Impressed Device: No

Tank ID: 6  
**Tank Status: Removed from Ground**  
Capacity: 270  
Product: Used Oil  
Install Date: 04/19/1974  
Remove Date: 09/01/1991  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 7  
**Tank Status: Currently In Use**  
Capacity: 20  
Product: HOIST TANK  
Install Date: 04/20/1971  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 8  
**Tank Status: Currently In Use**  
Capacity: 20  
Product: HOIST TANK  
Install Date: 04/20/1971  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 9  
**Tank Status: Currently In Use**  
Capacity: 15000  
Product: Gasoline  
Install Date: 11/10/2011  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging, Interstitial Monitoring  
Double Walled Tank

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Pipe Release Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled  
 Piping, Line Tightness Testing  
 Piping Material: Fiberglass Reinforced Plastic, Double Walled  
 Piping Type: Pressure  
 Construction Material: Fiberglass Reinforced Plastic, Double Walled  
 Impressed Device: No

Tank ID: 10  
**Tank Status: Currently In Use**  
 Capacity: 8000  
 Product: Gasoline, Diesel, Dual Compartment  
 Install Date: 11/10/2011  
 Remove Date: Not reported

Tank Release Detection: Inventory Control, Automatic Tank Gauging, Interstitial Monitoring  
 Double Walled Tank

Pipe Release Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled  
 Piping, Line Tightness Testing  
 Piping Material: Fiberglass Reinforced Plastic, Double Walled  
 Piping Type: Pressure  
 Construction Material: Fiberglass Reinforced Plastic, Double Walled  
 Impressed Device: No

**INVENTORY:**

Bea Number: Not reported  
 Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.64411  
 Longitude: -86.20699

**Z109**  
**SSW**  
 > 1  
 2.107 mi.  
 11126 ft.

**DOUGLAS SHELL**  
**30 N. WASHINGTON**  
**DOUGLAS, MI**  
 Site 3 of 9 in cluster Z

**MI RGA LUST S115673472**  
**N/A**

**Relative:**  
**Lower**

RGA LUST:  
 1998 DOUGLAS SHELL 30 N. WASHINGTON  
 1997 DOUGLAS SHELL 30 N. WASHINGTON

**Actual:**  
**595 ft.**

**Z110**  
**SSW**  
 > 1  
 2.107 mi.  
 11126 ft.

**DOUGLAS SHELL**  
**30 N WASHINGTON**  
**DOUGLAS, MI**  
 Site 4 of 9 in cluster Z

**MI RGA LUST S115673471**  
**N/A**

**Relative:**  
**Lower**

RGA LUST:  
 2012 DOUGLAS SHELL 30 N WASHINGTON  
 2011 DOUGLAS SHELL 30 N WASHINGTON  
 2010 DOUGLAS SHELL 30 N WASHINGTON  
 2009 DOUGLAS SHELL 30 N WASHINGTON  
 2008 DOUGLAS SHELL 30 N WASHINGTON  
 2007 DOUGLAS SHELL 30 N WASHINGTON  
 2006 DOUGLAS SHELL 30 N WASHINGTON  
 2005 DOUGLAS SHELL 30 N WASHINGTON  
 2004 DOUGLAS SHELL 30 N WASHINGTON

**Actual:**  
**595 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS SHELL (Continued)**

**S115673471**

2003	DOUGLAS SHELL	30 N WASHINGTON
2001	DOUGLAS SHELL	30 N WASHINGTON
2000	DOUGLAS SHELL	30 N WASHINGTON
1999	DOUGLAS SHELL	30 N WASHINGTON

**AA111**  
**SW**  
 > 1  
 2.130 mi.  
 11247 ft.

**TOWER MARINE/KALAMAZOO FERRY CO**  
**216 ST PETERS DR**  
**DOUGLAS, MI**

**MI RGA LUST**    **S115698340**  
 N/A

Site 1 of 7 in cluster AA

**Relative:**  
**Lower**

RGA LUST:

2001	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
2000	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1999	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1998	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1997	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR

**Actual:**  
**583 ft.**

**AA112**  
**SW**  
 > 1  
 2.130 mi.  
 11247 ft.

**SAUGATUCK YACHT SERVICES CO**  
**216 ST.PETERS DR**  
**DOUGLAS, MI 49453**

**MI UST**    **U003866318**  
 N/A

Site 2 of 7 in cluster AA

**Relative:**  
**Lower**

UST:

Facility ID: 00001948  
 Facility Type: CLOSED  
 Owner Name: R.J. PETERSON  
 Owner Address: 116 RIVERSIDE DR  
 Owner City,St,Zip: SAUGATUCK, MI 49453  
 Owner Country: USA  
 Owner Contact: Not reported  
 Owner Phone: (616) 857-2151  
 Contact: R.J . Peterson  
 Contact Phone: 616-857-2151  
 Date of Collection: 09/18/2006  
 Accuracy: 15  
 Accuracy Value Unit: METERS  
 Horizontal Datum: NAD83  
 Source: STATE OF MICHIGAN  
 Point Line Area: POINT  
 Desc Category: Not reported  
 Method of Collection: Interpolation-Map  
 Latitude: 42.64643  
 Longitude: -86.20880

Tank ID: 1  
**Tank Status: Removed from Ground**  
 Capacity: Not reported  
 Product: Gasoline  
 Install Date: 01/01/1970  
 Remove Date: 12/21/1993  
 Tank Release Detection: Not reported  
 Pipe Realease Detection: Not reported  
 Piping Material: Bare Steel  
 Piping Type: Not reported  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK YACHT SERVICES CO (Continued)**

**U003866318**

Tank ID: 3N  
**Tank Status: Removed from Ground**  
Capacity: 2000  
Product: Gasoline  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 4S  
**Tank Status: Removed from Ground**  
Capacity: 2000  
Product: Gasoline  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 5D  
**Tank Status: Removed from Ground**  
Capacity: 2000  
Product: Diesel  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2SER  
**Tank Status: Removed from Ground**  
Capacity: 500  
Product: Gasoline  
Install Date: 01/01/1980  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No



MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance		Database(s)	
Elevation	Site		

<b>AA113</b> <b>SW</b> <b>&gt; 1</b> <b>2.130 mi.</b> <b>11247 ft.</b>	<b>TOWER MARINE-DOUGLAS</b> <b>216 ST. PETERS DRIVE</b> <b>DOUGLAS, MI 49406</b>  <b>Site 3 of 7 in cluster AA</b>	<b>FINDS</b> <b>ECHO</b>	<b>1017768280</b> <b>N/A</b>
--	--	-----------------------------	---------------------------------

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110063867070

**Actual:**  
**583 ft.**

Environmental Interest/Information System

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

**ECHO:**

Envid: 1017768280  
 Registry ID: 110063867070  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110063867070](http://echo.epa.gov/detailed_facility_report?fid=110063867070)

<b>AA114</b> <b>SW</b> <b>&gt; 1</b> <b>2.130 mi.</b> <b>11247 ft.</b>	<b>TOWER MARINE-DOUGLAS</b> <b>216 ST PETERS DRIVE</b> <b>DOUGLAS, MI 49406</b>  <b>Site 4 of 7 in cluster AA</b>	<b>MI NPDES</b>	<b>S118492183</b> <b>N/A</b>
--	---	-----------------	---------------------------------

**Relative:**  
**Lower**

**MI NPDES:**

Permit Number: MIG690005  
 Permittee PO Box: N  
 Permittee Email: [terrie@towermarine.com](mailto:terrie@towermarine.com)  
 Issue Date: 04/15/2014  
 Effective Date: 04/15/2014  
 Expiration Date: 04/01/2017  
 Permittee Name: Roland J. Peterson, President  
 Permittee Address: 216 St. Peters Drive  
 Permittee Addr2: PO Box 188  
 Permittee City,St,Zip: Douglas, MI 49406  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Tower Marine-Douglas  
 Latitude: 42.648055  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.208333  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: 4050003  
 Permit Status: In Effect  
 COC Permit Category: Dredging Dewatering Water  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOWER MARINE-DOUGLAS (Continued)**

**S118492183**

DEQ Permit Compliance Manager Email: Not reported

**AA115**  
**SW**  
 > 1  
 2.130 mi.  
 11247 ft.

**TOWER MARINE**  
**216 SAINT PETERS DR**  
**DOUGLAS, MI 49406**  
 Site 5 of 7 in cluster AA

**MI WDS** **S111934695**  
**N/A**

**Relative:**  
**Lower**

WDS:  
 Site Id: MID050951474  
 WMD Id: 395969  
 Site Specific Name: TOWER MARINE  
 Mailing Address: PO BOX 188  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**Actual:**  
**583 ft.**

**AA116**  
**SW**  
 > 1  
 2.130 mi.  
 11247 ft.

**TOWER MARINE-DOUGLAS**  
**216 ST PETERS DRIVE**  
**DOUGLAS, MI 49406**  
 Site 6 of 7 in cluster AA

**MI NPDES** **S118492597**  
**N/A**

**Relative:**  
**Lower**

MI NPDES:  
 Permit Number: MIS110344  
 Permittee PO Box: N  
 Permittee Email: nancy@towermarine.com  
 Issue Date: 11/16/2011  
 Effective Date: 11/16/2011  
 Expiration Date: 04/01/2016  
 Permittee Name: Tower Marine  
 Permittee Address: 216 St. Peters Drive  
 Permittee Addr2: Not reported  
 Permittee City,St,Zip: Douglas, MI 49406  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Tower Marine  
 Latitude: 42.648055  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.208333  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: 4050003  
 Permit Status: Extended  
 COC Permit Category: SW-Industrial CY1  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Janelle Hohm  
 DEQ Permit Compliance Manager Email: hohmj@michigan.gov

**Actual:**  
**583 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

AA117  
SW  
> 1  
2.130 mi.  
11247 ft.

**TOWER MARINE**  
**216 SAINT PETERS DR**  
**DOUGLAS, MI 49406**  
**Site 7 of 7 in cluster AA**

**RCRA-SQG 1000210860**  
**FINDS MID050951474**  
**ECHO**

**Relative:**  
**Lower**

RCRA-SQG:

**Actual:**  
**583 ft.**

Date form received by agency: 04/27/2016  
Facility name: TOWER MARINE  
Facility address: 216 SAINT PETERS DR  
DOUGLAS, MI 49406  
EPA ID: MID050951474  
Mailing address: PO BOX 188  
DOUGLAS, MI 49406  
Contact: ROLAND J PETERSON  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: (269) 857-2151  
Contact email: Not reported  
EPA Region: 05  
Land type: Private  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: KALAMZOO FERRY CO INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 02/01/1965  
Owner/Op end date: Not reported

Owner/operator name: KALAMZOO FERRY CO INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 02/01/1965  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/09/2015  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/08/2014  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/10/2012  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 05/04/2011  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/18/2010  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/05/2005  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/10/2004  
Site name: TOWER MARINE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2003  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/22/1989  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Universal Waste - Small Quantity Handlers  
Date violation determined: 04/27/2011  
Date achieved compliance: 06/20/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 02/11/1998  
Date achieved compliance: 03/30/1998  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/11/1998  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/27/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Universal Waste - Small Quantity Handlers  
Date achieved compliance: 06/20/2011  
Evaluation lead agency: State

Evaluation date: 01/27/1998

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

Evaluation: FOCUSED COMPLIANCE INSPECTION  
 Area of violation: Generators - Records/Reporting  
 Date achieved compliance: 03/30/1998  
 Evaluation lead agency: State

**FINDS:**

Registry ID: 110003596092

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1000210860  
 Registry ID: 110003596092  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003596092](http://echo.epa.gov/detailed_facility_report?fid=110003596092)

**AB118**  
**SSW**  
**> 1**  
**2.141 mi.**  
**11306 ft.**  
**Relative:**  
**Lower**  
**Actual:**  
**582 ft.**

**KALAMAZOO LAKE WTP**  
**22 BAYOU STREET**  
**DOUGLAS, MI 49406**  
**Site 1 of 3 in cluster AB**

**ECHO 1018320784**  
**N/A**

**ECHO:**  
 Envid: 1018320784  
 Registry ID: 110006742007  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110006742007](http://echo.epa.gov/detailed_facility_report?fid=110006742007)

**AB119**  
**SSW**  
**> 1**  
**2.141 mi.**  
**11306 ft.**  
**Relative:**  
**Lower**  
**Actual:**  
**582 ft.**

**KALAMAZOO LAKE WTP**  
**22 BAYOU STREET**  
**DOUGLAS, MI 49406**  
**Site 2 of 3 in cluster AB**

**MI NPDES S117977308**  
**N/A**

**MI NPDES:**  
 Permit Number: MIG640101  
 Permittee PO Box: Y  
 Permittee Email: Not reported  
 Issue Date: 05/19/2015  
 Effective Date: 05/19/2015  
 Expiration Date: 04/01/2020  
 Permittee Name: Kalamazoo Lake WTP  
 Permittee Address: 6449 Old Allegan Road  
 Permittee Addr2: PO Box 789  
 Permittee City,St,Zip: Saugatuck, MI 49453  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Kalamazoo Lake WTP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KALAMAZOO LAKE WTP (Continued)**

**S117977308**

Latitude: 42.642777  
Lat Direction: N  
Lat Type Code: LAT  
Longitude: -86.198055  
Lon Direction: W  
Lon Type Code: LON  
Hydrologic Unit Code: 4050003  
Permit Status: In Effect  
COC Permit Category: Wastewater Discharge from Potable Water Supply  
DEQ District Email: Kalamazoo  
DEQ Permit Compliance Manager: Marcus Tironi  
DEQ Permit Compliance Manager Email: tironim@michigan.gov

**AB120**  
**SSW**  
**> 1**  
**2.141 mi.**  
**11306 ft.**

**KALAMAZOO LAKE WTP**  
**22 BAYOU**  
**DOUGLAS, MI 49406**  
**Site 3 of 3 in cluster AB**

**FINDS 1005551644**  
**N/A**

**Relative:**  
**Lower**

**Actual:**  
**582 ft.**

**Z121**  
**SSW**  
**> 1**  
**2.148 mi.**  
**11340 ft.**

**RICHARD QUADE**  
**50 CENTER RD**  
**DOUGLAS, MI 49406**  
**Site 5 of 9 in cluster Z**

**MI UST U003211808**  
**N/A**

**Relative:**  
**Lower**

**Actual:**  
**602 ft.**

UST:  
Facility ID: 00039025  
Facility Type: CLOSED  
Owner Name: RICHARD QUADE  
Owner Address: PO BOX 310  
Owner City,St,Zip: DOUGLAS, MI 49406-0310  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 561-2897  
Contact: Richard Quade  
Contact Phone: (616) 561-5574  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64362  
Longitude: -86.19966

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: Not reported  
Product: Gasoline  
Install Date: 01/01/1934  
Remove Date: 05/04/1998

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RICHARD QUADE (Continued)**

**U003211808**

Tank Release Detection: Not reported  
 Pipe Release Detection: Not reported  
 Piping Material: Bare Steel  
 Piping Type: Suction: Valve at Tank  
 Construction Material: Asphalt Coated or Bare Steel  
 Impressed Device: No

**Z122 DOUGLAS AMOCO 28876**  
**SSW 10 1/2 S WASHINGTON**  
**> 1 DOUGLAS, MI**  
**2.148 mi.**  
**11342 ft. Site 6 of 9 in cluster Z**

**MI RGA LUST S115673460**  
**N/A**

**Relative:**  
**Lower**

RGA LUST:

**Actual:**  
**602 ft.**

2012	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2011	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2010	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2009	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2008	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2007	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2006	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2005	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2004	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2003	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2001	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2000	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1999	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1998	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1997	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON

**Z123 DOUGLAS AMOCO 28876**  
**SSW 10 1/2 S WASHINGTON**  
**> 1 DOUGLAS, MI 49406**  
**2.148 mi.**  
**11342 ft. Site 7 of 9 in cluster Z**

**MI INVENTORY S11797285**  
**N/A**

**Relative:**  
**Lower**

INVENTORY:

Bea Number: Not reported  
 Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.64312  
 Longitude: -86.20773

**Actual:**  
**602 ft.**

**Z124 DOUGLAS AMOCO**  
**SSW 10 1/2 SOUTH WASHINGTON STREET**  
**> 1 DOUGLAS, MI 49406**  
**2.148 mi.**  
**11342 ft. Site 8 of 9 in cluster Z**

**MI AUL S117577794**  
**N/A**

**Relative:**  
**Lower**

AUL:

Status: Recorded  
 Site Name: Not reported  
 Property: on-site  
 Land Use Restriction Type: RC  
 Program Type: Part 213

**Actual:**  
**602 ft.**



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS AMOCO (Continued)**

**S117577794**

Program Support Assigned User: Nicholas Ekel  
 Program Support Assigned Date: 03/20/2015  
 Legal Description Of Property: Not reported  
 Based On The Deq Ref #: 11121315041  
 MDEQ Reference Number: RC-RRD-213-15-041  
 Property Or Description Restricted Area: Not reported  
 Lead Division: RRD  
 File Name Of Hyperlinked Legal Doc: U:\KERMIT\11121315041.PDF  
 Mapped Polygons Area In Acres: 0.43669999999999998  
 Mapped Polygons Area In Square Miles: 5.9999999999999995E-4  
 Date Data Entry Started: 05/06/2015  
 Date Data Entry Finished: 05/06/2015  
 Individual Or Staff Assoc With The Mapping: Nicholas Ekel  
 Program Used To Map Restricted Features: ArcGIS 10.2  
 Date Legal Paperwork Stamped/Filed/Register Of Deeds: 02/26/2015  
 Commercial I Land Use Restriction: 0  
 Commercial Ii Land Use Restriction: 0  
 Commercial Iii Land Use Restriction: 0  
 Commercial Iv Land Use Restriction: 0  
 Industrial Land Use Restriction: 0  
 Residential Land Use Restriction: 1  
 Recreational Land Use Restriction: 1  
 Multiple Land-Use Restrictions: 0  
 Site Specific Restrictions: 1  
 Groundwater Consumption Restrictions: 1  
 Groundwater Contact Restrictions: 0  
 Special Well Construction Requirements: 0  
 Special Building Restrictions: 1  
 Excavation And Soil Movement Restrictions: 1  
 Soil Movement Requirements: 0  
 There Is A Restriction On All Construction: 0  
 Monitoring Well Protected, No Tampering Or Removal: 0  
 There Is An Exposure Barrier In Place: 1  
 There Is A Health And Safety Plan: 0  
 There Is A Permanent Marker On The Site: 0  
 Map Comments: 20150320 - LRUR is NOT mapped in KERMIT - Nick Ekel20150506 - LRUR is mapped in KERMIT - Nick Ekel  
 Comment: February 24, 2015 consultant requested DEQ reference #.

**Z125 DOUGLAS AMOCO 28876**  
**SSW 10 1/2 S WASHINGTON**  
**> 1 DOUGLAS, MI 48152**  
**2.148 mi.**  
**11342 ft. Site 9 of 9 in cluster Z**

**MI LUST S102726336**  
**MI INVENTORY N/A**

**Relative:** LUST:  
**Lower** Facility ID: 50001810  
 Source: STATE OF MICHIGAN  
**Actual:** Owner Name: Amoco Petroleum Products  
**602 ft.** Owner Address: 17187 N Laurel Park Ste 365  
 Owner City,St,Zip: Livonia, MI 48152-3954  
 Owner Contact: Jeff Weston  
 Owner Phone: (734) 953-7013  
 Country: USA  
 District: Region 3 - Kalamazoo District Office  
 Site Name: Amoco #28876 (Douglas)  
 Latitude: 42.64311  
 Longitude: -86.20772

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS AMOCO 28876 (Continued)**

**S102726336**

Date of Collection: 12/27/2006  
Method of Collection: Interpolation-Map  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)

Leak Number: C-1267-85  
Release Date: 05/05/1985  
Substance Released: Not reported  
Release Status: Closed  
Release Closed Date: 03/13/2015

**INVENTORY:**

Bea Number: 201502190PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

Bea Number: 199800150PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

Bea Number: 199800149PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

126  
SSW  
> 1  
2.182 mi.  
11520 ft.

**GAS CENTER  
50 CENTER  
DOUGLAS, MI 49419**

**MI AST A100206476  
N/A**

**Relative:  
Lower**

**AST:**

**Actual:  
609 ft.**

Facility ID: 92003303  
Facility Phone: (616) 857-9411  
Owner Name: GAS CENTER  
Owner Address: 50 CENTER  
Owner City,St,Zip: DOUGLAS, MI 49419  
Owner County: USA  
Owner Contact: Not reported  
Owner Telephone: (269) 751-5171  
District: Region 3 - Kalamazoo District Office  
Contact: Richard Quaid  
List Status: CLOSED  
Date of Collection: 09/18/2006  
Accuracy: 15 METERS  
Source: STATE OF MICHIGAN  
Point Line Area: POINT

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**GAS CENTER (Continued)**

**A100206476**

Description Category:	Not reported
Method of Collection:	Interpolation-Map
Horizontal Datum:	NAD83
Latitude:	42.6436230
Longitude:	-86.199663
Tank Id:	2
Tank Status:	Removed from Premises
Capacity (in gallons):	8000
Installation Date:	Not reported
Substance Stored:	LPG
Removed/Closed Date:	04/06/1995
Tank Id:	1
Tank Status:	Removed from Premises
Capacity (in gallons):	12000
Installation Date:	Not reported
Substance Stored:	LPG
Removed/Closed Date:	02/23/1995

127  
 SW  
 > 1  
 2.195 mi.  
 11589 ft.

**KALICO KITCHEN LTD**  
**312 FERRY STREET**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY S118693682**  
**N/A**

**Relative:**  
**Lower**  
  
**Actual:**  
**585 ft.**

INVENTORY:  
 Bea Number: 201602352PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

128  
 NE  
 > 1  
 2.203 mi.  
 11634 ft.

**AGRI-SCIENCE THECHNOLOGIES**  
**6135 BLUE STAR HIGHWAY**  
**SAUGATUCK, MI 49453**

**MI AIRS S118839614**  
**N/A**

**Relative:**  
**Higher**  
  
**Actual:**  
**747 ft.**

AIRS:  
 State Registration Number: P0718  
 Naics Code: Not reported  
 Contact Email: kevin@agri-science.com  
 Contact Name: KEVIN DEHERRERA  
 Contact Phone: 3032417720  
 Contact Address: (same as site address)  
 Contact City,St,Zip: Not reported  
 Permit Number: 107-16  
 Date Received: 06/14/2016  
 Application Reason: AQUA AMMONIA STORAGE TANK  
 Record Type: Not reported  
 State County FIPS: Not reported  
 Facility Category: Not reported  
 SIC Primary: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**AGRI-SCIENCE THECHNOLOGIES (Continued)**

**S118839614**

Tribal Code:	Not reported
Facility Status:	Not reported
Supplemental Location Text:	Not reported
Business Name:	Not reported
Principal Product:	Not reported
Principal Product Description:	Not reported
UTM Zone (Geo Coordinates Universal Transverse Mercator System):	Not reported
UTM Horizontal Coord:	Not reported
UTM Vertical Coord:	Not reported
Mailing Name:	Not reported
Mailing Contact Person:	Not reported
Mailing Street:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Mailing Zip 4 Extension:	Not reported
Compliance Person:	Not reported
Compliance Area Code:	Not reported
Compliance Phone Number:	Not reported
Emission Inventory Contact Person:	Not reported
EI Contact Area Code:	Not reported
EI Contact Phone Number:	Not reported
Permit Contact Person:	Not reported
Permit Contact Person Area Code:	Not reported
Permit Contact Person Phone Number:	Not reported
Federal Employer Id Number:	Not reported
# Of Employees:	Not reported
Reporting Year:	Not reported
Date Record Was Created:	Not reported

129  
 SW  
 > 1  
 2.235 mi.  
 11800 ft.

**219 ST PETERS DR  
 DOUGLAS, MI 29406**

**ERNS 2016156605  
 N/A**

**Relative:  
 Lower**

[Click this hyperlink](#) while viewing on your computer to access additional ERNS detail in the EDR Site Report.

**Actual:  
 621 ft.  
 AC130  
 SSW  
 > 1  
 2.235 mi.  
 11800 ft.**

**DOUGLAS MARINE CORP  
 160 WASHINGTON ST  
 DOUGLAS, MI 49406  
 Site 1 of 2 in cluster AC**

**MI BEA S110482757  
 MI WDS N/A**

**Relative:  
 Lower**

BEA:  
 Secondary Address: Not reported  
 BEA Number: 108  
 District: Kalamazoo  
 Date Received: 11/12/1997  
 Submitter Name: Haworth Incorporated  
 Petition Determination: Not reported  
 Petition Disclosure: 0  
 Category: No Hazardous Substance(s)  
 Determination 20107A: Not reported  
 Reviewer: unas\_pl  
 Division Assigned: Not reported

**Actual:  
 611 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**S110482757**

WDS:

Site Id: MID089964613  
 WMD Id: 397755  
 Site Specific Name: DOUGLAS MARINE CORP  
 Mailing Address: PO BOX 522  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**AD131**  
**SSW**  
**> 1**  
**2.236 mi.**  
**11808 ft.**

**TOWER MARINE**  
**216 PETER'S DRIVE**  
**DOUGLAS, MI 49406**

**US BROWNFIELDS 1016370589**  
**FINDS N/A**

**Site 1 of 2 in cluster AD**

**Relative:**  
**Higher**

US BROWNFIELDS:

Recipient name: Allegan County  
 Grant type: Assessment  
 Property name: TOWER MARINE  
 Property #: Not reported  
 Parcel size: 20.16

**Actual:**  
**629 ft.**

Property Description: An 1871 site map included with documentation provided by Tower Marine indicated that the eastern portion of the Subject Property was historically residential and contained a school house. No information regarding when these structures were razed was available. Based on a review of historical aerial photographs, the Subject Property was developed as a marina between 1967 and 1974. The Subject Property contained undeveloped beachfront and wooded land from as early as 1938 through the construction of the marina. At the time of ECTs site reconnaissance, the Subject Property was developed as a marina. Four conjoined buildings i.e., the main subject buildings are located in the westernmost portion of the Subject Property that include a store, a hangar/maintenance building, and two warehouses. Ferry boats are built in the warehouse buildings. Boat construction operations include welding, tooling, sanding, and painting.

Latitude: 42.6447419  
 Longitude: -86.2063846  
 HCM label: Address Matching-House Number  
 Map scale: Not reported  
 Point of reference: Entrance Point of a Facility or Station  
 Datum: North American Datum of 1983  
 ACRES property ID: 125683  
 Start date: Not reported  
 Completed date: Not reported  
 Acres cleaned up: Not reported  
 Cleanup funding: Not reported  
 Cleanup funding source: Not reported  
 Assessment funding: 22077  
 Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement  
 Redevelopment funding: Not reported  
 Redev. funding source: Not reported  
 Redev. funding entity name: Not reported  
 Redevelopment start date: Not reported  
 Assessment funding entity: EPA  
 Cleanup funding entity: Not reported  
 Grant type: Hazardous  
 Accomplishment type: Phase II Environmental Assessment  
 Accomplishment count: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Cooperative agreement #:	00E00361
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Meidan Income:	1401
# Unemployed:	6
% Unemployed:	77.7%
# Vacant Housing:	121
% Vacant Housing:	3.9%
Recipient name:	Allegan County
Grant type:	Assessment
Property name:	TOWER MARINE
Property #:	Not reported
Parcel size:	20.16
Property Description:	Not reported
Latitude:	42.6447546
Longitude:	-86.2063803
HCM label:	Address Matching-House Number

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 142101  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported  
Cleanup funding source: Not reported  
Assessment funding: 3500  
Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement  
Redevelopment funding: Not reported  
Redev. funding source: Not reported  
Redev. funding entity name: Not reported  
Redevelopment start date: Not reported  
Assessment funding entity: EPA  
Cleanup funding entity: Not reported  
Grant type: Hazardous & Petroleum  
Accomplishment type: Phase I Environmental Assessment  
Accomplishment count: 0  
Cooperative agreement #: 00E00362  
Ownership entity: Private  
Current owner: Kalamazoo Ferry Company  
Did owner change: N  
Cleanup required: No  
Video available: No  
Photo available: Yes  
Institutional controls required: N  
IC Category proprietary controls: Not reported  
IC cat. info. devices: Not reported  
IC cat. gov. controls: Not reported  
IC cat. enforcement permit tools: Not reported  
IC in place date: Not reported  
IC in place: No  
State/tribal program date: Not reported  
State/tribal program ID: Not reported  
State/tribal NFA date: Not reported  
Air contaminated: Not reported  
Air cleaned: Not reported  
Asbestos found: Not reported  
Asbestos cleaned: Not reported  
Controlled substance found: Not reported  
Controlled substance cleaned: Not reported  
Drinking water affected: Not reported  
Drinking water cleaned: Not reported  
Groundwater affected: Y  
Groundwater cleaned: Not reported  
Lead contaminant found: Y  
Lead cleaned up: Not reported  
No media affected: Not reported  
Unknown media affected: Not reported  
Other cleaned up: Not reported  
Other metals found: Not reported  
Other metals cleaned: Not reported  
Other contaminants found: Not reported  
Other contams found description: Not reported  
PAHs found: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Median Income:	1401
# Unemployed:	6
% Unemployed:	77.7%
# Vacant Housing:	121
% Vacant Housing:	3.9%
Recipient name:	Allegan County
Grant type:	Assessment
Property name:	TOWER MARINE
Property #:	Not reported
Parcel size:	20.16
Property Description:	An 1871 site map included with documentation provided by Tower Marine indicated that the eastern portion of the Subject Property was historically residential and contained a school house. No information regarding when these structures were razed was available. Based on a review of historical aerial photographs, the Subject Property was developed as a marina between 1967 and 1974. The Subject Property contained undeveloped beachfront and wooded land from as early as 1938 through the construction of the marina. At the time of ECTs site reconnaissance, the Subject Property was developed as a marina. Four conjoined buildings i.e., the main subject buildings are located in the westernmost portion of the Subject Property that include a store, a hangar/maintenance building, and two warehouses. Ferry boats are built in the warehouse buildings. Boat construction operations include welding, tooling, sanding, and painting.
Latitude:	42.6447419
Longitude:	-86.2063846
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	125683
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	3500
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	00E00361
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completition Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Meidan Income:	1401
# Unemployed:	6
% Unemployed:	77.7%
# Vacant Housing:	121
% Vacant Housing:	3.9%
Recipient name:	Allegan County
Grant type:	Assessment
Property name:	TOWER MARINE
Property #:	Not reported
Parcel size:	20.16
Property Description:	Not reported
Latitude:	42.6447546
Longitude:	-86.2063803
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	142101

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	27000
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous & Petroleum
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	00E00362
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Y

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

% Low Income: 3.0%  
Median Income: 1401  
# Unemployed: 6  
% Unemployed: 77.7%  
# Vacant Housing: 121  
% Vacant Housing: 3.9%

**FINDS:**

Registry ID: 110046369443

Environmental Interest/Information System  
US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)  
is an federal online database for Brownfields Grantees to  
electronically submit data directly to EPA.

**AC132**  
**SSW**  
**> 1**  
**2.269 mi.**  
**11978 ft.**

**BOB MEEUWSEN**  
**221 WASHINGTON ST**  
**DOUGLAS, MI 49406**  
**Site 2 of 2 in cluster AC**

**MI WDS S111946919**  
**N/A**

**Relative:**  
**Lower**

WDS:  
Site Id: MIG000038368  
WMD Id: 416927  
Site Specific Name: BOB MEEUWSEN  
Mailing Address: 221 S WASHINGTON  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

**Actual:**  
**613 ft.**

**AD133**  
**SSW**  
**> 1**  
**2.291 mi.**  
**12098 ft.**

**METROPOLITAN TITLE COMPANY**  
**25-29 BLUE STAR HIGHWAY**  
**DOUGLAS, MI**  
**Site 2 of 2 in cluster AD**

**MI BEA S104910881**  
**N/A**

**Relative:**  
**Higher**

BEA:  
Secondary Address: Not reported  
BEA Number: 300  
District: Kalamazoo  
Date Received: 09/14/1999  
Submitter Name: Lighthouse Realty Co., Inc.  
Petition Determination: Affirmed  
Petition Disclosure: 1  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: kieslinb  
Division Assigned: Storage Tank Division

**Actual:**  
**628 ft.**

Secondary Address: Not reported  
BEA Number: 301  
District: Kalamazoo  
Date Received: 09/14/1999  
Submitter Name: Kiama Properties  
Petition Determination: Affirmed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METROPOLITAN TITLE COMPANY (Continued)**

**S104910881**

Petition Disclosure: 1  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: kieslinb  
Division Assigned: Storage Tank Division

134  
SW  
> 1  
2.301 mi.  
12147 ft.

**KALICO KITCHEN LTD**  
**312 FERRY ST**  
**DOUGLAS, MI 49406**

**MI INVENTORY S117324933**  
**N/A**

**Relative:**  
**Lower**

**INVENTORY:**  
Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.63799  
Longitude: -86.21177

**Actual:**  
**621 ft.**

135  
SSW  
> 1  
2.316 mi.  
12227 ft.

**METALLURGICAL HIGH VACUUM CORP**  
**471 WASHINGTON ST**  
**DOUGLAS, MI 49406**

**RCRA NonGen / NLR 1000149213**  
**FINDS MID027114123**  
**ECHO**

**Relative:**  
**Lower**

**RCRA NonGen / NLR:**  
Date form received by agency: 09/05/1996  
Facility name: METALLURGICAL HIGH VACUUM CORP  
Facility address: 471 WASHINGTON ST  
DOUGLAS, MI 49406  
EPA ID: MID027114123  
Mailing address: 471 S WASHINGTON  
DOUGLAS, MI 49406  
Contact: GEOFF HUMBERSTONE  
Contact address: 471 WASHINGTON ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (616) 857-1488  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:**  
**612 ft.**

**Owner/Operator Summary:**

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 09/06/1996  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METALLURGICAL HIGH VACUUM CORP (Continued)**

**1000149213**

Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 09/06/1996  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/07/1989  
Site name: METALLURGICAL HIGH VACUUM CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003591970

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000149213  
Registry ID: 110003591970  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003591970](http://echo.epa.gov/detailed_facility_report?fid=110003591970)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

AE136  
SSW  
> 1  
2.318 mi.  
12239 ft.

**JOHNSONS STANDARD 28867  
BLUE STAR HWY & CENTER ST  
DOUGLAS, MI 49406**

**SEMS-ARCHIVE 1000320550  
RCRA NonGen / NLR MID981187453**

**Site 1 of 5 in cluster AE**

**Relative:  
Higher**

SEMS-ARCHIVE:  
Site ID: 503441  
EPA ID: MID981187453  
Federal Facility: N  
NPL: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**Actual:  
630 ft.**

**Following information was gathered from the prior CERCLIS update completed in 10/2013:**

Site ID: 0503441  
Federal Facility: Not a Federal Facility  
NPL Status: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**CERCLIS-NFRAP Site Alias Name(s):**

Alias Name: JOHNSONS AMOCO SERVICE STATION  
Alias Address: Not reported  
MI

**Program Priority:**

Description: Great Lakes

**CERCLIS-NFRAP Assessment History:**

Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 02/02/90  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: / /  
Date Completed: 02/02/90  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 08/13/87  
Priority Level: Low priority for further assessment

Action: DISCOVERY  
Date Started: / /  
Date Completed: 12/31/85  
Priority Level: Not reported

**RCRA NonGen / NLR:**

Date form received by agency: 12/31/2001  
Facility name: AMOCO OIL CO  
Facility address: BLUE STAR HWY  
DOUGLAS, MI 49406  
EPA ID: MID981187453  
Mailing address: P O BOX 352917  
TOLEDO, OH 43635  
Contact: KEVIN ENDRISS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHNSONS STANDARD 28867 (Continued)**

**1000320550**

Contact address: BLUE STAR HWY  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (419) 842-1553  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: AMOCO OIL CO  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1970  
Owner/Op end date: Not reported

Owner/operator name: AMOCO OIL CO  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1970  
Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA, INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 10/16/2002  
Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA, INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 10/16/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHNSONS STANDARD 28867 (Continued)**

**1000320550**

Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/16/1991  
Site name: AMOCO OIL CO  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

**AE137**  
**SSW**  
**> 1**  
**2.318 mi.**  
**12240 ft.**  
**Relative:**  
**Higher**  
**Actual:**  
**630 ft.**

**JOHNSONS AMOCO SERVICE DOUGLAS**  
**BLUE STAR HWY & CENTER ST**  
**DOUGLAS, MI**

**MI RGA PART 201** **S115658847**  
**N/A**

**Site 2 of 5 in cluster AE**

RGA PART 201:  
1991 JOHNSONS AMOCO SERVICE DOUGLAS BLUE STAR HWY & CENTER ST

**AE138**  
**SSW**  
**> 1**  
**2.335 mi.**  
**12330 ft.**

**DEAN JOHNSON**  
**314 FREMONT ST**  
**DOUGLAS, MI 49406**

**MI UST** **U003211944**  
**N/A**

**Site 3 of 5 in cluster AE**

**Relative:**  
**Higher**  
**Actual:**  
**632 ft.**

UST:  
Facility ID: 00039423  
Facility Type: CLOSED  
Owner Name: DEAN JOHNSON  
Owner Address: 314 FREMONT ST  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-4127  
Contact: DEAN JOHNSON  
Contact Phone: (616) 857-4127  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEAN JOHNSON (Continued)

U003211944

Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64257  
Longitude: -86.20831  
  
Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Diesel  
Install Date: 01/01/1973  
Remove Date: 09/17/1997  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: No Valve At Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 01/01/1973  
Remove Date: 09/17/1997  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: No Valve At Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

AE139  
SSW  
> 1  
2.343 mi.  
12373 ft.

CENTER (294) STREET, WEST  
294 W. CENTER STREET  
ALLEGAN (County), MI 49406  
  
Site 4 of 5 in cluster AE

MI INVENTORY S114033214  
N/A

Relative:  
Higher

INVENTORY:  
Bea Number: 201301870PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

Actual:  
630 ft.

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

---

<b>AE140</b> <b>SSW</b> > 1 2.343 mi. 12373 ft.	<b>CENTER (294) STREET, WEST</b> <b>294 W. CENTER STREET</b> <b>DOUGLAS, MI 49406</b>  <b>Site 5 of 5 in cluster AE</b>	<b>MI BEA</b>   <b>S113717174</b> <b>N/A</b>
---	---	--

<b>Relative:</b> <b>Higher</b>  <b>Actual:</b> <b>630 ft.</b>	<b>BEA:</b> Secondary Address: Not reported BEA Number: 1870 District: Kalamazoo Date Received: 05/29/2013 Submitter Name: Coastal Real Estate Holdings IV, LLC Petition Determination: No Request Petition Disclosure: 0 Category: Not reported Determination 20107A: No Request Reviewer: spauldie Division Assigned: RRD
---	--

---

<b>141</b> <b>South</b> > 1 2.365 mi. 12486 ft.	<b>HOUSE</b> <b>3040 HARBOR RD</b> <b>DOUGLAS, MI 16803</b>	<b>MI UST</b>   <b>1003955791</b> <b>N/A</b>
---	---	--

<b>Relative:</b> <b>Lower</b>  <b>Actual:</b> <b>589 ft.</b>	<b>UST:</b> Facility ID: 00040945 Facility Type: ACTIVE Owner Name: DOUGLAS L. PETERSEN Owner Address: 1338 DEERFIELD DR Owner City,St,Zip: STATE COLLEGE, PA 16803-2208 Owner Country: USA Owner Contact: Not reported Owner Phone: (814) 238-8170 Contact: DOUGLAS L. PETERSEN Contact Phone: (814) 238-8170 Date of Collection: 03/07/2007 Accuracy: 40 Accuracy Value Unit: FEET Horizontal Datum: NAD83 Source: STATE OF MICHIGAN Point Line Area: POINT Desc Category: Not reported Method of Collection: Interpolation-Map Latitude: 42.63895 Longitude: -86.17626  Tank ID: 1 <b>Tank Status: Currently In Use</b> Capacity: 250 Product: RESIDENTIAL USE Install Date: 04/19/1976 Remove Date: Not reported Tank Release Detection: Not reported Pipe Release Detection: Not reported Piping Material: COPPERLINE Piping Type: Not reported Construction Material: Asphalt Coated or Bare Steel Impressed Device: No
--	--

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

142  
SSW  
> 1  
2.432 mi.  
12842 ft.

SAUGATUCK PUBLIC SCHOOLS-GARAGE  
BLUE STAR HIGHWAY  
DOUGLAS, MI 49406

MI UST U000249333  
N/A

Relative:  
Higher

UST:

Actual:  
640 ft.

Facility ID: 00016804  
Facility Type: CLOSED  
Owner Name: SAUGATUCK PUBLIC SCHOOLS  
Owner Address: 201 RANDOLPH ST  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-1444  
Contact: PATRICK BORST  
Contact Phone: (616) 857-8271  
Date of Collection: 06/26/2007  
Accuracy: 40  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64248  
Longitude: -86.20828

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 550  
Product: Diesel  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 550  
Product: Gasoline  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**  
Capacity: 550

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK PUBLIC SCHOOLS-GARAGE (Continued)**

**U000249333**

Product: Gasoline  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**AF143**  
**SW**  
**> 1**  
**2.454 mi.**  
**12958 ft.**

**WEST SHORE GOLF CLUB**  
**14 FERRY ST**  
**DOUGLAS, MI 49406**  
**Site 1 of 10 in cluster AF**

**MI UST** **U000249331**  
**N/A**

**Relative:**  
**Lower**

UST:

**Actual:**  
**627 ft.**

Facility ID: 00033298  
Facility Type: CLOSED  
Owner Name: WEST SHORE GOLF CLUB  
Owner Address: 14 FERRY ST  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2500  
Contact: Not reported  
Contact Phone: ( ) -  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.64387  
Longitude: -86.21252

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 560  
Product: Gasoline  
Install Date: 01/10/1985  
Remove Date: 11/11/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

AF144  
SW  
> 1  
2.454 mi.  
12958 ft.

**MACATAWA BANK**  
**14 FERRY ST**  
**DOUGLAS, MI 49406**  
**Site 2 of 10 in cluster AF**

**RCRA NonGen / NLR**    **1014392376**  
**MIK612445361**

**Relative:**  
**Lower**

RCRA NonGen / NLR:

**Actual:**  
**627 ft.**

Date form received by agency: 01/15/2013  
Facility name: MACATAWA BANK  
Facility address: 14 FERRY ST  
DOUGLAS, MI 49406  
EPA ID: MIK612445361  
Mailing address: 10759 MACATAWA DR  
HOLLAND, MI 49424  
Contact: RICK VANDENBERG  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: (616) 494-1405  
Contact email: RVANDENBERG@MACATAWABANK.COM  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 06/01/2011  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 06/01/2011  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MACATAWA BANK (Continued)**

**1014392376**

Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 11/30/2010  
Site name: MACATAWA BANK  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 04/06/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

**AF145  
SW  
> 1  
2.454 mi.  
12958 ft.**

**FERRY (14) STREET  
14 FERRY STREET  
DOUGLAS, MI 49406**

**MI BEA S110748308  
MI WDS N/A**

**Site 3 of 10 in cluster AF**

**Relative:  
Lower**

BEA:

Secondary Address: Not reported  
BEA Number: 1543  
District: Kalamazoo  
Date Received: 12/03/2010  
Submitter Name: Macatawa Bank  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1544  
District: Kalamazoo  
Date Received: 12/03/2010  
Submitter Name: Coastal Real Estate Holdings, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1628

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRY (14) STREET (Continued)**

**S110748308**

District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: Douglas Property Development, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1629  
District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: BDR Executive Custom Homes, Inc.  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1630  
District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: BDR Management, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

**WDS:**

Site Id: MIK612445361  
WMD Id: 488793  
Site Specific Name: FORMER WEST SHORE GOLF CLUB  
Mailing Address: 10759 MACATAWA DR  
Mailing City/State/Zip: 49424  
Mailing County: OTTAWA

**AF146**  
**SW**  
**> 1**  
**2.454 mi.**  
**12958 ft.**

**FERRY (14) STREET**  
**14 FERRY STREET**  
**ALLEGAN (County), MI 49406**  
**Site 4 of 10 in cluster AF**

**MI INVENTORY S114034323**  
**N/A**

**Relative:**  
**Lower**

**INVENTORY:**  
Bea Number: 201101628PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Actual:**  
**627 ft.**

Bea Number: 201001544PL

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FERRY (14) STREET (Continued)**

**S114034323**

Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201001543PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201101629PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201101630PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**AF147  
 SW  
 > 1  
 2.454 mi.  
 12958 ft.**

**MACATAWA BANK  
 14 FERRY ST  
 DOUGLAS, MI 49406  
 Site 5 of 10 in cluster AF**

**FINDS 1014732433  
 ECHO N/A**

**Relative:  
 Lower**

FINDS:

Registry ID: 110043185095

**Actual:  
 627 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1014732433  
 Registry ID: 110043185095  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110043185095](http://echo.epa.gov/detailed_facility_report?fid=110043185095)

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**AF148**     **MI DEQ VILLAGE OF DOUGLAS**  
**SW**        **CENTER & FERRY ST**  
**> 1**        **DOUGLAS, MI 49406**  
**2.468 mi.**  
**13033 ft.**     **Site 6 of 10 in cluster AF**

**PA MANIFEST**     **S116738112**  
                                 **N/A**

**Relative:**  
**Lower**

Manifest Details:

Year: 2013  
Manifest Number: 001237371FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 01/10/2013  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: Not reported  
TSD Date: Not reported  
TSD Facility Name: Evoqua Water Technologies LLC  
TSD Facility Address: 118 Park Rd  
TSD Facility City: Darlington  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 9  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: PAD987270725  
Date TSP Sig: Not reported

**Actual:**  
**624 ft.**

**AF149**     **MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS**  
**SW**        **CENTER & FERRY STREET**  
**> 1**        **DOUGLAS, MI 49406**  
**2.468 mi.**  
**13033 ft.**     **Site 7 of 10 in cluster AF**

**PA MANIFEST**     **S109246548**  
                                 **N/A**

**Relative:**  
**Lower**

Manifest Details:

Year: 2012  
Manifest Number: 001237358FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 03/13/2012  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: Not reported  
TSD Date: Not reported  
TSD Facility Name: Siemens Industries Inc  
TSD Facility Address: 118 Park Rd  
TSD Facility City: Darlington  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040

**Actual:**  
**624 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Container Number: 10  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: PAD987270725  
Date TSP Sig: Not reported

Year: 2011  
Manifest Number: 001237353FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 03/08/2011  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 5  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 1250  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2010  
Manifest Number: 001237351FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 09/14/2010  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 10  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2500

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2009  
Manifest Number: 001237333FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 05/19/2009  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 15  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2009  
Manifest Number: 001237344FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 10/26/2009  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 9  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3150  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Date TSP Sig: Not reported  
Year: 2008  
Manifest Number: 001237327FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 04/23/2008  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 31  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 6000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2008  
Manifest Number: 001237325FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 01/03/2008  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 16  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2008



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)**

**S109246548**

Manifest Number: 001237375FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 09/25/2008  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 20  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237322FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 10/24/2007  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 15  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237324FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Generator Date: 11/28/2007  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 14  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237308FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 02/09/2007  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 31  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 7000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237338FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 07/02/2007  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)**

**S109246548**

Contact Name: Not reported  
 Contact Phone: 269-567-3529  
 TSD EPA Id: PAD987270725  
 TSD Date: Not reported  
 TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
 TSD Facility Address: 118 PARK ROAD  
 TSD Facility City: DARLINGTON  
 TSD Facility State: PA  
 Facility Telephone: Not reported  
 Page Number: 1  
 Line Number: 1  
 Waste Number: D040  
 Container Number: 27  
 Container Type: Metal drums, barrels, kegs  
 Waste Quantity: 6000  
 Unit: Pounds  
 Handling Code: Not reported  
 TSP EPA Id: Not reported  
 Date TSP Sig: Not reported

Year: 2007  
 Manifest Number: 001237311FLE  
 Manifest Type: Not reported  
 Generator EPA Id: MIK679614198  
 Generator Date: 04/11/2007  
 Mailing Address: Not reported  
 Mailing City, St, Zip: Not reported  
 Contact Name: Not reported  
 Contact Phone: 269-567-3529  
 TSD EPA Id: PAD987270725  
 TSD Date: Not reported  
 TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
 TSD Facility Address: 118 PARK ROAD  
 TSD Facility City: DARLINGTON  
 TSD Facility State: PA  
 Facility Telephone: Not reported  
 Page Number: 1  
 Line Number: 1  
 Waste Number: D040  
 Container Number: 30  
 Container Type: Metal drums, barrels, kegs  
 Waste Quantity: 7500  
 Unit: Pounds  
 Handling Code: Not reported  
 TSP EPA Id: Not reported  
 Date TSP Sig: Not reported

**AF150**  
**SW**  
**> 1**  
**2.468 mi.**  
**13033 ft.**

**MI DEPT/ENVIRONMENTAL QUALITY**  
**CENTER & FERRY ST**  
**DOUGLAS, MI 49406**  
**Site 8 of 10 in cluster AF**

**MI WDS S111973834**  
**N/A**

**Relative:**  
**Lower**

WDS:

Site Id: MIK679614198  
 WMD Id: 473345

**Actual:**  
**624 ft.**

Site Specific Name: MI DEPT/DEQ/REMEDIATION & REDEVELOPMENT DIV  
 Mailing Address: 7953 ADOBE

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

---

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**S111973834**

Mailing City/State/Zip: 49009  
Mailing County: KALAMAZOO

<b>AF151</b>	<b>MI DEPT/ENVIRONMENTAL QUALITY</b>	<b>FINDS</b>	<b>1007132767</b>
<b>SW</b>	<b>CENTER &amp; FERRY ST</b>	<b>ECHO</b>	<b>N/A</b>
<b>&gt; 1</b>	<b>DOUGLAS, MI 49406</b>		

**2.469 mi.**  
**13036 ft.**

**Site 9 of 10 in cluster AF**

**Relative:** FINDS:  
**Lower**

Registry ID: 110015804860

**Actual:**  
**624 ft.**

Environmental Interest/Information System  
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

ECHO:

Envid: 1007132767  
Registry ID: 110015804860  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015804860](http://echo.epa.gov/detailed_facility_report?fid=110015804860)

<b>AF152</b>	<b>MI DEPT/ENVIRONMENTAL QUALITY</b>	<b>RCRA-SQG</b>	<b>1007099508</b>
<b>SW</b>	<b>CENTER &amp; FERRY ST</b>		<b>MIK679614198</b>
<b>&gt; 1</b>	<b>DOUGLAS, MI 49406</b>		

**2.469 mi.**  
**13036 ft.**

**Site 10 of 10 in cluster AF**

**Relative:**  
**Lower**

RCRA-SQG:  
Date form received by agency: 04/14/2014  
Facility name: MI DEPT/ENVIRONMENTAL QUALITY

**Actual:**  
**624 ft.**

Facility address: CENTER & FERRY ST  
DOUGLAS, MI 49406  
EPA ID: MIK679614198  
Mailing address: 7953 ADOBE  
KALAMAZOO, MI 49009  
Contact: RAY SPAULDING  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: (269) 567-3532  
Contact email: SPAULDINGR1@MICHIGAN.GOV  
EPA Region: 05  
Land type: State  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT/ENVIRONMENTAL QUALITY (Continued)

1007099508

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: MDEQ/VILLAGE OF DOUGLAS  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: State  
Owner/Operator Type: Owner  
Owner/Op start date: 07/23/2002  
Owner/Op end date: Not reported

Owner/operator name: MDEQ/VILLAGE OF DOUGLAS  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: State  
Owner/Operator Type: Operator  
Owner/Op start date: 07/23/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/25/2011  
Site name: MI DEPT/ENVIRONMENTAL QUALITY  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/20/2010  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

. Waste code: D001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2010

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Large Quantity Generator

. Waste code: D040

. Waste name: TRICHTHLORETHYLENE

Date form received by agency: 02/24/2010

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 06/01/2009

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 04/15/2009

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 12/15/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 09/22/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 05/02/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 04/24/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Date form received by agency: 04/21/2008  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/04/2008  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2008  
Site name: MI DEPT/ENVIRONMENTAL QUALITY  
Classification: Small Quantity Generator

Date form received by agency: 06/08/2007  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/22/2006  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/23/2002  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Not a generator, verified  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 11/05/2003  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 11/05/2003  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 11/05/2003  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 11/05/2003  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

AG153  
SSW  
> 1  
2.517 mi.  
13290 ft.

**WEATHERVANE PARTNERS LLC**  
**102 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**RCRA NonGen / NLR**    **1015753840**  
**MIK146550217**

**Site 1 of 5 in cluster AG**

**Relative:**  
**Higher**

RCRA NonGen / NLR:

**Actual:**  
**649 ft.**

Date form received by agency: 09/20/2012  
Facility name: WEATHERVANE PARTNERS LLC  
Facility address: 102 BLUE STAR HWY  
DOUGLAS, MI 49406  
EPA ID: MIK146550217  
Mailing address: P O BOX 821  
SAUGATUCK, MI 49453  
Contact: RON KRONEMEYER  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: (616) 836-7539  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: WEATHERVANE PARTNERS LLC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 09/20/2012  
Owner/Op end date: Not reported

Owner/operator name: WEATHERVANE PARTNERS LLC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 09/20/2012  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEATHERVANE PARTNERS LLC (Continued)**

**1015753840**

Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE  
  
Violation Status: No violations found

**AG154**  
**SSW**  
**> 1**  
**2.517 mi.**  
**13290 ft.**

**WEATHERVANE PARTNERS LLC**  
**102 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**MI WDS S112452435**  
**N/A**

**Site 2 of 5 in cluster AG**

**Relative:**  
**Higher**

WDS:  
Site Id: MIK146550217  
WMD Id: 491984  
Site Specific Name: WEATHERVANE PARTNERS LLC  
Mailing Address: P O BOX 821  
Mailing City/State/Zip: 49453  
Mailing County: ALLEGAN

**Actual:**  
**649 ft.**

**AG155**  
**SSW**  
**> 1**  
**2.517 mi.**  
**13290 ft.**

**WEATHERVANE PARTNERS LLC**  
**102 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**FINDS 1015832515**  
**ECHO N/A**

**Site 3 of 5 in cluster AG**

**Relative:**  
**Higher**

FINDS:  
Registry ID: 110055060204

**Actual:**  
**649 ft.**

Environmental Interest/Information System  
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1015832515  
Registry ID: 110055060204  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110055060204](http://echo.epa.gov/detailed_facility_report?fid=110055060204)





Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHN BARNHILL (Continued)**

**U000249147**

Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64371  
Longitude: -86.20715

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 4  
**Tank Status: Removed from Ground**  
Capacity: 2000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHN BARNHILL (Continued)**

**U000249147**

Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**AG160**  
**SSW**  
**> 1**  
**2.551 mi.**  
**13468 ft.**  
**Relative:**  
**Higher**  
**Actual:**  
**646 ft.**

**201 BLUE STAR MEM HWY**  
**DOUGLAS, MI 49406**  
**Site 5 of 5 in cluster AG**

**EDR Hist Auto 1015304464**  
**N/A**

EDR Historical Auto Stations:  
Name: BARNHILLS MOBIL  
Year: 1999  
Address: 201 BLUE STAR MEM HWY

**AH161**  
**SSW**  
**> 1**  
**2.553 mi.**  
**13481 ft.**  
**Relative:**  
**Lower**  
**Actual:**  
**620 ft.**

**INTERURBAN TRANSIT AUTHORITY**  
**100 WILEY ST**  
**DOUGLAS, MI 49406**  
**Site 4 of 5 in cluster AH**

**RCRA-CESQG 1007097518**  
**MIK366242642**

RCRA-CESQG:  
Date form received by agency: 08/27/2003  
Facility name: INTERURBAN TRANSIT AUTHORITY  
Facility address: 100 WILEY ST  
DOUGLAS, MI 49406  
EPA ID: MIK366242642  
Mailing address: PO BOX 649  
DOUGLAS, MI 49406  
Contact: NIEL CARLSON  
Contact address: 100 WILEY ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (269) 857-3848  
Contact email: Not reported  
EPA Region: 05  
Classification: Conditionally Exempt Small Quantity Generator  
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INTERURBAN TRANSIT AUTHORITY (Continued)**

**1007097518**

Owner/Operator Summary:

Owner/operator name: CHERIE GILLER, EXECUTIVE DIRECTOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Municipal  
Owner/Operator Type: Operator  
Owner/Op start date: 05/07/1980  
Owner/Op end date: Not reported

Owner/operator name: CHERIE GILLER, EXECUTIVE DIRECTOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Municipal  
Owner/Operator Type: Owner  
Owner/Op start date: 05/07/1980  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

AH162 INTERURBAN TRANSIT AUTHORITY  
SSW 100 WILEY ST  
> 1 DOUGLAS, MI 49406  
2.553 mi.  
13481 ft. Site 5 of 5 in cluster AH

FINDS 1007136059  
ECHO N/A

Relative:  
Lower

FINDS:

Registry ID: 110015840697

Actual:  
620 ft.

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INTERURBAN TRANSIT AUTHORITY (Continued)**

**1007136059**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1007136059  
Registry ID: 110015840697  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015840697](http://echo.epa.gov/detailed_facility_report?fid=110015840697)

**AI163**  
**East**  
**> 1**  
**2.562 mi.**  
**13529 ft.**

**DIVERSIFIED SALVAGE**  
**3387 60TH ST**  
**HAMILTON, MI 49149**  
**Site 1 of 3 in cluster AI**

**FTTS 1007275687**  
**HIST FTTS N/A**

**Relative:**  
**Higher**

**FTTS INSP:**  
Inspection Number: 19921130NV004 1  
Region: 05  
Inspection Date: 11/30/92  
Inspector: LEWIN  
Violation occurred: No  
Investigation Type: Section 6 PCB SEE Conducted  
Investigation Reason: Neutral Scheme, Region  
Legislation Code: TSCA  
Facility Function: User

**Actual:**  
**714 ft.**

**HIST FTTS INSP:**  
Inspection Number: 19921130NV004 1  
Region: 05  
Inspection Date: Not reported  
Inspector: LEWIN  
Violation occurred: No  
Investigation Type: Section 6 PCB SEE Conducted  
Investigation Reason: Neutral Scheme, Region  
Legislation Code: TSCA  
Facility Function: User

**AI164**  
**East**  
**> 1**  
**2.562 mi.**  
**13529 ft.**

**DIVERSIFIED SALVAGE INC**  
**3387 60TH ST**  
**HAMILTON, MI 49419**  
**Site 2 of 3 in cluster AI**

**MI WDS S111970146**  
**N/A**

**Relative:**  
**Higher**

**WDS:**  
Site Id: MIG000007206  
WMD Id: 458030  
Site Specific Name: DIVERSIFIED SALVAGE INC  
Mailing Address: 3387 60TH ST  
Mailing City/State/Zip: 49419  
Mailing County: ALLEGAN

**Actual:**  
**714 ft.**

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

<b>AI165</b> <b>East</b> <b>&gt; 1</b> <b>2.562 mi.</b> <b>13529 ft.</b>	<b>DIVERSIFIED SALVAGE</b> <b>3387 60TH STREET</b> <b>HAMILTON, MI 49419</b>  <b>Site 3 of 3 in cluster AI</b>	<b>US AIRS</b> <b>FINDS</b> <b>ECHO</b>	<b>1004530740</b> <b>N/A</b>
<b>Relative:</b> <b>Higher</b>	US AIRS MINOR: Envid: 1004530740 Region Code: 05 Programmatic ID: AIR MI00000000000N0970 Facility Registry ID: 110001829362 D and B Number: Not reported Primary SIC Code: 4953 NAICS Code: 562219 Default Air Classification Code: MIN Facility Type of Ownership Code: POF Air CMS Category Code: Not reported HPV Status: Not reported		
<b>Actual:</b> <b>714 ft.</b>	US AIRS MINOR: Region Code: 05 Programmatic ID: AIR MI00000000000N0970 Facility Registry ID: 110001829362 Air Operating Status Code: OPR Default Air Classification Code: MIN Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards Activity Date: 2002-05-02 00:00:00 Activity Status Date: Not reported Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation Activity Status: Not reported		

**FINDS:**

Registry ID: 110001829362

**Environmental Interest/Information System**

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

AIR MINOR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number  
EPA ID Number

**DIVERSIFIED SALVAGE (Continued)**

**1004530740**

ECHO:  
Envid: 1004530740  
Registry ID: 110001829362  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110001829362](http://echo.epa.gov/detailed_facility_report?fid=110001829362)

**166**  
**ENE**  
**> 1**  
**2.589 mi.**  
**13669 ft.**

**6056 BLUE STAR HWY**  
**SAUGATUCK, MI 49453**

**EDR Hist Auto 1015572142**  
**N/A**

**Relative:**  
**Higher**

EDR Historical Auto Stations:  
Name: MUFFLER MAN  
Year: 2003  
Address: 6056 BLUE STAR HWY  
  
Name: MUFFLER MAN  
Year: 2007  
Address: 6056 BLUE STAR HWY

**Actual:**  
**758 ft.**

**AJ167**  
**SSW**  
**> 1**  
**2.667 mi.**  
**14080 ft.**

**HAWORTH INC**  
**200 BLUE STAR HWY**  
**DOUGLAS, MI 49406**  
**Site 1 of 7 in cluster AJ**

**FINDS 1015902244**  
**ECHO N/A**

**Relative:**  
**Higher**

FINDS:  
Registry ID: 110046088167

**Actual:**  
**645 ft.**

Environmental Interest/Information System  
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:  
Envid: 1015902244  
Registry ID: 110046088167  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110046088167](http://echo.epa.gov/detailed_facility_report?fid=110046088167)

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**AJ168**  
**SSW**  
**> 1**  
**2.667 mi.**  
**14080 ft.**

**VILLAGE OF DOUGLAS CONTAMINATION**  
**200 BLUE STAR HWY**  
**DOUGLAS, MI**

**MI RGA PART 201**

**S115662228**  
**N/A**

**Site 2 of 7 in cluster AJ**

**Relative:**  
**Higher**

Relative: RGA PART 201:

2012	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY
2011	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY
2010	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY

**Actual:**  
**645 ft.**

**AJ169**  
**SSW**  
**> 1**  
**2.667 mi.**  
**14080 ft.**

**HAWORTH INC**  
**200 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**RCRA-CESQG**

**1000342008**  
**MIT270011521**

**Site 3 of 7 in cluster AJ**

**Relative:**  
**Higher**

Relative: RCRA-CESQG:

Date form received by agency: 05/22/2012  
 Facility name: HAWORTH INC  
 Facility address: 200 BLUE STAR HWY  
 DOUGLAS, MI 49406  
 EPA ID: MIT270011521  
 Mailing address: PO BOX 549  
 DOUGLAS, MI 49406  
 Contact: JAMES KOZMINSKI  
 Contact address: Not reported  
 Not reported  
 Contact country: US  
 Contact telephone: (616) 393-1533  
 Contact email: JIM.KOZMINSKI@HAWORTH.COM  
 EPA Region: 05  
 Land type: Private  
 Classification: Conditionally Exempt Small Quantity Generator  
 Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: HAWORTH  
 Owner/operator address: Not reported  
 Not reported  
 Owner/operator country: Not reported  
 Owner/operator telephone: Not reported  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: 01/01/1996  
 Owner/Op end date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

Owner/operator name: HAWORTH  
Owner/operator address: Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1996  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/28/2011  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/11/2006  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/17/2004  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2003  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/10/1999  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 10/09/1980  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 04/27/2011  
Date achieved compliance: 05/26/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 04/27/2011  
Date achieved compliance: 05/26/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 02/16/1999  
Date achieved compliance: 05/04/1999  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/16/1999  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

Final penalty amount: Not reported  
 Paid penalty amount: Not reported

**Evaluation Action Summary:**

Evaluation date: 04/27/2011  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: State Statute or Regulation  
 Date achieved compliance: 05/26/2011  
 Evaluation lead agency: State

Evaluation date: 04/27/2011  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Generators - Pre-transport  
 Date achieved compliance: 05/26/2011  
 Evaluation lead agency: State

Evaluation date: 02/10/1999  
 Evaluation: FOLLOW-UP INSPECTION  
 Area of violation: Generators - Records/Reporting  
 Date achieved compliance: 05/04/1999  
 Evaluation lead agency: State

Evaluation date: 05/14/1985  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

AJ170  
 SSW  
 > 1  
 2.667 mi.  
 14080 ft.

**VILLAGE OF DOUGLAS CONTAMINATION**  
**200 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**MI PART 201 S110093282**  
**MI INVENTORY N/A**  
**MI WDS**

**Site 4 of 7 in cluster AJ**

**Relative:**  
**Higher**

**PART 201:**  
 Facility ID: 3000032  
**Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring)**  
 Source: Furniture & Fixtures  
 SAM Score: 42  
 SAM Score Date: 03/26/2004  
 Township: 03N  
 Range: 16W  
 Section: 16  
 Quarter: NE  
 Quarter/Quarter: SE  
 Pollutants: Ni; TCE

**Actual:**  
**645 ft.**

**INVENTORY:**

Bea Number: Not reported  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: Part 201  
 Latitude: 42.63989  
 Longitude: -86.21122

WDS:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VILLAGE OF DOUGLAS CONTAMINATION (Continued)

S110093282

Site Id: MIT270011521  
WMD Id: 414505  
Site Specific Name: HAWORTH INC  
Mailing Address: PO BOX 549  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

AJ171  
SSW  
> 1  
2.667 mi.  
14080 ft.

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS  
200 BLUE STAR HWY  
DOUGLAS, MI 49406

PA MANIFEST S108851066  
N/A

Site 5 of 7 in cluster AJ

Relative:  
Higher

Manifest Details:

Actual:  
645 ft.

Year: 2006  
Manifest Number: PAH298381  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 08/30/2006  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: Not reported  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: 269-567-3500  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 40  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 8000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2006  
Manifest Number: 001237303FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 10/26/2006  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: Not reported  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: 269-567-3500  
Page Number: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S108851066

Line Number: 1  
Waste Number: D040  
Container Number: 25  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 5000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported  
  
Year: 2006  
Manifest Number: 001237306FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 12/20/2006  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: Not reported  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: 269-567-3500  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 36  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 7200  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

AJ172 CHASE MFG CO  
SSW 281 CHASE RD  
> 1 DOUGLAS, MI 49406  
2.674 mi.  
14118 ft. Site 6 of 7 in cluster AJ

ICIS 1016278065  
FINDS N/A  
ECHO

Relative:  
Higher

ICIS:  
Enforcement Action ID: 05-1987-0524  
FRS ID: 110009292229  
Action Name: CHASE MANUFACTURING  
Facility Name: CHASE MFG CO  
Facility Address: 281 CHASE RD  
DOUGLAS, MI 49406  
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz  
Facility County: ALLEGAN  
Program System Acronym: ICIS  
Enforcement Action Forum Desc: Administrative - Formal  
EA Type Code: 106  
Facility SIC Code: Not reported  
Federal Facility ID: Not reported  
Latitude in Decimal Degrees: Not reported

Actual:  
648 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1016278065**

Longitude in Decimal Degrees: Not reported  
Permit Type Desc: Not reported  
Program System Acronym: 14785  
Facility NAICS Code: Not reported  
Tribal Land Code: Not reported

Facility Name: CHASE MFG CO  
Address: 281 CHASE RD  
Tribal Indicator: N  
Fed Facility: Not reported  
NAIC Code: Not reported  
SIC Code: Not reported

Facility Name: CHASE MFG CO  
Address: 281 CHASE RD  
Tribal Indicator: N  
Fed Facility: Not reported  
NAIC Code: Not reported  
SIC Code: Not reported

**FINDS:**

Registry ID: 110009292229

Environmental Interest/Information System  
SUPERFUND (NON-NPL)

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

**ECHO:**

Envid: 1016278065  
Registry ID: 110009292229  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110009292229](http://echo.epa.gov/detailed_facility_report?fid=110009292229)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

AK173  
SSW  
> 1  
2.725 mi.  
14387 ft.

**BLUE STAR (2948) HIGHWAY**  
**2948 BLUE STAR HIGHWAY**  
**DOUGLAS, MI 49406**

MI BEA S105541542  
MI WDS N/A

Site 1 of 2 in cluster AK

Relative:  
Higher

BEA:

Secondary Address: Not reported  
BEA Number: 547  
District: Kalamazoo  
Date Received: 07/02/2002  
Submitter Name: Bank One, Managed Assets  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: ducharmm  
Division Assigned: RRD

Actual:  
644 ft.

Secondary Address: Not reported  
BEA Number: 750  
District: Kalamazoo  
Date Received: 05/26/2004  
Submitter Name: Blue Star Properties LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: ducharmm  
Division Assigned: RRD

WDS:

Site Id: MID103472577  
WMD Id: 398190  
Site Specific Name: HANSEN MANUFACTURING  
Mailing Address: 2948 BLUE STAR HWY  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

AJ174  
SSW  
> 1  
2.726 mi.  
14394 ft.

**CHASE MFG CO**  
**281 CHASE RD**  
**DOUGLAS, MI 49406**

SEMS 1000379090  
PRP MID980409890

Site 7 of 7 in cluster AJ

Relative:  
Higher

SEMS:

Site ID: 502730  
EPA ID: MID980409890  
Federal Facility: N  
NPL: Not on the NPL  
Non NPL Status: Referred to Removal - NFRAP

Actual:  
646 ft.

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0502730  
EPA ID: MID980409890  
Facility County: ALLEGAN  
Short Name: CHASE MFG CO  
Congressional District: 04  
IFMS ID: 059C

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1000379090**

SMSA Number: Not reported  
USGC Hydro Unit: 04050003  
Federal Facility: Not a Federal Facility  
DMNSN Number: 0.00000  
Site Orphan Flag: N  
RCRA ID: Not reported  
USGS Quadrangle: Not reported  
Site Init By Prog: Not reported  
NFRAP Flag: Not reported  
Parent ID: Not reported  
RST Code: P  
EPA Region: 05  
Classification: Not reported  
Site Settings Code: Not reported  
NPL Status: Not on the NPL  
DMNSN Unit Code: Not reported  
RBRAC Code: Not reported  
RResp Fed Agency Code: Not reported  
Non NPL Status: Referred to Removal - NFRAP  
Non NPL Status Date: 01/27/00  
Site Fips Code: 26005  
CC Concurrence Date: / /  
CC Concurrence FY: Not reported  
Alias EPA ID: Not reported  
Site FUDS Flag: Not reported  
  
Alias Comments: Not reported  
Site Description: Not reported

**CERCLIS Assessment History:**

Action Code: 001  
Action: DISCOVERY  
Date Started: / /  
Date Completed: 12/11/80  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported  
  
Action Code: 001  
Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 06/28/85  
Priority Level: Higher priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported  
  
Action Code: 001  
Action: SITE INSPECTION  
Date Started: / /



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1000379090**

Date Completed: 09/30/86  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: UNILATERAL ADMIN ORDER  
Date Started: / /  
Date Completed: 10/08/87  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: Federal Enforcement  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL  
Date Started: 10/08/87  
Date Completed: 05/13/88  
Priority Level: Cleaned up  
Operable Unit: SITEWIDE  
Primary Responsibility: Responsible Party  
Planning Status: Primary  
Urgency Indicator: Time Critical  
Action Anomaly: Not reported

Action Code: 001  
Action: EXPANDED SITE INSPECTION  
Date Started: / /  
Date Completed: 10/31/91  
Priority Level: Recommended for HRS Scoring  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Primary  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

PRP:  
PRP name: HAWORTH, INC.  
WICKES MANUFACTURING COMPANY

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**AK175**  
**SSW**  
 > 1  
 2.735 mi.  
 14441 ft.

**DOUGLAS**  
**2935 BLUE STAR HWY**  
**DOUGLAS, MI 49419**  
 Site 2 of 2 in cluster AK

**MI AST**    **A100001270**  
 N/A

**Relative:**  
**Higher**

AST:  
 Facility ID: 92003349  
 Facility Phone: Not reported  
 Owner Name: DOUGLAS  
 Owner Address: 2935 BLUE STAR HWY  
 Owner City,St,Zip: DOUGLAS, MI 49419  
 Owner County: USA  
 Owner Contact: Not reported  
 Owner Telephone: (269) 751-5171  
 District: Region 3 - Kalamazoo District Office  
 Contact: Pam Schut  
 List Status: CLOSED  
 Date of Collection: Not reported  
 Accuracy: Not reported  
 Source: Not reported  
 Point Line Area: Not reported  
 Description Category: Not reported  
 Method of Collection: Not reported  
 Horizontal Datum: Not reported  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**645 ft.**

Tank Id: 1  
 Tank Status: Removed from Premises  
 Capacity (in gallons): 30000  
 Installation Date: 11/23/1994  
 Substance Stored: LPG  
 Removed/Closed Date: 07/01/2007

**176**  
**East**  
 > 1  
 2.748 mi.  
 14511 ft.

**TOP & ALL METAL RECYCLING, LLC**  
**5954 134TH AVENUE**  
**HAMILTON, MI 49149**

**MI AIRS**    **S107699987**  
 N/A

**Relative:**  
**Higher**

AIRS:  
 State Registration Number: N0970  
 Naics Code: Not reported  
 Contact Email: Not reported  
 Contact Name: Not reported  
 Contact Phone: Not reported  
 Contact Address: (same as site address)  
 Contact City,St,Zip: Not reported  
 Permit Number: 21-86I  
 Date Received: 07/14/1986  
 Application Reason: WIRE BURN OFF OVEN/INCINERATOR  
 Record Type: Not reported  
 State County FIPS: Not reported  
 Facility Category: Not reported  
 SIC Primary: Not reported  
 Tribal Code: Not reported  
 Facility Status: Not reported  
 Supplemental Location Text: Not reported  
 Business Name: Not reported

**Actual:**  
**738 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOP & ALL METAL RECYCLING, LLC (Continued)**

**S107699987**

Principal Product:	Not reported	
Principal Product Description:	Not reported	
UTM Zone (Geo Coordinates Universal Transverse Mercator System):		Not reported
UTM Horizontal Coord:	Not reported	
UTM Vertical Coord:	Not reported	
Mailing Name:	Not reported	
Mailing Contact Person:	Not reported	
Mailing Street:	Not reported	
Mailing City:	Not reported	
Mailing State:	Not reported	
Mailing Zip:	Not reported	
Mailing Zip 4 Extension:	Not reported	
Compliance Person:	Not reported	
Compliance Area Code:	Not reported	
Compliance Phone Number:	Not reported	
Emission Inventory Contact Person:	Not reported	
EI Contact Area Code:	Not reported	
EI Contact Phone Number:	Not reported	
Permit Contact Person:	Not reported	
Permit Contact Person Area Code:	Not reported	
Permit Contact Person Phone Number:	Not reported	
Federal Employer Id Number:	Not reported	
# Of Employees:	Not reported	
Reporting Year:	Not reported	
Date Record Was Created:	Not reported	

Count: 6 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FENNVILLE	1003871277	CHEVRON CHEMICAL COMPANY	0.8MILE EAST OF CITY	49408	SEMS-ARCHIVE
FENNVILLE	1003871273	CHEVRON CHEMICAL COMPANY	ONE BLK OFF MAIN ON FENNVILLE	49408	SEMS-ARCHIVE
HOLLAND	U003211645	BRINK FARMS INC	A 5717 138TH AVENUE	49423	MI LUST, MI UST
HOLLAND	S106408398	WESTSHORE RECYCLING AND TRANSFER S	A-4376 60TH ST	49423	MI SWF/LF, MI WDS
LEIGHTON TWP	1003871219	LEIGHTON TOWNSHIP DUMPSITE	KALAMAZOO AVE 130TH & 140TH	49406	SEMS-ARCHIVE
SAUGATUCK	1003871184	SAUGATUCK TOWNSHIP LANDFILL	134TH AVENUE	49453	SEMS-ARCHIVE

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2016	Telephone: 703-603-8704
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/04/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016	Source: EPA
Date Data Arrived at EDR: 06/30/2016	Telephone: 800-424-9346
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 11/18/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Federal ERNS list**

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016

Source: National Response Center, United States Coast Guard

Date Data Arrived at EDR: 09/29/2016

Telephone: 202-267-2180

Date Made Active in Reports: 11/11/2016

Last EDR Contact: 09/29/2016

Number of Days to Update: 43

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Annually

## **State- and tribal - equivalent CERCLIS**

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Date of Government Version: N/A

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 10/31/2013

Telephone: 517-284-5103

Date Made Active in Reports: 11/20/2013

Last EDR Contact: 10/24/2016

Number of Days to Update: 20

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: No Update Planned

## **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF: Solid Waste Facilities Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/27/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 09/27/2016

Telephone: 517-335-4035

Date Made Active in Reports: 10/19/2016

Last EDR Contact: 09/27/2016

Number of Days to Update: 22

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Semi-Annually

## **State and tribal leaking storage tank lists**

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/29/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 08/17/2016

Telephone: 517-373-9837

Date Made Active in Reports: 11/02/2016

Last EDR Contact: 11/16/2016

Number of Days to Update: 77

Next Scheduled EDR Contact: 02/27/2017

Data Release Frequency: Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016

Source: EPA, Region 5

Date Data Arrived at EDR: 04/27/2016

Telephone: 312-886-7439

Date Made Active in Reports: 06/03/2016

Last EDR Contact: 10/28/2016

Number of Days to Update: 37

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015	Source: EPA Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3372
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015	Source: EPA Region 8
Date Data Arrived at EDR: 10/23/2015	Telephone: 303-312-6271
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 118	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015	Source: EPA Region 7
Date Data Arrived at EDR: 02/12/2016	Telephone: 913-551-7003
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 112	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/19/2016	Telephone: 214-665-6597
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 105	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-8677
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

***State and tribal registered storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/11/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Varies

## UST: Underground Storage Tank Facility List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/29/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/17/2016	Telephone: 517-241-8847
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 11/16/2016
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: Annually

## UST 2: Underground Storage Tank Listing

A listing of underground storage tank site locations that have unknown owner information.

Date of Government Version: 07/19/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/25/2016	Telephone: 517-241-8847
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Annually

## AST: Aboveground Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 08/03/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/22/2016	Telephone: 517-241-8847
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 11/11/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: No Update Planned

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/28/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/26/2016  
Date Data Arrived at EDR: 02/05/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 119

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015  
Date Data Arrived at EDR: 11/13/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 52

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016  
Date Data Arrived at EDR: 04/27/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 37

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016  
Date Data Arrived at EDR: 04/29/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 35

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Semi-Annually

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016  
Date Data Arrived at EDR: 01/08/2016  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 41

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/29/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 67

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## ***State and tribal institutional control / engineering control registries***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AUL: Engineering and Institutional Controls

A listing of sites with institutional and/or engineering controls in place.

Date of Government Version: 09/15/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 09/16/2016

Telephone: 517-373-4828

Date Made Active in Reports: 10/19/2016

Last EDR Contact: 11/28/2016

Number of Days to Update: 33

Next Scheduled EDR Contact: 03/13/2017

Data Release Frequency: Varies

## **State and tribal voluntary cleanup sites**

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015

Source: EPA, Region 1

Date Data Arrived at EDR: 09/29/2015

Telephone: 617-918-1102

Date Made Active in Reports: 02/18/2016

Last EDR Contact: 09/26/2016

Number of Days to Update: 142

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Source: EPA, Region 7

Date Data Arrived at EDR: 04/22/2008

Telephone: 913-551-7365

Date Made Active in Reports: 05/19/2008

Last EDR Contact: 04/20/2009

Number of Days to Update: 27

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

## **State and tribal Brownfields sites**

### BROWNFIELDS: Brownfields and USTfield Site Database

All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process. Be aware that this is not a list of all of the potential brownfield sites in Michigan.

Date of Government Version: 01/15/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 02/02/2016

Telephone: 517-373-4805

Date Made Active in Reports: 04/04/2016

Last EDR Contact: 10/24/2016

Number of Days to Update: 62

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

### BROWNFIELDS 2: Brownfields Building and Land Site Locations

A listing of brownfield building and land site locations. The listing is a collaborative effort of Michigan Economic Development Corporation, Michigan Economic Developers Association, Detroit Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007

Source: Economic Development Corporation

Date Data Arrived at EDR: 04/10/2007

Telephone: 888-522-0103

Date Made Active in Reports: 05/01/2007

Last EDR Contact: 11/28/2016

Number of Days to Update: 21

Next Scheduled EDR Contact: 03/13/2017

Data Release Frequency: Varies

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/20/2016  
Date Data Arrived at EDR: 09/21/2016  
Date Made Active in Reports: 11/11/2016  
Number of Days to Update: 51

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 09/21/2016  
Next Scheduled EDR Contact: 01/02/2017  
Data Release Frequency: Semi-Annually

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### **HIST LF: Inactive Solid Waste Facilities**

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/1997  
Date Data Arrived at EDR: 02/28/2003  
Date Made Active in Reports: 03/06/2003  
Number of Days to Update: 6

Source: Dept of Environmental Quality  
Telephone: 517-335-4034  
Last EDR Contact: 02/28/2003  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SWRCY: Recycling Facilities**

A listing of recycling center locations.

Date of Government Version: 07/07/2016  
Date Data Arrived at EDR: 07/11/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 52

Source: Dept of Environmental Quality  
Telephone: 517-241-5719  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Varies

### **INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 10/31/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 10/24/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: No Update Planned

### **IHS OPEN DUMPS: Open Dumps on Indian Land**

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 11/04/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/10/2016
	Data Release Frequency: No Update Planned

### **PART 201: Part 201 Site List**

A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

Date of Government Version: 10/01/2013	Source: Department of Environmental Quality
Date Data Arrived at EDR: 10/03/2014	Telephone: 517-284-5103
Date Made Active in Reports: 10/03/2014	Last EDR Contact: 10/24/2016
Number of Days to Update: 0	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: No Update Planned

### **INVENTORY: Inventory of Facilities**

The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

Date of Government Version: 07/26/2016	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/27/2016	Telephone: 517-284-5136
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 10/26/2016
Number of Days to Update: 36	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Lab Listing**

A listing of clandestine drug lab locations.

Date of Government Version: 05/11/2016	Source: Department of Community Health
Date Data Arrived at EDR: 05/24/2016	Telephone: 517-373-3740
Date Made Active in Reports: 07/05/2016	Last EDR Contact: 10/24/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DEL PART 201: Delisted List of Contaminated Sites

A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion.

A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

Date of Government Version: 08/01/2013	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/01/2013	Telephone: 517-373-9541
Date Made Active in Reports: 09/11/2013	Last EDR Contact: 10/24/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Quarterly

## Local Land Records

### LIENS: Lien List

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC \* 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 07/07/2015	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/24/2015	Telephone: 517-241-7603
Date Made Active in Reports: 08/05/2015	Last EDR Contact: 10/21/2016
Number of Days to Update: 12	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## Records of Emergency Release Reports

### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 09/27/2016
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Annually



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PEAS: Pollution Emergency Alerting System

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 07/01/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/29/2016	Telephone: 517-373-8427
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 12/08/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 11/17/2016  
Next Scheduled EDR Contact: 11/28/2016  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016  
Date Data Arrived at EDR: 08/17/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 65

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 11/16/2016  
Next Scheduled EDR Contact: 02/27/2017  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 11/08/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 6

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 11/11/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 01/15/2015  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 14

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 09/23/2016  
Next Scheduled EDR Contact: 01/02/2017  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 04/05/2016  
Number of Days to Update: 133

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/22/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 10/24/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 02/24/2014  
Number of Days to Update: 74

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 12/06/2016  
Next Scheduled EDR Contact: 03/20/2017  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2016  
Date Data Arrived at EDR: 08/22/2016  
Date Made Active in Reports: 11/11/2016  
Number of Days to Update: 81

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 11/18/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 127	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/05/2016	Telephone: 202-564-5088
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/11/2016
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Quarterly

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 12/06/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/06/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/28/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/03/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/05/2016	Telephone: 202-343-9775
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 16	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 11/02/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016  
Date Data Arrived at EDR: 08/01/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 11/23/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/14/2016  
Next Scheduled EDR Contact: 01/23/2017  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016  
Date Data Arrived at EDR: 07/26/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 59

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 11/08/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 09/09/2016  
Next Scheduled EDR Contact: 12/05/2016  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016  
Date Data Arrived at EDR: 04/07/2016  
Date Made Active in Reports: 09/02/2016  
Number of Days to Update: 148

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 10/20/2016  
Next Scheduled EDR Contact: 01/16/2017  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 06/30/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 88

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 06/30/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 88

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016  
Date Data Arrived at EDR: 09/01/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 12/01/2016  
Next Scheduled EDR Contact: 03/13/2017  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 12/12/2016
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 12/02/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016	Source: EPA
Date Data Arrived at EDR: 09/07/2016	Telephone: (312) 353-2000
Date Made Active in Reports: 11/11/2016	Last EDR Contact: 12/06/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/28/2016
Number of Days to Update: 91	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 12/05/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

## AIRS: Permit and Emissions Inventory Data

Permit and emissions inventory data.

Date of Government Version: 09/21/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 09/22/2016	Telephone: 517-373-7074
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 12/15/2016
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/03/2017
	Data Release Frequency: Varies

## BEA: Baseline Environmental Assessment Database

A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/21/2013  
Date Data Arrived at EDR: 08/23/2013  
Date Made Active in Reports: 09/12/2013  
Number of Days to Update: 20

Source: Dept of Environmental Quality  
Telephone: 517-373-9541  
Last EDR Contact: 11/11/2016  
Next Scheduled EDR Contact: 02/27/2017  
Data Release Frequency: No Update Planned

## COAL ASH: Coal Ash Disposal Sites

Coal fired power plants in Southeast Michigan that have coal ash handling on site.

Date of Government Version: 07/07/2016  
Date Data Arrived at EDR: 07/18/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 45

Source: Dept of Environmental Quality  
Telephone: 586-753-3754  
Last EDR Contact: 06/30/2016  
Next Scheduled EDR Contact: 10/17/2016  
Data Release Frequency: Varies

## DRYCLEANERS: Drycleaning Establishments

A listing of drycleaning facilities in Michigan.

Date of Government Version: 07/20/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 38

Source: Dept of Environmental Quality  
Telephone: 517-335-4586  
Last EDR Contact: 10/17/2016  
Next Scheduled EDR Contact: 01/30/2017  
Data Release Frequency: Annually

## LEAD CERT: Lead Safe Housing Registry

A listing of Michigan properties included in the Lead Safe Housing Registry.

Date of Government Version: 09/15/2015  
Date Data Arrived at EDR: 09/16/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 14

Source: Department of Community Health  
Telephone: 517-335-9699  
Last EDR Contact: 12/05/2016  
Next Scheduled EDR Contact: 03/20/2017  
Data Release Frequency: Quarterly

## NPDES: List of Active NPDES Permits

General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

Date of Government Version: 05/04/2016  
Date Data Arrived at EDR: 07/07/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 56

Source: Dept of Environmental Quality  
Telephone: 517-241-1300  
Last EDR Contact: 10/07/2016  
Next Scheduled EDR Contact: 01/16/2017  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 09/22/2016  
Date Data Arrived at EDR: 09/22/2016  
Date Made Active in Reports: 10/20/2016  
Number of Days to Update: 28

Source: Dept of Environmental Quality  
Telephone: 517-241-1515  
Last EDR Contact: 11/07/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## WDS: Waste Data System

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

Date of Government Version: 08/31/2016  
Date Data Arrived at EDR: 09/01/2016  
Date Made Active in Reports: 10/19/2016  
Number of Days to Update: 48

Source: Dept of Environmental Quality  
Telephone: 517-284-6562  
Last EDR Contact: 11/17/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016	Source: Department of Interior
Date Data Arrived at EDR: 06/13/2016	Telephone: 202-208-2609
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 12/09/2016
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/27/2017
	Data Release Frequency: Quarterly

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/20/2016	Telephone: 202-564-2280
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 09/20/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/02/2017
	Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016	Source: EPA
Date Data Arrived at EDR: 08/23/2016	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/22/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA PART 201: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 11/11/2016
Number of Days to Update: 45	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 08/31/2016	Telephone: N/A
Date Made Active in Reports: 12/12/2016	Last EDR Contact: 10/12/2016
Number of Days to Update: 103	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/03/2016	Telephone: 518-402-8651
Date Made Active in Reports: 09/09/2016	Last EDR Contact: 11/02/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/13/2017
	Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/22/2016	Telephone: 717-783-8990
Date Made Active in Reports: 11/22/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 123	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013	Source: Department of Environmental Management
Date Data Arrived at EDR: 06/19/2015	Telephone: 401-222-2797
Date Made Active in Reports: 07/15/2015	Last EDR Contact: 11/21/2016
Number of Days to Update: 26	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Natural Resources
Date Data Arrived at EDR: 04/14/2016	Telephone: N/A
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 12/12/2016
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/27/2017
	Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Day Care Centers, Group & Family Homes

Source: Bureau of REgulatory Services

Telephone: 517-373-8300

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetlands Inventory

Source: Department of Natural Resources

Telephone: 517-241-2254

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

**KLSWA South**  
Harbor Lake Drive  
Douglas, MI 49406

Inquiry Number: 4811515.1s  
December 20, 2016

## The EDR Radius Map™ Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	8
Orphan Summary .....	110
Government Records Searched/Data Currency Tracking .....	GR-1

## GEOCHECK ADDENDUM

GeoCheck - Not Requested

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

### **Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.



## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

HARBOR LAKE DRIVE  
DOUGLAS, MI 49406

#### COORDINATES

Latitude (North): 42.6350970 - 42° 38' 6.34"  
Longitude (West): 86.2057930 - 86° 12' 20.85"  
Universal Transverse Mercator: Zone 16  
UTM X (Meters): 565118.2  
UTM Y (Meters): 4720385.5  
Elevation: 633 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 6065673 SAUGATUCK, MI  
Version Date: 2014  
  
South Map: 6065653 GLENN, MI  
Version Date: 2014

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140722, 20140721  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
HARBOR LAKE DRIVE  
DOUGLAS, MI 49408

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	DOUGLAS SITE	AMITY LANE	FINDS, ECHO	Higher	695, 0.132, NW
A2	RANDY'S WEST SHORE B	6765 ENTERPRISE DR	RCRA-CESQG	Higher	1124, 0.213, SSW
A3	RANDY'S WEST SHORE B	6765 ENTERPRISE DR	MI WDS	Higher	1124, 0.213, SSW
A4	RANDY'S WEST SHORE B	6765 ENTERPRISE DR	FINDS, ECHO	Higher	1124, 0.213, SSW
5	DOUGLAS SCHOOLS	415 WILEY ST	MI WDS	Higher	1233, 0.234, WNW
6	ENTERPRISE HINGE	6779 ENTERPRISE DR	MI WDS	Higher	1467, 0.278, SW
B7	2987 BLUE STAR HIGHW	2987 BLUE STAR HIGHW	US BROWNFIELDS, FINDS	Higher	1648, 0.312, West
B8	OCCUPANT	3479 BLUE STAR HWY	MI AST	Higher	1676, 0.317, WNW
9	BLUE STAR (6473) HIG	6473 BLUE STAR HIGHW	MI INVENTORY	Higher	1679, 0.318, WNW
C10	DOUGLAS MARINE CORP	6780 ENTERPRISE DR	WI MANIFEST	Higher	1806, 0.342, SSW
C11	DOUGLAS MARINE CORP	6780 ENTERPRISE DR.	RCRA-SQG, FINDS, ECHO	Higher	1806, 0.342, SSW
C12	DOUGLAS MARINE CORP	6780 ENTERPRISE DRIV	MI AIRS, MI NPDES, MI WDS	Higher	1806, 0.342, SSW
D13	DOUGLAS	2935 BLUE STAR HWY	MI AST	Higher	1838, 0.348, NW
D14	BLUE STAR (2948) HIG	2948 BLUE STAR HIGHW	MI BEA, MI WDS	Higher	1850, 0.350, NW
D15	KALICO KITCHEN LTD	312 FERRY ST	MI LUST, MI UST	Higher	1922, 0.364, WNW
16	HANSEN MANUFACTURING	2948 BLUE STAR HWY	RCRA NonGen / NLR, FINDS, ECHO	Higher	1986, 0.376, SW
E17	JOHN BARNHILL	201 BLUE STAR HWY	MI UST	Higher	2193, 0.415, NNW
E18		201 BLUE STAR MEM H	EDR Hist Auto	Higher	2193, 0.415, NNW
19	CHASE MFG CO	281 CHASE RD	SEMS, PRP	Higher	2195, 0.416, NW
F20	HAWORTH INC	200 BLUE STAR HWY	FINDS, ECHO	Higher	2207, 0.418, NW
F21	MI DEPT ENVIRONMENTA	200 BLUE STAR HWY	PA MANIFEST	Higher	2207, 0.418, NW
F22	VILLAGE OF DOUGLAS C	200 BLUE STAR HWY	MI PART 201, MI INVENTORY, MI WDS	Higher	2207, 0.418, NW
F23	VILLAGE OF DOUGLAS C	200 BLUE STAR HWY	MI RGA PART 201	Higher	2207, 0.418, NW
F24	HAWORTH INC	200 BLUE STAR HWY	RCRA-CESQG	Higher	2207, 0.418, NW
F25	CHASE MFG CO	281 CHASE RD	ICIS, FINDS, ECHO	Higher	2399, 0.454, NW
G26	WEATHERVANE PARTNERS	102 BLUE STAR HWY	MI WDS	Higher	2571, 0.487, NNW
G27	WEATHERVANE PARTNERS	102 BLUE STAR HWY	FINDS, ECHO	Higher	2571, 0.487, NNW
G28	WEATHERVANE PARTNERS	102 BLUE STAR HWY	RCRA NonGen / NLR	Higher	2571, 0.487, NNW
H29	BRANCH MAINTENANCE G	486 WATER ST	MI RGA LUST	Lower	2604, 0.493, ENE
H30	BRANCH MAINTENANCE G	486 WATER ST.	MI RGA LUST	Lower	2604, 0.493, ENE
H31	ALLEGAN CO RD COMMIS	486 WATER ST	MI RGA PART 201	Lower	2604, 0.493, ENE
32	SAUGATUCK PUBLIC SCH	BLUE STAR HIGHWAY	MI UST	Higher	2718, 0.515, NNW
33	BLOKS REFUSE SERVICE	129TH STREET	FINDS	Higher	2727, 0.516, SW
34	METALLURGICAL HIGH V	471 WASHINGTON ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	2766, 0.524, NE
I35	INTERURBAN TRANSIT A	100 WILEY ST	RCRA-CESQG	Lower	2926, 0.554, East
I36	INTERURBAN TRANSIT A	100 WILEY ST	FINDS, ECHO	Lower	2926, 0.554, East
J37	BOB MEEUWSEN	221 WASHINGTON ST	MI WDS	Lower	2977, 0.564, NE
K38	JOHNSONS AMOCO SERVI	BLUE STAR HWY & CENT	MI RGA PART 201	Lower	3113, 0.590, North
K39	DEAN JOHNSON	314 FREMONT ST	MI UST	Lower	3114, 0.590, North

MAPPED SITES SUMMARY

Target Property Address:  
HARBOR LAKE DRIVE  
DOUGLAS, MI 49408

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">K40</a>	JOHNSONS STANDARD 28	BLUE STAR HWY & CENT	SEMS-ARCHIVE, RCRA NonGen / NLR	Lower	3114, 0.590, North
<a href="#">J41</a>	DOUGLAS MARINE CORP	160 WASHINGTON ST	MI BEA, MI WDS	Lower	3123, 0.591, NNE
<a href="#">L42</a>	CENTER (294) STREET,	294 W. CENTER STREET	MI INVENTORY	Lower	3165, 0.599, North
<a href="#">L43</a>	CENTER (294) STREET,	294 W. CENTER STREET	MI BEA	Lower	3165, 0.599, North
<a href="#">K44</a>	METROPOLITAN TITLE C	25-29 BLUE STAR HIGH	MI BEA	Lower	3197, 0.605, North
<a href="#">45</a>	GAS CENTER	50 CENTER	MI AST	Lower	3364, 0.637, NNE
<a href="#">M46</a>	MI DEQ VILLAGE OF DO	CENTER & FERRY ST	PA MANIFEST	Lower	3504, 0.664, NNW
<a href="#">M47</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	MI WDS	Lower	3504, 0.664, NNW
<a href="#">M48</a>	MI DEPT ENVIRONMENTA	CENTER & FERRY STREE	PA MANIFEST	Lower	3504, 0.664, NNW
<a href="#">M49</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	FINDS, ECHO	Lower	3510, 0.665, NNW
<a href="#">M50</a>	MI DEPT/ENVIRONMENTA	CENTER & FERRY ST	RCRA-SQG	Lower	3510, 0.665, NNW
<a href="#">51</a>	TOWER MARINE	216 PETER'S DRIVE	US BROWNFIELDS, FINDS	Lower	3518, 0.666, North
<a href="#">N52</a>	RICHARD QUADE	50 CENTER RD	MI UST	Lower	3534, 0.669, NNE
<a href="#">N53</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI LUST, MI INVENTORY	Lower	3546, 0.672, NNE
<a href="#">N54</a>	DOUGLAS AMOCO	10 1/2 SOUTH WASHING	MI AUL	Lower	3546, 0.672, NNE
<a href="#">N55</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI RGA LUST	Lower	3546, 0.672, NNE
<a href="#">N56</a>	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON	MI INVENTORY	Lower	3546, 0.672, NNE
<a href="#">M57</a>	FERRY (14) STREET	14 FERRY STREET	MI BEA, MI WDS	Lower	3609, 0.684, NNW
<a href="#">M58</a>	WEST SHORE GOLF CLUB	14 FERRY ST	MI UST	Lower	3609, 0.684, NNW
<a href="#">M59</a>	MACATAWA BANK	14 FERRY ST	RCRA NonGen / NLR	Lower	3609, 0.684, NNW
<a href="#">M60</a>	MACATAWA BANK	14 FERRY ST	FINDS, ECHO	Lower	3612, 0.684, NNW
<a href="#">M61</a>	FERRY (14) STREET	14 FERRY STREET	MI INVENTORY	Lower	3612, 0.684, NNW
<a href="#">O62</a>	KALAMAZOO LAKE WTP	22 BAYOU STREET	ECHO	Lower	3677, 0.696, NE
<a href="#">O63</a>	KALAMAZOO LAKE WTP	22 BAYOU STREET	MI NPDES	Lower	3677, 0.696, NE
<a href="#">O64</a>	KALAMAZOO LAKE WTP	22 BAYOU	FINDS	Lower	3677, 0.696, NE
<a href="#">N65</a>	DOUGLAS SHELL	30 N WASHINGTON	MI LUST, MI UST, MI INVENTORY	Lower	3752, 0.711, NNE
<a href="#">N66</a>	DOUGLAS SHELL	30 N WASHINGTON	MI RGA LUST	Lower	3752, 0.711, NNE
<a href="#">N67</a>	DOUGLAS SHELL	30 N. WASHINGTON	MI RGA LUST	Lower	3752, 0.711, NNE
<a href="#">N68</a>	FLEMING OIL CO	30 WASHINGTON ST	MI AUL, MI WDS	Lower	3752, 0.711, NNE
<a href="#">69</a>		219 ST PETERS DR	ERNS	Lower	3919, 0.742, North
<a href="#">70</a>	WEATHER VAN CLEANERS	102 WASHINGTON ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	4190, 0.794, NNE
<a href="#">P71</a>	METROPOLITAN TITLE O	25-27 BLUE STAR	MI LUST, MI INVENTORY	Lower	4249, 0.805, NNE
<a href="#">P72</a>	UNION STREET & BLUE	UNION STREET & BLUE	MI INVENTORY	Lower	4255, 0.806, NNE
<a href="#">73</a>	KALICO KITCHEN LTD	312 FERRY ST	MI INVENTORY	Lower	4567, 0.865, NNW
<a href="#">Q74</a>	SAUGATUCK YACHT SERV	216 ST.PETERS DR	MI UST	Lower	4588, 0.869, North
<a href="#">Q75</a>	TOWER MARINE	216 SAINT PETERS DR	RCRA-SQG, FINDS, ECHO	Lower	4588, 0.869, North
<a href="#">Q76</a>	TOWER MARINE-DOUGLAS	216 ST. PETERS DRIVE	FINDS, ECHO	Lower	4588, 0.869, North
<a href="#">Q77</a>	TOWER MARINE/KALAMAZ	216 ST PETERS DR	MI RGA LUST	Lower	4588, 0.869, North
<a href="#">Q78</a>	TOWER MARINE-DOUGLAS	216 ST PETERS DRIVE	MI NPDES	Lower	4588, 0.869, North

MAPPED SITES SUMMARY

Target Property Address:  
HARBOR LAKE DRIVE  
DOUGLAS, MI 49408

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">Q79</a>	TOWER MARINE-DOUGLAS	216 ST PETERS DRIVE	MI NPDES	Lower	4588, 0.869, North
<a href="#">Q80</a>	TOWER MARINE	216 SAINT PETERS DR	MI WDS	Lower	4588, 0.869, North
<a href="#">81</a>	KALICO KITCHEN LTD	312 FERRY STREET	MI INVENTORY	Lower	5264, 0.997, NNW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***State- and tribal - equivalent CERCLIS***

MI SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

### ***State and tribal landfill and/or solid waste disposal site lists***

MI SWF/LF..... Solid Waste Facilities Database

# EXECUTIVE SUMMARY

## **State and tribal leaking storage tank lists**

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

## **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing  
INDIAN UST..... Underground Storage Tanks on Indian Land

## **State and tribal voluntary cleanup sites**

INDIAN VCP..... Voluntary Cleanup Priority Listing

## **State and tribal Brownfields sites**

MI BROWNFIELDS..... Brownfields and UST Site Database

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Lists of Landfill / Solid Waste Disposal Sites**

MI SWRCY..... Recycling Facilities  
MI HIST LF..... Inactive Solid Waste Facilities  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
ODI..... Open Dump Inventory  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
IHS OPEN DUMPS..... Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... Delisted National Clandestine Laboratory Register  
MI CDL..... Clandestine Drug Lab Listing  
MI DEL PART 201..... Delisted List of Contaminated Sites  
US CDL..... National Clandestine Laboratory Register

### **Local Land Records**

MI LIENS..... Lien List  
LIENS 2..... CERCLA Lien Information

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
MI SPILLS..... Pollution Emergency Alerting System

### **Other Ascertainable Records**

FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List

## EXECUTIVE SUMMARY

TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PADS.....	PCB Activity Database System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
MI COAL ASH.....	Coal Ash Disposal Sites
MI DRYCLEANERS.....	Drycleaning Establishments
MI LEAD.....	Lead Safe Housing Registry
MI UIC.....	Underground Injection Wells Database
ABANDONED MINES.....	Abandoned Mines
FUELS PROGRAM.....	EPA Fuels Program Registered Listing

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

MI RGA LF.....	Recovered Government Archive Solid Waste Facilities List
----------------	--

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## EXECUTIVE SUMMARY

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal CERCLIS list***

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 SEMS site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>NW 1/4 - 1/2 (0.416 mi.)</b>	<b>19</b>	<b>32</b>

#### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 SEMS-ARCHIVE site within approximately 1.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOHNSONS STANDARD 28</b>	<b>BLUE STAR HWY &amp; CENT</b>	<b>N 1/2 - 1 (0.590 mi.)</b>	<b>K40</b>	<b>51</b>

#### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 3



## EXECUTIVE SUMMARY

RCRA-SQG sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>DOUGLAS MARINE CORP</i>	<i>6780 ENTERPRISE DR.</i>	<i>SSW 1/4 - 1/2 (0.342 mi.)</i>	<i>C11</i>	<i>16</i>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MI DEPT/ENVIRONMENTA <i>TOWER MARINE</i>	CENTER & FERRY ST <i>216 SAINT PETERS DR</i>	NNW 1/2 - 1 (0.665 mi.) <i>N 1/2 - 1 (0.869 mi.)</i>	M50 <i>Q75</i>	63 <i>103</i>

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 3 RCRA-CESQG sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RANDY'S WEST SHORE B HAWORTH INC	6765 ENTERPRISE DR 200 BLUE STAR HWY	SSW 1/8 - 1/4 (0.213 mi.) NW 1/4 - 1/2 (0.418 mi.)	A2 F24	8 37

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
INTERURBAN TRANSIT A	100 WILEY ST	E 1/2 - 1 (0.554 mi.)	I35	47

### ***Federal ERNS list***

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 09/26/2016 has revealed that there is 1 ERNS site within approximately 1.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	219 ST PETERS DR	N 1/2 - 1 (0.742 mi.)	69	98

### ***State and tribal leaking storage tank lists***

MI LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Leaking Underground Storage Tank (LUST) Database.

A review of the MI LUST list, as provided by EDR, and dated 06/29/2016 has revealed that there are 4 MI LUST sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>KALICO KITCHEN LTD</i>	<i>312 FERRY ST</i>	<i>WNW 1/4 - 1/2 (0.364 mi.)</i>	<i>D15</i>	<i>26</i>

## EXECUTIVE SUMMARY

Facility Id: 00042503  
 Release Status: Open  
 Substance Release: Mixture,Mixture,Mixture

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DOUGLAS AMOCO 28876</b> Facility Id: 50001810 Release Status: Closed	<b>10 1/2 S WASHINGTON</b>	<b>NNE 1/2 - 1 (0.672 mi.)</b>	<b>N53</b>	<b>85</b>
<b>DOUGLAS SHELL</b> Facility Id: 00004516 Release Status: Closed Substance Release: Used Oil Substance Release: Gasoline Substance Release: Unknown	<b>30 N WASHINGTON</b>	<b>NNE 1/2 - 1 (0.711 mi.)</b>	<b>N65</b>	<b>93</b>
<b>METROPOLITAN TITLE O</b> Facility Id: 50002327 Release Status: Open Substance Release: Unknown	<b>25-27 BLUE STAR</b>	<b>NNE 1/2 - 1 (0.805 mi.)</b>	<b>P71</b>	<b>100</b>

### **State and tribal registered storage tank lists**

MI UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Michigan UST database.

A review of the MI UST list, as provided by EDR, has revealed that there are 8 MI UST sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KALICO KITCHEN LTD</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00042503	<b>312 FERRY ST</b>	<b>WNW 1/4 - 1/2 (0.364 mi.)</b>	<b>D15</b>	<b>26</b>
<b>JOHN BARNHILL</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00017264	<b>201 BLUE STAR HWY</b>	<b>NNW 1/4 - 1/2 (0.415 mi.)</b>	<b>E17</b>	<b>30</b>
<b>SAUGATUCK PUBLIC SCH</b> Database: UST, Date of Government Version: 06/29/2016 Tank Status: Removed from Ground Facility Type: CLOSED Facility Id: 00016804	<b>BLUE STAR HIGHWAY</b>	<b>NNW 1/2 - 1 (0.515 mi.)</b>	<b>32</b>	<b>44</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DEAN JOHNSON</b> Database: UST, Date of Government Version: 06/29/2016	<b>314 FREMONT ST</b>	<b>N 1/2 - 1 (0.590 mi.)</b>	<b>K39</b>	<b>50</b>

## EXECUTIVE SUMMARY

Tank Status: Removed from Ground				
Facility Type: CLOSED				
Facility Id: 00039423				
RICHARD QUADE	50 CENTER RD	NNE 1/2 - 1 (0.669 mi.)	N52	84
Database: UST, Date of Government Version: 06/29/2016				
Tank Status: Removed from Ground				
Facility Type: CLOSED				
Facility Id: 00039025				
WEST SHORE GOLF CLUB	14 FERRY ST	NNW 1/2 - 1 (0.684 mi.)	M58	89
Database: UST, Date of Government Version: 06/29/2016				
Tank Status: Removed from Ground				
Facility Type: CLOSED				
Facility Id: 00033298				
<b>DOUGLAS SHELL</b>	<b>30 N WASHINGTON</b>	<b>NNE 1/2 - 1 (0.711 mi.)</b>	<b>N65</b>	<b>93</b>
Database: UST, Date of Government Version: 06/29/2016				
Tank Status: Removed from Ground				
Tank Status: Currently In Use				
Facility Type: ACTIVE				
Facility Id: 00004516				
SAUGATUCK YACHT SERV	216 ST.PETERS DR	N 1/2 - 1 (0.869 mi.)	Q74	102
Database: UST, Date of Government Version: 06/29/2016				
Tank Status: Removed from Ground				
Facility Type: CLOSED				
Facility Id: 00001948				

MI AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Natural Resources' Michigan AST database.

A review of the MI AST list, as provided by EDR, and dated 08/03/2016 has revealed that there are 3 MI AST sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OCCUPANT	3479 BLUE STAR HWY	WNW 1/4 - 1/2 (0.317 mi.)	B8	13
Facility Id: 91003007				
List Status: CLOSED				
Removed/Closed Date: 09/30/1991				
Tank Status: Removed from Premises				
DOUGLAS	2935 BLUE STAR HWY	NW 1/4 - 1/2 (0.348 mi.)	D13	24
Facility Id: 92003349				
List Status: CLOSED				
Removed/Closed Date: 07/01/2007				
Tank Status: Removed from Premises				
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GAS CENTER	50 CENTER	NNE 1/2 - 1 (0.637 mi.)	45	55
Facility Id: 92003303				
List Status: CLOSED				
Removed/Closed Date: 02/23/1995				
Removed/Closed Date: 04/06/1995				
Tank Status: Removed from Premises				

## EXECUTIVE SUMMARY

### ***State and tribal institutional control / engineering control registries***

MI AUL: A listing of sites with institutional and/or engineering controls in place.

A review of the MI AUL list, as provided by EDR, and dated 09/15/2016 has revealed that there are 2 MI AUL sites within approximately 1.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DOUGLAS AMOCO Facility ID: 50001810	10 1/2 SOUTH WASHING	NNE 1/2 - 1 (0.672 mi.)	N54	86
<b>FLEMING OIL CO</b> Facility ID: 00004516	<b>30 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.711 mi.)</b>	<b>N68</b>	<b>97</b>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 09/20/2016 has revealed that there are 2 US BROWNFIELDS sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>2987 BLUE STAR HIGHW</b>	<b>2987 BLUE STAR HIGHW</b>	<b>W 1/4 - 1/2 (0.312 mi.)</b>	<b>B7</b>	<b>11</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TOWER MARINE</b>	<b>216 PETER'S DRIVE</b>	<b>N 1/2 - 1 (0.666 mi.)</b>	<b>51</b>	<b>74</b>

#### ***Local Lists of Hazardous waste / Contaminated Sites***

MI INVENTORY: The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and

## EXECUTIVE SUMMARY

Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the MI INVENTORY list, as provided by EDR, and dated 07/26/2016 has revealed that there are 11 MI INVENTORY sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BLUE STAR (6473) HIG <b>VILLAGE OF DOUGLAS C</b> Facility ID: 03000032	6473 BLUE STAR HIGHW <b>200 BLUE STAR HWY</b>	WNW 1/4 - 1/2 (0.318 mi.) <b>NW 1/4 - 1/2 (0.418 mi.)</b>	9 <b>F22</b>	14 <b>36</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CENTER (294) STREET, <b>DOUGLAS AMOCO 28876</b> DOUGLAS AMOCO 28876 Facility ID: 50001810	294 W. CENTER STREET <b>10 1/2 S WASHINGTON</b> 10 1/2 S WASHINGTON	N 1/2 - 1 (0.599 mi.) <b>NNE 1/2 - 1 (0.672 mi.)</b> NNE 1/2 - 1 (0.672 mi.)	L42 <b>N53</b> N56	54 <b>85</b> 87
FERRY (14) STREET <b>DOUGLAS SHELL</b> Facility ID: 00004516	14 FERRY STREET <b>30 N WASHINGTON</b>	NNW 1/2 - 1 (0.684 mi.) <b>NNE 1/2 - 1 (0.711 mi.)</b>	M61 <b>N65</b>	91 <b>93</b>
<b>METROPOLITAN TITLE O</b> Facility ID: 50002327	<b>25-27 BLUE STAR</b>	<b>NNE 1/2 - 1 (0.805 mi.)</b>	<b>P71</b>	<b>100</b>
UNION STREET & BLUE KALICO KITCHEN LTD Facility ID: 00042503	UNION STREET & BLUE 312 FERRY ST	NNE 1/2 - 1 (0.806 mi.) NNW 1/2 - 1 (0.865 mi.)	P72 73	101 101
KALICO KITCHEN LTD	312 FERRY STREET	NNW 1/2 - 1 (0.997 mi.)	81	109

MI PART 201: A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

A review of the MI PART 201 list, as provided by EDR, and dated 10/01/2013 has revealed that there is 1 MI PART 201 site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VILLAGE OF DOUGLAS C</b> Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring) Facility ID: 3000032	<b>200 BLUE STAR HWY</b>	<b>NW 1/4 - 1/2 (0.418 mi.)</b>	<b>F22</b>	<b>36</b>

### **Other Ascertainable Records**

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or

## EXECUTIVE SUMMARY

dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>HANSEN MANUFACTURING</b>	<b>2948 BLUE STAR HWY</b>	<b>SW 1/4 - 1/2 (0.376 mi.)</b>	<b>16</b>	<b>27</b>
<b>WEATHERVANE PARTNERS</b>	<b>102 BLUE STAR HWY</b>	<b>NNW 1/4 - 1/2 (0.487 mi.)</b>	<b>G28</b>	<b>42</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>METALLURGICAL HIGH V</b>	<b>471 WASHINGTON ST</b>	<b>NE 1/2 - 1 (0.524 mi.)</b>	<b>34</b>	<b>46</b>
<b>JOHNSONS STANDARD 28</b>	<b>BLUE STAR HWY &amp; CENT</b>	<b>N 1/2 - 1 (0.590 mi.)</b>	<b>K40</b>	<b>51</b>
<b>MACATAWA BANK</b>	<b>14 FERRY ST</b>	<b>NNW 1/2 - 1 (0.684 mi.)</b>	<b>M59</b>	<b>89</b>
<b>WEATHER VAN CLEANERS</b>	<b>102 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.794 mi.)</b>	<b>70</b>	<b>99</b>

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 PRP site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>NW 1/4 - 1/2 (0.416 mi.)</b>	<b>19</b>	<b>32</b>

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 07/27/2016 has revealed that there is 1 ICIS site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>NW 1/4 - 1/2 (0.454 mi.)</b>	<b>F25</b>	<b>40</b>

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/15/2016 has revealed that there are 18 FINDS sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DOUGLAS SITE</b>	<b>AMITY LANE</b>	<b>NW 1/8 - 1/4 (0.132 mi.)</b>	<b>1</b>	<b>8</b>
<b>RANDY'S WEST SHORE B</b>	<b>6765 ENTERPRISE DR</b>	<b>SSW 1/8 - 1/4 (0.213 mi.)</b>	<b>A4</b>	<b>10</b>
<b>2987 BLUE STAR HIGHW</b>	<b>2987 BLUE STAR HIGHW</b>	<b>W 1/4 - 1/2 (0.312 mi.)</b>	<b>B7</b>	<b>11</b>
<b>DOUGLAS MARINE CORP</b>	<b>6780 ENTERPRISE DR.</b>	<b>SSW 1/4 - 1/2 (0.342 mi.)</b>	<b>C11</b>	<b>16</b>

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>HANSEN MANUFACTURING</b>	<b>2948 BLUE STAR HWY</b>	<b>SW 1/4 - 1/2 (0.376 mi.)</b>	<b>16</b>	<b>27</b>
<b>HAWORTH INC</b>	<b>200 BLUE STAR HWY</b>	<b>NW 1/4 - 1/2 (0.418 mi.)</b>	<b>F20</b>	<b>34</b>
<b>CHASE MFG CO</b>	<b>281 CHASE RD</b>	<b>NW 1/4 - 1/2 (0.454 mi.)</b>	<b>F25</b>	<b>40</b>
<b>WEATHERVANE PARTNERS</b>	<b>102 BLUE STAR HWY</b>	<b>NNW 1/4 - 1/2 (0.487 mi.)</b>	<b>G27</b>	<b>42</b>
<b>BLOKS REFUSE SERVICE</b>	<b>129TH STREET</b>	<b>SW 1/2 - 1 (0.516 mi.)</b>	<b>33</b>	<b>45</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>METALLURGICAL HIGH V</b>	<b>471 WASHINGTON ST</b>	<b>NE 1/2 - 1 (0.524 mi.)</b>	<b>34</b>	<b>46</b>
<b>INTERURBAN TRANSIT A</b>	<b>100 WILEY ST</b>	<b>E 1/2 - 1 (0.554 mi.)</b>	<b>I36</b>	<b>49</b>
<b>MI DEPT/ENVIRONMENTA</b>	<b>CENTER &amp; FERRY ST</b>	<b>NNW 1/2 - 1 (0.665 mi.)</b>	<b>M49</b>	<b>63</b>
<b>TOWER MARINE</b>	<b>216 PETER'S DRIVE</b>	<b>N 1/2 - 1 (0.666 mi.)</b>	<b>51</b>	<b>74</b>
<b>MACATAWA BANK</b>	<b>14 FERRY ST</b>	<b>NNW 1/2 - 1 (0.684 mi.)</b>	<b>M60</b>	<b>91</b>
<b>KALAMAZOO LAKE WTP</b>	<b>22 BAYOU</b>	<b>NE 1/2 - 1 (0.696 mi.)</b>	<b>O64</b>	<b>93</b>
<b>WEATHER VAN CLEANERS</b>	<b>102 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.794 mi.)</b>	<b>70</b>	<b>99</b>
<b>TOWER MARINE</b>	<b>216 SAINT PETERS DR</b>	<b>N 1/2 - 1 (0.869 mi.)</b>	<b>Q75</b>	<b>103</b>
<b>TOWER MARINE-DOUGLAS</b>	<b>216 ST. PETERS DRIVE</b>	<b>N 1/2 - 1 (0.869 mi.)</b>	<b>Q76</b>	<b>107</b>

MI AIRS: Permit and emissions inventory data.

A review of the MI AIRS list, as provided by EDR, and dated 09/21/2016 has revealed that there is 1 MI AIRS site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DOUGLAS MARINE CORP</b> State Registration Id: N1263	<b>6780 ENTERPRISE DRIV</b>	<b>SSW 1/4 - 1/2 (0.342 mi.)</b>	<b>C12</b>	<b>23</b>

MI BEA: A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

A review of the MI BEA list, as provided by EDR, and dated 08/21/2013 has revealed that there are 5 MI BEA sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BLUE STAR (2948) HIG</b>	<b>2948 BLUE STAR HIGHW</b>	<b>NW 1/4 - 1/2 (0.350 mi.)</b>	<b>D14</b>	<b>25</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DOUGLAS MARINE CORP</b>	<b>160 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.591 mi.)</b>	<b>J41</b>	<b>53</b>
<b>CENTER (294) STREET,</b>	<b>294 W. CENTER STREET</b>	<b>N 1/2 - 1 (0.599 mi.)</b>	<b>L43</b>	<b>54</b>
<b>METROPOLITAN TITLE C</b>	<b>25-29 BLUE STAR HIGH</b>	<b>N 1/2 - 1 (0.605 mi.)</b>	<b>K44</b>	<b>54</b>
<b>FERRY (14) STREET</b>	<b>14 FERRY STREET</b>	<b>NNW 1/2 - 1 (0.684 mi.)</b>	<b>M57</b>	<b>87</b>

## EXECUTIVE SUMMARY

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 12/31/2015 has revealed that there are 3 PA MANIFEST sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MI DEPT ENVIRONMENTA Generator EPA Id: MIK679614198	200 BLUE STAR HWY	NW 1/4 - 1/2 (0.418 mi.)	F21	35
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MI DEQ VILLAGE OF DO Generator EPA Id: MIK679614198	CENTER & FERRY ST	NNW 1/2 - 1 (0.664 mi.)	M46	56
MI DEPT ENVIRONMENTA Generator EPA Id: MIK679614198	CENTER & FERRY STREE	NNW 1/2 - 1 (0.664 mi.)	M48	56

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, and dated 12/31/2015 has revealed that there is 1 WI MANIFEST site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DOUGLAS MARINE CORP ACT Status: A EPA ID: MID982633117	6780 ENTERPRISE DR	SSW 1/4 - 1/2 (0.342 mi.)	C10	14

MI NPDES: General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

A review of the MI NPDES list, as provided by EDR, and dated 05/04/2016 has revealed that there are 4 MI NPDES sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DOUGLAS MARINE CORP</b> Permit Number: MIS111032	<b>6780 ENTERPRISE DRIV</b>	<b>SSW 1/4 - 1/2 (0.342 mi.)</b>	<b>C12</b>	<b>23</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KALAMAZOO LAKE WTP Permit Number: MIG640101	22 BAYOU STREET	NE 1/2 - 1 (0.696 mi.)	O63	92
TOWER MARINE-DOUGLAS Permit Number: MIG690005	216 ST PETERS DRIVE	N 1/2 - 1 (0.869 mi.)	Q78	107
TOWER MARINE-DOUGLAS Permit Number: MIS110344	216 ST PETERS DRIVE	N 1/2 - 1 (0.869 mi.)	Q79	108



## EXECUTIVE SUMMARY

MI WDS: The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

A review of the MI WDS list, as provided by EDR, and dated 08/31/2016 has revealed that there are 13 MI WDS sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RANDY'S WEST SHORE B WMD Id: 476841 Site Id: MIK369822291	6765 ENTERPRISE DR	SSW 1/8 - 1/4 (0.213 mi.)	A3	9
DOUGLAS SCHOOLS WMD Id: 422272 Site Id: MIG000061161	415 WILEY ST	WNW 1/8 - 1/4 (0.234 mi.)	5	10
ENTERPRISE HINGE WMD Id: 446016 Site Id: MIG000034927	6779 ENTERPRISE DR	SW 1/4 - 1/2 (0.278 mi.)	6	10
<b>DOUGLAS MARINE CORP</b> WMD Id: 401549 Site Id: MID982633117	<b>6780 ENTERPRISE DRIV</b>	<b>SSW 1/4 - 1/2 (0.342 mi.)</b>	<b>C12</b>	<b>23</b>
<b>BLUE STAR (2948) HIG</b> WMD Id: 398190 Site Id: MID103472577	<b>2948 BLUE STAR HIGHW</b>	<b>NW 1/4 - 1/2 (0.350 mi.)</b>	<b>D14</b>	<b>25</b>
<b>VILLAGE OF DOUGLAS C</b> WMD Id: 414505 Site Id: MIT270011521	<b>200 BLUE STAR HWY</b>	<b>NW 1/4 - 1/2 (0.418 mi.)</b>	<b>F22</b>	<b>36</b>
WEATHERVANE PARTNERS WMD Id: 491984 Site Id: MIK146550217	102 BLUE STAR HWY	NNW 1/4 - 1/2 (0.487 mi.)	G26	42
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BOB MEEUWSEN WMD Id: 416927 Site Id: MIG000038368	221 WASHINGTON ST	NE 1/2 - 1 (0.564 mi.)	J37	49
<b>DOUGLAS MARINE CORP</b> WMD Id: 397755 Site Id: MID089964613	<b>160 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.591 mi.)</b>	<b>J41</b>	<b>53</b>
MI DEPT/ENVIRONMENTA WMD Id: 473345 Site Id: MIK679614198	CENTER & FERRY ST	NNW 1/2 - 1 (0.664 mi.)	M47	56
<b>FERRY (14) STREET</b> WMD Id: 488793 Site Id: MIK612445361	<b>14 FERRY STREET</b>	<b>NNW 1/2 - 1 (0.684 mi.)</b>	<b>M57</b>	<b>87</b>
<b>FLEMING OIL CO</b> WMD Id: 443993 Site Id: MIG000038594	<b>30 WASHINGTON ST</b>	<b>NNE 1/2 - 1 (0.711 mi.)</b>	<b>N68</b>	<b>97</b>
TOWER MARINE WMD Id: 395969 Site Id: MID050951474	216 SAINT PETERS DR	N 1/2 - 1 (0.869 mi.)	Q80	109

## EXECUTIVE SUMMARY

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/18/2016 has revealed that there are 15 ECHO sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>DOUGLAS SITE</i>	<i>AMITY LANE</i>	<i>NW 1/8 - 1/4 (0.132 mi.)</i>	<i>1</i>	<i>8</i>
<i>RANDY'S WEST SHORE B</i>	<i>6765 ENTERPRISE DR</i>	<i>SSW 1/8 - 1/4 (0.213 mi.)</i>	<i>A4</i>	<i>10</i>
<i>DOUGLAS MARINE CORP</i>	<i>6780 ENTERPRISE DR.</i>	<i>SSW 1/4 - 1/2 (0.342 mi.)</i>	<i>C11</i>	<i>16</i>
<i>HANSEN MANUFACTURING</i>	<i>2948 BLUE STAR HWY</i>	<i>SW 1/4 - 1/2 (0.376 mi.)</i>	<i>16</i>	<i>27</i>
<i>HAWORTH INC</i>	<i>200 BLUE STAR HWY</i>	<i>NW 1/4 - 1/2 (0.418 mi.)</i>	<i>F20</i>	<i>34</i>
<i>CHASE MFG CO</i>	<i>281 CHASE RD</i>	<i>NW 1/4 - 1/2 (0.454 mi.)</i>	<i>F25</i>	<i>40</i>
<i>WEATHERVANE PARTNERS</i>	<i>102 BLUE STAR HWY</i>	<i>NNW 1/4 - 1/2 (0.487 mi.)</i>	<i>G27</i>	<i>42</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>METALLURGICAL HIGH V</i>	<i>471 WASHINGTON ST</i>	<i>NE 1/2 - 1 (0.524 mi.)</i>	<i>34</i>	<i>46</i>
<i>INTERURBAN TRANSIT A</i>	<i>100 WILEY ST</i>	<i>E 1/2 - 1 (0.554 mi.)</i>	<i>I36</i>	<i>49</i>
<i>MI DEPT/ENVIRONMENTA</i>	<i>CENTER &amp; FERRY ST</i>	<i>NNW 1/2 - 1 (0.665 mi.)</i>	<i>M49</i>	<i>63</i>
<i>MACATAWA BANK</i>	<i>14 FERRY ST</i>	<i>NNW 1/2 - 1 (0.684 mi.)</i>	<i>M60</i>	<i>91</i>
<i>KALAMAZOO LAKE WTP</i>	<i>22 BAYOU STREET</i>	<i>NE 1/2 - 1 (0.696 mi.)</i>	<i>O62</i>	<i>92</i>
<i>WEATHER VAN CLEANERS</i>	<i>102 WASHINGTON ST</i>	<i>NNE 1/2 - 1 (0.794 mi.)</i>	<i>70</i>	<i>99</i>
<i>TOWER MARINE</i>	<i>216 SAINT PETERS DR</i>	<i>N 1/2 - 1 (0.869 mi.)</i>	<i>Q75</i>	<i>103</i>
<i>TOWER MARINE-DOUGLAS</i>	<i>216 ST. PETERS DRIVE</i>	<i>N 1/2 - 1 (0.869 mi.)</i>	<i>Q76</i>	<i>107</i>

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	201 BLUE STAR MEM H	NNW 1/4 - 1/2 (0.415 mi.)	E18	32

## EXECUTIVE SUMMARY

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

MI RGA PART 201: The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

A review of the MI RGA PART 201 list, as provided by EDR, has revealed that there are 3 MI RGA PART 201 sites within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
VILLAGE OF DOUGLAS C Facility ID: 3000032	200 BLUE STAR HWY	NW 1/4 - 1/2 (0.418 mi.)	F23	37

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ALLEGAN CO RD COMMIS Facility ID: 30045	486 WATER ST	ENE 1/4 - 1/2 (0.493 mi.)	H31	44
JOHNSONS AMOCO SERVI Facility ID: 30013	BLUE STAR HWY & CENT	N 1/2 - 1 (0.590 mi.)	K38	49

MI RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

A review of the MI RGA LUST list, as provided by EDR, has revealed that there are 6 MI RGA LUST sites within approximately 1.25 miles of the target property.

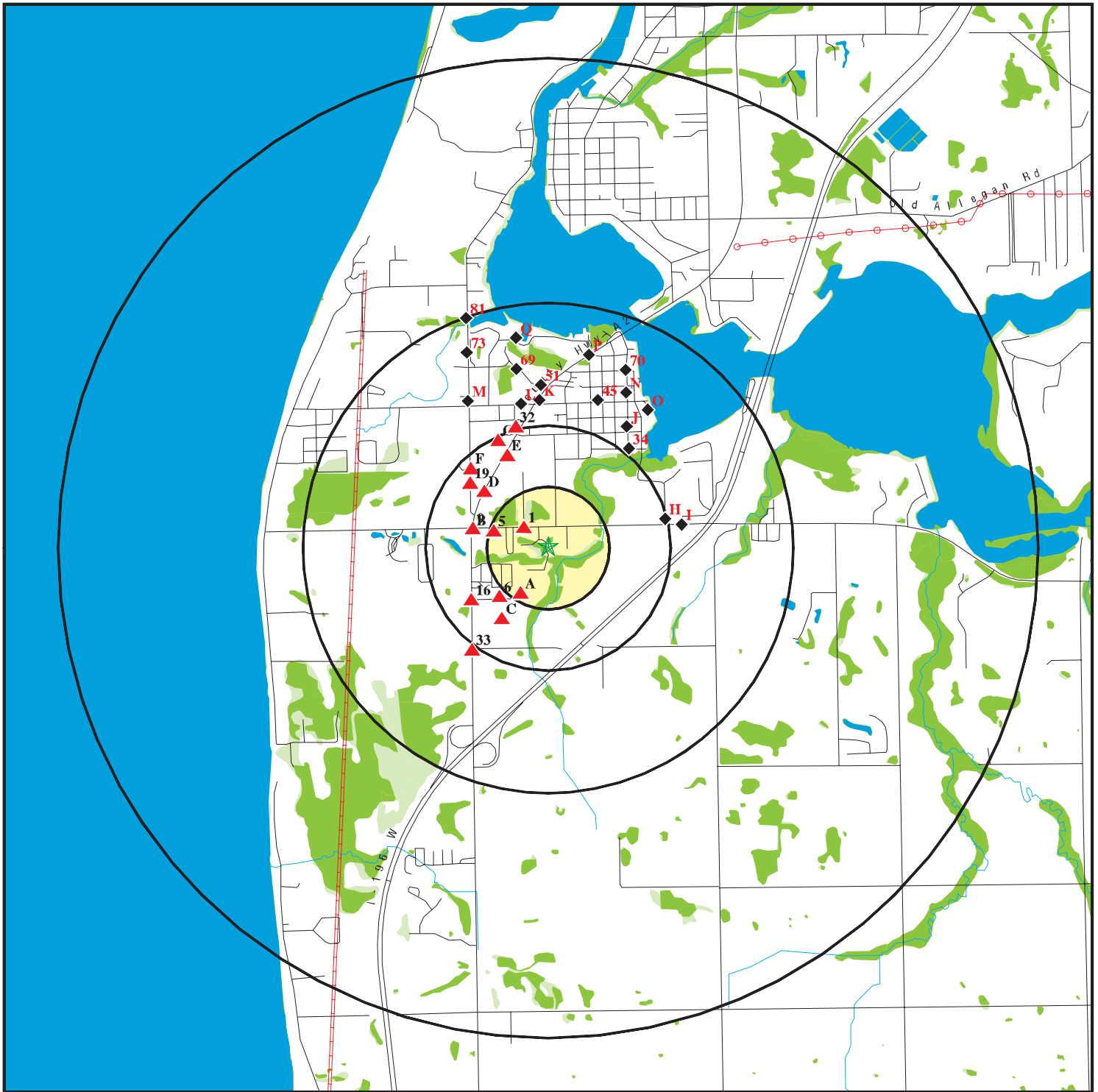
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BRANCH MAINTENANCE G Facility ID: 00006446 Facility ID: 0-006446 Facility ID: 6446	486 WATER ST	ENE 1/4 - 1/2 (0.493 mi.)	H29	43
BRANCH MAINTENANCE G Facility ID: 0-006446	486 WATER ST.	ENE 1/4 - 1/2 (0.493 mi.)	H30	44
DOUGLAS AMOCO 28876 Facility ID: 5-001810 Facility ID: 50001810	10 1/2 S WASHINGTON	NNE 1/2 - 1 (0.672 mi.)	N55	87
DOUGLAS SHELL Facility ID: 00004516 Facility ID: 4516 Facility ID: 0-004516	30 N WASHINGTON	NNE 1/2 - 1 (0.711 mi.)	N66	97
DOUGLAS SHELL Facility ID: 0-004516	30 N. WASHINGTON	NNE 1/2 - 1 (0.711 mi.)	N67	97
TOWER MARINE/KALAMAZ Facility ID: 0-017962	216 ST PETERS DR	N 1/2 - 1 (0.869 mi.)	Q77	107

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

<u>Site Name</u>	<u>Database(s)</u>
FERRYSBURG TERMINAL	MI LUST, MI INVENTORY
CHEVRON CHEMICAL COMPANY	SEMS-ARCHIVE
CHEVRON CHEMICAL COMPANY	SEMS-ARCHIVE
LEIGHTON TOWNSHIP DUMPSITE	SEMS-ARCHIVE

# OVERVIEW MAP - 4811515.1S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Pipelines
- National Wetland Inventory
- State Wetlands

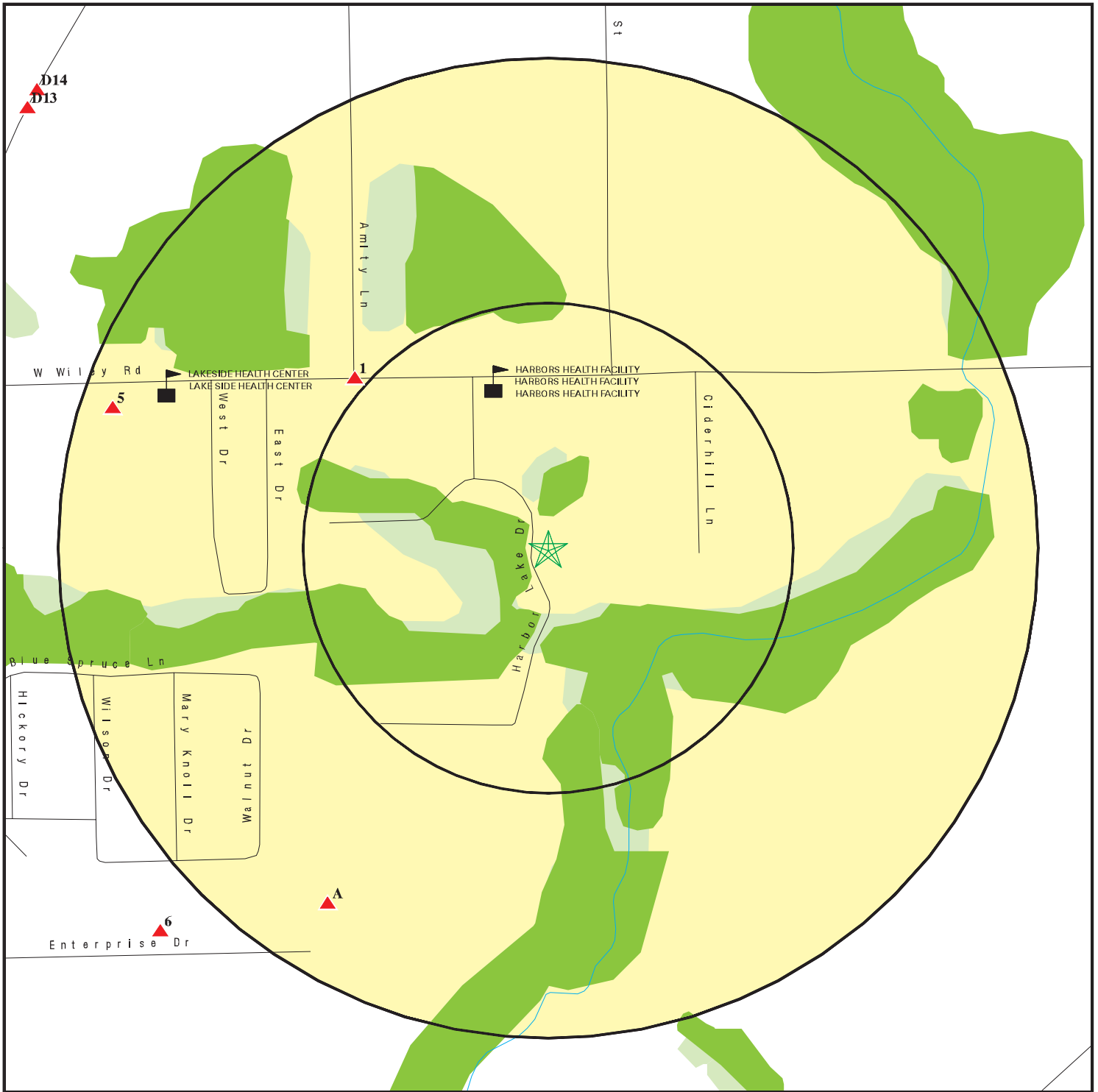


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: KLSWA South  
 ADDRESS: Harbor Lake Drive  
 Douglas MI 49406  
 LAT/LONG: 42.635097 / 86.205793

CLIENT: Fleis and VandenBrink Eng.  
 CONTACT: Amber Jane Schneider  
 INQUIRY #: 4811515.1s  
 DATE: December 20, 2016 3:01 pm

# DETAIL MAP - 4811515.1S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites

0                      1/16                      1/8                      1/4 Miles

- ▨ Indian Reservations BIA
- National Wetland Inventory
- State Wetlands

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: KLSWA South  
 ADDRESS: Harbor Lake Drive  
 Douglas MI 49406  
 LAT/LONG: 42.635097 / 86.205793

CLIENT: Fleis and VandenBrink Eng.  
 CONTACT: Amber Jane Schneider  
 INQUIRY #: 4811515.1s  
 DATE: December 20, 2016 3:01 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.250		0	0	0	0	0	0
Proposed NPL	1.250		0	0	0	0	0	0
NPL LIENS	1.250		0	0	0	0	0	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.250		0	0	0	0	0	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	1.250		0	0	0	0	0	0
SEMS	1.250		0	0	1	0	0	1
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	1.250		0	0	0	1	0	1
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.250		0	0	0	0	0	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	1.250		0	0	0	0	0	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	1.250		0	0	0	0	0	0
RCRA-SQG	1.250		0	0	1	2	0	3
RCRA-CESQG	1.250		0	1	1	1	0	3
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	1.250		0	0	0	0	0	0
US ENG CONTROLS	1.250		0	0	0	0	0	0
US INST CONTROL	1.250		0	0	0	0	0	0
<b><i>Federal ERNS list</i></b>								
ERNS	1.250		0	0	0	1	0	1
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
MI SHWS	1.250		0	0	0	0	0	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
MI SWF/LF	1.250		0	0	0	0	0	0
<b><i>State and tribal leaking storage tank lists</i></b>								
MI LUST	1.250		0	0	1	3	0	4
INDIAN LUST	1.250		0	0	0	0	0	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	1.250		0	0	0	0	0	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MI UST	1.250		0	0	2	6	0	8
MI AST	1.250		0	0	2	1	0	3
INDIAN UST	1.250		0	0	0	0	0	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
MI AUL	1.250		0	0	0	2	0	2
<b><i>State and tribal voluntary cleanup sites</i></b>								
INDIAN VCP	1.250		0	0	0	0	0	0
<b><i>State and tribal Brownfields sites</i></b>								
MI BROWNFIELDS	1.250		0	0	0	0	0	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	1.250		0	0	1	1	0	2
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
MI SWRCY	1.250		0	0	0	0	0	0
MI HIST LF	1.250		0	0	0	0	0	0
INDIAN ODI	1.250		0	0	0	0	0	0
ODI	1.250		0	0	0	0	0	0
DEBRIS REGION 9	1.250		0	0	0	0	0	0
IHS OPEN DUMPS	1.250		0	0	0	0	0	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	1.250		0	0	0	0	0	0
MI INVENTORY	1.250		0	0	2	9	0	11
MI PART 201	1.250		0	0	1	0	0	1
MI CDL	1.250		0	0	0	0	0	0
MI DEL PART 201	1.250		0	0	0	0	0	0
US CDL	1.250		0	0	0	0	0	0
<b><i>Local Land Records</i></b>								
MI LIENS	1.250		0	0	0	0	0	0
LIENS 2	1.250		0	0	0	0	0	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	1.250		0	0	0	0	0	0
MI SPILLS	1.250		0	0	0	0	0	0
<b><i>Other Ascertainable Records</i></b>								
RCRA NonGen / NLR	1.250		0	0	2	4	0	6
FUDS	1.250		0	0	0	0	0	0
DOD	1.250		0	0	0	0	0	0
SCRD DRYCLEANERS	1.250		0	0	0	0	0	0



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	1.250		0	0	0	0	0	0
EPA WATCH LIST	1.250		0	0	0	0	0	0
2020 COR ACTION	1.250		0	0	0	0	0	0
TSCA	1.250		0	0	0	0	0	0
TRIS	1.250		0	0	0	0	0	0
SSTS	1.250		0	0	0	0	0	0
ROD	1.250		0	0	0	0	0	0
RMP	1.250		0	0	0	0	0	0
RAATS	1.250		0	0	0	0	0	0
PRP	1.250		0	0	1	0	0	1
PADS	1.250		0	0	0	0	0	0
ICIS	1.250		0	0	1	0	0	1
FTTS	1.250		0	0	0	0	0	0
MLTS	1.250		0	0	0	0	0	0
COAL ASH DOE	1.250		0	0	0	0	0	0
COAL ASH EPA	1.250		0	0	0	0	0	0
PCB TRANSFORMER	1.250		0	0	0	0	0	0
RADINFO	1.250		0	0	0	0	0	0
HIST FTTS	1.250		0	0	0	0	0	0
DOT OPS	1.250		0	0	0	0	0	0
CONSENT	1.250		0	0	0	0	0	0
INDIAN RESERV	1.250		0	0	0	0	0	0
FUSRAP	1.250		0	0	0	0	0	0
UMTRA	1.250		0	0	0	0	0	0
LEAD SMELTERS	1.250		0	0	0	0	0	0
US AIRS	1.250		0	0	0	0	0	0
US MINES	1.250		0	0	0	0	0	0
FINDS	1.250		0	2	6	10	0	18
DOCKET HWC	1.250		0	0	0	0	0	0
UXO	1.250		0	0	0	0	0	0
MI AIRS	1.250		0	0	1	0	0	1
MI BEA	1.250		0	0	1	4	0	5
MI COAL ASH	1.250		0	0	0	0	0	0
MI DRYCLEANERS	1.250		0	0	0	0	0	0
MI LEAD	1.250		0	0	0	0	0	0
PA MANIFEST	1.250		0	0	1	2	0	3
WI MANIFEST	1.250		0	0	1	0	0	1
MI NPDES	1.250		0	0	1	3	0	4
MI UIC	1.250		0	0	0	0	0	0
MI WDS	1.250		0	2	5	6	0	13
ABANDONED MINES	1.250		0	0	0	0	0	0
FUELS PROGRAM	1.250		0	0	0	0	0	0
ECHO	1.250		0	2	5	8	0	15

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.250		0	0	0	0	0	0
EDR Hist Auto	1.250		0	0	1	0	0	1
EDR Hist Cleaner	1.250		0	0	0	0	0	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
MI RGA PART 201	1.250		0	0	2	1	0	3
MI RGA LF	1.250		0	0	0	0	0	0
MI RGA LUST	1.250		0	0	2	4	0	6
- Totals --		0	0	7	42	69	0	118

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation		Database(s)	EDR ID Number EPA ID Number
--	--	-------------	--------------------------------

<b>1</b> <b>NW</b> <b>1/8-1/4</b> <b>0.132 mi.</b> <b>695 ft.</b>	<b>DOUGLAS SITE</b> <b>AMITY LANE</b> <b>DOUGLAS, MI 49406</b>	<b>FINDS</b> <b>ECHO</b>	<b>1016274292</b> <b>N/A</b>
---	--	-----------------------------	---------------------------------

**Relative:**  
**Higher**

**FINDS:**

Registry ID: 110008452539

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**Actual:**  
**633 ft.**

**ECHO:**

Envid: 1016274292  
 Registry ID: 110008452539  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110008452539](http://echo.epa.gov/detailed_facility_report?fid=110008452539)

<b>A2</b> <b>SSW</b> <b>1/8-1/4</b> <b>0.213 mi.</b> <b>1124 ft.</b>	<b>RANDY'S WEST SHORE BOAT REPAIR INC</b> <b>6765 ENTERPRISE DR</b> <b>DOUGLAS, MI 49406</b>  <b>Site 1 of 3 in cluster A</b>	<b>RCRA-CESQG</b>	<b>1007202883</b> <b>MIK369822291</b>
--	---	-------------------	--

**Relative:**  
**Higher**

**RCRA-CESQG:**

Date form received by agency: 12/29/2003  
 Facility name: RANDY'S WEST SHORE BOAT REPAIR INC  
 Facility address: 6765 ENTERPRISE DR  
 DOUGLAS, MI 49406  
 EPA ID: MIK369822291  
 Mailing address: PO BOX 2740  
 DOUGLAS, MI 49406  
 Contact: RANDY CRUM  
 Contact address: 6765 ENTERPRISE DR  
 DOUGLAS, MI 49406  
 Contact country: US  
 Contact telephone: (269) 857-2181  
 Contact email: Not reported  
 EPA Region: 05  
 Classification: Conditionally Exempt Small Quantity Generator  
 Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

**Actual:**  
**637 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANDY'S WEST SHORE BOAT REPAIR INC (Continued)**

**1007202883**

hazardous waste

Owner/Operator Summary:

Owner/operator name: JODIE L. MCGEE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 02/01/2003  
Owner/Op end date: Not reported

Owner/operator name: RANDOLPH S. CRUM  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 02/01/2003  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

**A3**  
**SSW**  
**1/8-1/4**  
**0.213 mi.**  
**1124 ft.**

**RANDY'S WEST SHORE BOAT REPAIR INC**  
**6765 ENTERPRISE DR**  
**DOUGLAS, MI 49406**  
**Site 2 of 3 in cluster A**

**MI WDS S111975603**  
**N/A**

**Relative:**  
**Higher**

WDS:  
Site Id: MIK369822291  
WMD Id: 476841  
Site Specific Name: RANDY'S WEST SHORE BOAT REPAIR INC  
Mailing Address: PO BOX 2740  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

**Actual:**  
**637 ft.**

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Elevation	Site	Database(s)	EPA ID Number

---

<b>A4</b> <b>SSW</b> <b>1/8-1/4</b> <b>0.213 mi.</b> <b>1124 ft.</b>	<b>RANDY'S WEST SHORE BOAT REPAIR INC</b> <b>6765 ENTERPRISE DR</b> <b>DOUGLAS, MI 49406</b>  <b>Site 3 of 3 in cluster A</b>	<b>FINDS</b> <b>ECHO</b>	<b>1007217879</b> <b>N/A</b>
--	---	-----------------------------	---------------------------------

**Relative:**  
**Higher**

FINDS:

Registry ID: 110016734060

**Actual:**  
**637 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1007217879  
 Registry ID: 110016734060  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110016734060](http://echo.epa.gov/detailed_facility_report?fid=110016734060)

<b>5</b> <b>WNW</b> <b>1/8-1/4</b> <b>0.234 mi.</b> <b>1233 ft.</b>	<b>DOUGLAS SCHOOLS</b> <b>415 WILEY ST</b> <b>DOUGLAS, MI 49406</b>	<b>MI WDS</b>	<b>S111950451</b> <b>N/A</b>
---	---	---------------	---------------------------------

**Relative:**  
**Higher**

WDS:

Site Id: MIG000061161  
 WMD Id: 422272  
 Site Specific Name: DOUGLAS SCHOOLS  
 Mailing Address: 415 WILEY  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**Actual:**  
**642 ft.**

<b>6</b> <b>SW</b> <b>1/4-1/2</b> <b>0.278 mi.</b> <b>1467 ft.</b>	<b>ENTERPRISE HINGE</b> <b>6779 ENTERPRISE DR</b> <b>DOUGLAS, MI 49406</b>	<b>MI WDS</b>	<b>S111961826</b> <b>N/A</b>
--	--	---------------	---------------------------------

**Relative:**  
**Higher**

WDS:

Site Id: MIG000034927  
 WMD Id: 446016  
 Site Specific Name: ENTERPRISE HINGE  
 Mailing Address: 6779 ENTERPRISE ST  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**Actual:**  
**642 ft.**

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**B7**  
**West**  
**1/4-1/2**  
**0.312 mi.**  
**1648 ft.**

**2987 BLUE STAR HIGHWAY**  
**2987 BLUE STAR HIGHWAY**  
**DOUGLAS, MI 49408**

**US BROWNFIELDS** **1016361889**  
**FINDS** **N/A**

**Site 1 of 2 in cluster B**

**Relative:**  
**Higher**

US BROWNFIELDS:

**Actual:**  
**650 ft.**

Recipient name: Macatawa Area Coordinating Council  
 Grant type: Assessment  
 Property name: 2987 BLUE STAR HIGHWAY  
 Property #: 03-59-021-015-00  
 Parcel size: 1.9  
 Property Description: Property historically used as a boat yard. Commercial office building constructed in approximately 2004.  
 Latitude: 42.6327297  
 Longitude: -86.21188710000001  
 HCM label: Address Matching-House Number  
 Map scale: Not reported  
 Point of reference: Entrance Point of a Facility or Station  
 Datum: North American Datum of 1983  
 ACRES property ID: 135794  
 Start date: Not reported  
 Completed date: Not reported  
 Acres cleaned up: Not reported  
 Cleanup funding: Not reported  
 Cleanup funding source: Not reported  
 Assessment funding: 2200  
 Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement  
 Redevelopment funding: Not reported  
 Redev. funding source: Not reported  
 Redev. funding entity name: Not reported  
 Redevelopment start date: Not reported  
 Assessment funding entity: EPA  
 Cleanup funding entity: Not reported  
 Grant type: Hazardous  
 Accomplishment type: Phase I Environmental Assessment  
 Accomplishment count: 0  
 Cooperative agreement #: 00E43601  
 Ownership entity: Private  
 Current owner: Woodland Douglas Partners LLC  
 Did owner change: N  
 Cleanup required: No  
 Video available: No  
 Photo available: Yes  
 Institutional controls required: U  
 IC Category proprietary controls: Not reported  
 IC cat. info. devices: Not reported  
 IC cat. gov. controls: Not reported  
 IC cat. enforcement permit tools: Not reported  
 IC in place date: Not reported  
 IC in place: No  
 State/tribal program date: Not reported  
 State/tribal program ID: Not reported  
 State/tribal NFA date: Not reported  
 Air contaminated: Not reported  
 Air cleaned: Not reported  
 Asbestos found: Not reported  
 Asbestos cleaned: Not reported  
 Controlled substance found: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**2987 BLUE STAR HIGHWAY (Continued)**

**1016361889**

Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	1.9
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	1.9
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**2987 BLUE STAR HIGHWAY (Continued)**

**1016361889**

Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	78
% Below Poverty:	6.6%
# Low Income:	163
% Low Income:	3.1%
Meidan Income:	2623
# Unemployed:	7
% Unemployed:	73.1%
# Vacant Housing:	168
% Vacant Housing:	3.1%

**FINDS:**

Registry ID: 110045012393

**Environmental Interest/Information System**

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

**B8**  
**WNW**  
**1/4-1/2**  
**0.317 mi.**  
**1676 ft.**

**OCCUPANT**  
**3479 BLUE STAR HWY**  
**FENVILLE, MI 49419**  
**Site 2 of 2 in cluster B**

**MI AST A100205703**  
**N/A**

**Relative:**  
**Higher**

AST:  
 Facility ID: 91003007  
 Facility Phone: () -  
 Owner Name: OCCUPANT  
 Owner Address: 3479 BLUE STAR HWY  
 Owner City,St,Zip: FENVILLE, MI 49419  
 Owner County: USA  
 Owner Contact: Not reported  
 Owner Telephone: (269) 751-5171  
 District: Region 3 - Kalamazoo District Office  
 Contact: Richard Quade  
 List Status: CLOSED  
 Date of Collection: 01/11/2001  
 Accuracy: 100 FEET  
 Source: STATE OF MICHIGAN

**Actual:**  
**650 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OCCUPANT (Continued)**

**A100205703**

Point Line Area: POINT  
Description Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Horizontal Datum: NAD83  
Latitude: 42.6719330  
Longitude: -86.188872

Tank Id: 1  
Tank Status: Removed from Premises  
Capacity (in gallons): Not reported  
Installation Date: Not reported  
Substance Stored: FL  
Removed/Closed Date: 09/30/1991

Tank Id: 2  
Tank Status: Removed from Premises  
Capacity (in gallons): Not reported  
Installation Date: Not reported  
Substance Stored: FL  
Removed/Closed Date: 09/30/1991

Tank Id: 3  
Tank Status: Removed from Premises  
Capacity (in gallons): Not reported  
Installation Date: Not reported  
Substance Stored: FL  
Removed/Closed Date: 09/30/1991

**9**  
**WNW**  
**1/4-1/2**  
**0.318 mi.**  
**1679 ft.**

**BLUE STAR (6473) HIGHWAY**  
**6473 BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49406**

**MI INVENTORY S114032927**  
**N/A**

**Relative:**  
**Higher**

INVENTORY:  
Bea Number: 200701058PL  
Township: Saugatuck  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Actual:**  
**650 ft.**

**C10**  
**SSW**  
**1/4-1/2**  
**0.342 mi.**  
**1806 ft.**

**DOUGLAS MARINE CORP**  
**6780 ENTERPRISE DR**  
**DOUGLAS, MI 49406**

**WI MANIFEST S117667344**  
**N/A**

**Site 1 of 3 in cluster C**

**Relative:**  
**Higher**

WI MANIFEST:  
Year: 2015  
EPA ID: MID982633117  
FID: Not reported  
ACT Code: 209  
ACT Status: A

**Actual:**  
**641 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**S117667344**

ACT Code 1: 209  
ACT Name: HW Handler (Out-of-State) - TSD/Generator  
Contact Title: Not reported  
Contact Name: Not reported  
Contact Address: Not reported  
Contact City/State/Zip: Not reported  
Contact Telephone: Not reported  
Contact EMail Address: Not reported

Shipped:

Year: 2015  
Manifest Doc Id: 002654428GBF  
Copy Type: TSDCOPY  
Gen EPA ID: MID982633117  
Gen Date: 04/01/2015  
GEN Copy Revd Date: Not reported  
TSD Date: 04/07/2015  
TSD EPA ID: WID990829475  
TSD Copy Revd Date: 05/14/2015

Year: 2015  
Manifest Doc Id: 002655820GBF  
Copy Type: TSDCOPY  
Gen EPA ID: MID982633117  
Gen Date: 09/24/2015  
GEN Copy Revd Date: Not reported  
TSD Date: 10/01/2015  
TSD EPA ID: WID990829475  
TSD Copy Revd Date: 11/13/2015

Year: 2014  
EPA ID: MID982633117  
FID: Not reported  
ACT Code: 209  
ACT Status: A  
ACT Code 1: 209  
ACT Name: HW Handler (Out-of-State) - TSD/Generator  
Contact Title: Not reported  
Contact Name: Not reported  
Contact Address: Not reported  
Contact City/State/Zip: Not reported  
Contact Telephone: Not reported  
Contact EMail Address: Not reported

Shipped:

Year: 2014  
Manifest Doc Id: 002398620GBF  
Copy Type: TSDCOPY  
Gen EPA ID: MID982633117  
Gen Date: 06/17/2014  
GEN Copy Revd Date: Not reported  
TSD Date: 06/23/2014  
TSD EPA ID: WID990829475  
TSD Copy Revd Date: 08/12/2014

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**C11**  
**SSW**  
**1/4-1/2**  
**0.342 mi.**  
**1806 ft.**

**DOUGLAS MARINE CORP**  
**6780 ENTERPRISE DR.**  
**DOUGLAS, MI 49406**

**RCRA-SQG** **1000234793**  
**FINDS** **MID982633117**  
**ECHO**

**Site 2 of 3 in cluster C**

**Relative:**  
**Higher**

RCRA-SQG:

**Actual:**  
**641 ft.**

Date form received by agency: 06/16/2015  
Facility name: DOUGLAS MARINE CORP  
Facility address: 6780 ENTERPRISE DR  
DOUGLAS, MI 49406  
EPA ID: MID982633117  
Mailing address: PO BOX 819  
DOUGLAS, MI 49406  
Contact: PETER HLEDIN  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: (269) 857-1764  
Contact email: Not reported  
EPA Region: 05  
Land type: Private  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: PETER HLEDIN  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 09/01/1988  
Owner/Op end date: Not reported

Owner/operator name: PETER HLEDIN  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 09/01/1988  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/24/2014  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 11/05/2013  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/18/2012  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/09/2012  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

. Waste code: F003  
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 04/21/2011  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/17/2009  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 12/31/2008  
Site name: DOUGLAS MARINE CORP  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2008  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

Date form received by agency: 02/18/2008  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/23/2007  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/12/2006  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2006  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

Date form received by agency: 03/26/2004  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2004  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

Date form received by agency: 03/03/2003  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2002  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator

Date form received by agency: 02/05/2002  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/16/2000  
Site name: DOUGLES MARINE  
Classification: Large Quantity Generator

Date form received by agency: 12/16/1998  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 05/17/1989  
Site name: DOUGLAS MARINE CORP  
Classification: Large Quantity Generator  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 9130.3

Waste code: F003  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 9130.3

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 03/29/2012  
Date achieved compliance: 05/02/2012  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/04/2012  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 07/11/2006  
Date achieved compliance: 08/14/2006  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/12/2006  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 07/11/2006  
Date achieved compliance: 08/14/2006  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/12/2006  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 01/11/2000  
Date achieved compliance: 03/10/2000  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 01/11/2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 01/11/2000  
Date achieved compliance: 03/10/2000  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 01/11/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 12/12/1994  
Date achieved compliance: 01/17/1995  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/12/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:  
Evaluation date: 03/29/2012  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 05/02/2012  
Evaluation lead agency: State

Evaluation date: 07/11/2006  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 08/14/2006  
Evaluation lead agency: State

Evaluation date: 07/11/2006  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 08/14/2006  
Evaluation lead agency: State

Evaluation date: 07/11/2006  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**1000234793**

Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 01/11/2000  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 03/10/2000  
Evaluation lead agency: State

Evaluation date: 01/11/2000  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 03/10/2000  
Evaluation lead agency: State

Evaluation date: 12/11/1998  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/28/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/28/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 01/17/1995  
Evaluation lead agency: State

**FINDS:**

Registry ID: 110002118903

**Environmental Interest/Information System**

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

**ECHO:**

Envid: 1000234793  
Registry ID: 110002118903  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110002118903](http://echo.epa.gov/detailed_facility_report?fid=110002118903)

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**C12**  
**SSW**  
**1/4-1/2**  
**0.342 mi.**  
**1806 ft.**

**DOUGLAS MARINE CORP**  
**6780 ENTERPRISE DRIVE**  
**DOUGLAS, MI 49406**

**Site 3 of 3 in cluster C**

**MI AIRS** **S107700138**  
**MI NPDES** **N/A**  
**MI WDS**

**Relative:**  
**Higher**

AIRES:

**Actual:**  
**641 ft.**

State Registration Number:	N1263	
Naics Code:	Not reported	
Contact Email:	Not reported	
Contact Name:	PETER HLEDIN	
Contact Phone:	2698574308	
Contact Address:	(same as site address)	
Contact City,St,Zip:	Not reported	
Permit Number:	69-86B	
Date Received:	02/18/2005	
Application Reason:	CHANGE IN MATERIAL USE	
Record Type:	Not reported	
State County FIPS:	Not reported	
Facility Category:	Not reported	
SIC Primary:	Not reported	
Tribal Code:	Not reported	
Facility Status:	Not reported	
Supplemental Location Text:	Not reported	
Business Name:	Not reported	
Principal Product:	Not reported	
Principal Product Description:	Not reported	
UTM Zone (Geo Coordinates Universal Transverse Mercator System):		Not reported
UTM Horizontal Coord:	Not reported	
UTM Vertical Coord:	Not reported	
Mailing Name:	Not reported	
Mailing Contact Person:	Not reported	
Mailing Street:	Not reported	
Mailing City:	Not reported	
Mailing State:	Not reported	
Mailing Zip:	Not reported	
Mailing Zip 4 Extension:	Not reported	
Compliance Person:	Not reported	
Compliance Area Code:	Not reported	
Compliance Phone Number:	Not reported	
Emission Inventory Contact Person:	Not reported	
EI Contact Area Code:	Not reported	
EI Contact Phone Number:	Not reported	
Permit Contact Person:	Not reported	
Permit Contact Person Area Code:	Not reported	
Permit Contact Person Phone Number:	Not reported	
Federal Employer Id Number:	Not reported	
# Of Employees:	Not reported	
Reporting Year:	Not reported	
Date Record Was Created:	Not reported	

MI NPDES:

Permit Number:	MIS111032
Permittee PO Box:	N
Permittee Email:	dmskater@frontier.com
Issue Date:	08/24/2011
Effective Date:	08/24/2011
Expiration Date:	04/01/2016
Permittee Name:	Douglas Marine Corporation

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS MARINE CORP (Continued)**

**S107700138**

Permittee Address: 6780 Enterprise Drive  
 Permittee Addr2: Not reported  
 Permittee City,St,Zip: Douglas, MI 49406  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Douglas Marine Corp  
 Latitude: 42.627777  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.214722  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: 4050003  
 Permit Status: Extended  
 COC Permit Category: SW-Industrial CY1  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Janelle Hohm  
 DEQ Permit Compliance Manager Email: hohmj@michigan.gov

**WDS:**

Site Id: MID982633117  
 WMD Id: 401549  
 Site Specific Name: DOUGLAS MARINE CORP  
 Mailing Address: PO BOX 819  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**D13  
 NW  
 1/4-1/2  
 0.348 mi.  
 1838 ft.**

**DOUGLAS  
 2935 BLUE STAR HWY  
 DOUGLAS, MI 49419  
 Site 1 of 3 in cluster D**

**MI AST A100001270  
 N/A**

**Relative:  
 Higher**

**AST:**

Facility ID: 92003349  
 Facility Phone: Not reported  
 Owner Name: DOUGLAS  
 Owner Address: 2935 BLUE STAR HWY  
 Owner City,St,Zip: DOUGLAS, MI 49419  
 Owner County: USA  
 Owner Contact: Not reported  
 Owner Telephone: (269) 751-5171  
 District: Region 3 - Kalamazoo District Office  
 Contact: Pam Schut  
 List Status: CLOSED  
 Date of Collection: Not reported  
 Accuracy: Not reported  
 Source: Not reported  
 Point Line Area: Not reported  
 Description Category: Not reported  
 Method of Collection: Not reported  
 Horizontal Datum: Not reported  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:  
 645 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS (Continued)**

**A100001270**

Tank Id: 1  
Tank Status: Removed from Premises  
Capacity (in gallons): 30000  
Installation Date: 11/23/1994  
Substance Stored: LPG  
Removed/Closed Date: 07/01/2007

**D14  
NW  
1/4-1/2  
0.350 mi.  
1850 ft.**

**BLUE STAR (2948) HIGHWAY  
2948 BLUE STAR HIGHWAY  
DOUGLAS, MI 49406**

**MI BEA S105541542  
MI WDS N/A**

**Site 2 of 3 in cluster D**

**Relative:  
Higher**

BEA:  
Secondary Address: Not reported  
BEA Number: 547  
District: Kalamazoo  
Date Received: 07/02/2002  
Submitter Name: Bank One, Managed Assets  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: ducharmm  
Division Assigned: RRD

**Actual:  
644 ft.**

Secondary Address: Not reported  
BEA Number: 750  
District: Kalamazoo  
Date Received: 05/26/2004  
Submitter Name: Blue Star Properties LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: ducharmm  
Division Assigned: RRD

**WDS:**

Site Id: MID103472577  
WMD Id: 398190  
Site Specific Name: HANSEN MANUFACTURING  
Mailing Address: 2948 BLUE STAR HWY  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

D15  
WNW  
1/4-1/2  
0.364 mi.  
1922 ft.

KALICO KITCHEN LTD  
312 FERRY ST  
DOUGLAS, MI 49406  
  
Site 3 of 3 in cluster D

MI LUST U004225624  
MI UST N/A

Relative:  
Higher

LUST:

Actual:  
650 ft.

Facility ID: 00042503  
Source: STATE OF MICHIGAN  
Owner Name: Catherine D Wilt  
Owner Address: PO Box 919  
Owner City,St,Zip: Douglas, MI 49406  
Owner Contact: Not reported  
Owner Phone: (616) 218-6340  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Kalico Kitchen Ltd  
Latitude: 42.63799  
Longitude: -86.21177  
Date of Collection: 01/27/2015  
Method of Collection: Address Matching-House Number  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
  
Leak Number: C-0042-14  
Release Date: 05/07/2014  
Substance Released: Mixture,Mixture,Mixture  
Release Status: Open  
Release Closed Date: Not reported

UST:

Facility ID: 00042503  
Facility Type: CLOSED  
Owner Name: CATHERINE D WILT  
Owner Address: PO BOX 919  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 218-6340  
Contact: Katherine Wilt  
Contact Phone: (616) 218-6346  
Date of Collection: 01/27/2015  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.63799  
Longitude: -86.21177

Tank ID: 1  
Tank Status: Removed from Ground  
Capacity: 5000  
Product: Not reported  
Install Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KALICO KITCHEN LTD (Continued)**

**U004225624**

Remove Date: 05/20/2014  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Unknown  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 5000  
Product: Not reported  
Install Date: Not reported  
Remove Date: 06/20/2014  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Unknown  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**  
Capacity: 5000  
Product: Not reported  
Install Date: Not reported  
Remove Date: 05/20/2014  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Unknown  
Impressed Device: No

16  
SW  
1/4-1/2  
0.376 mi.  
1986 ft.

**HANSEN MANUFACTURING**  
**2948 BLUE STAR HWY**  
**DOUGLAS, MI 49406**

**RCRA NonGen / NLR** 1000379754  
**FINDS** MID103472577  
**ECHO**

**Relative:**  
**Higher**

RCRA NonGen / NLR:

**Actual:**  
**645 ft.**

Date form received by agency: 12/31/2001  
Facility name: HANSEN MANUFACTURING  
Facility address: 2948 BLUE STAR HWY  
DOUGLAS, MI 49406  
EPA ID: MID103472577  
Contact: JOHN WILLIAMS  
Contact address: 2948 BLUE STAR HWY  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (616) 857-1731  
Contact email: Not reported  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANSEN MANUFACTURING (Continued)**

**1000379754**

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/2002  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/26/1993  
Site name: HANSEN MANUFACTURING  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/05/1987  
Site name: HANSEN MANUFACTURING  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANSEN MANUFACTURING (Continued)**

**1000379754**

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 09/29/1997  
Date achieved compliance: 11/24/1997  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/29/1997  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: LDR - General  
Date violation determined: 09/29/1997  
Date achieved compliance: 03/30/1998  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/29/1997  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 09/29/1997  
Date achieved compliance: 11/24/1997  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/29/1997  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/29/1997  
Date achieved compliance: 11/24/1997  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 09/29/1997  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANSEN MANUFACTURING (Continued)**

**1000379754**

Evaluation Action Summary:

Evaluation date: 09/23/1997  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 11/24/1997  
Evaluation lead agency: State

Evaluation date: 09/23/1997  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: LDR - General  
Date achieved compliance: 03/30/1998  
Evaluation lead agency: State

Evaluation date: 09/23/1997  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 11/24/1997  
Evaluation lead agency: State

Evaluation date: 09/23/1997  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 11/24/1997  
Evaluation lead agency: State

FINDS:

Registry ID: 110003610272

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000379754  
Registry ID: 110003610272  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003610272](http://echo.epa.gov/detailed_facility_report?fid=110003610272)

**E17**  
**NNW**  
**1/4-1/2**  
**0.415 mi.**  
**2193 ft.**

**JOHN BARNHILL**  
**201 BLUE STAR HWY**  
**DOUGLAS, MI 49406**  
**Site 1 of 2 in cluster E**

**MI UST** **U000249147**  
**N/A**

**Relative:**  
**Higher**

UST:  
Facility ID: 00017264  
Facility Type: CLOSED  
Owner Name: JOHN BARNHILL  
Owner Address: 201 BLUE STAR HWY  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported

**Actual:**  
**646 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHN BARNHILL (Continued)**

**U000249147**

Owner Phone: (616) 857-7231  
Contact: JOHN BARNHILL  
Contact Phone: (616) 857-7231  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64371  
Longitude: -86.20715

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status: Removed from Ground**  
Capacity: 3000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 4

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHN BARNHILL (Continued)**

**U000249147**

**Tank Status:** Removed from Ground  
Capacity: 2000  
Product: Gasoline  
Install Date: 05/05/1954  
Remove Date: 10/01/1988  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**E18  
NNW  
1/4-1/2  
0.415 mi.  
2193 ft.**

**201 BLUE STAR MEM HWY  
DOUGLAS, MI 49406**

**EDR Hist Auto 1015304464  
N/A**

**Site 2 of 2 in cluster E**

**Relative:  
Higher**

EDR Historical Auto Stations:

Name: BARNHILLS MOBIL  
Year: 1999  
Address: 201 BLUE STAR MEM HWY

**Actual:  
646 ft.**

**19  
NW  
1/4-1/2  
0.416 mi.  
2195 ft.**

**CHASE MFG CO  
281 CHASE RD  
DOUGLAS, MI 49406**

**SEMS 1000379090  
PRP MID980409890**

**Relative:  
Higher**

SEMS:

Site ID: 502730  
EPA ID: MID980409890  
Federal Facility: N  
NPL: Not on the NPL  
Non NPL Status: Referred to Removal - NFRAP

**Actual:  
646 ft.**

**Following information was gathered from the prior CERCLIS update completed in 10/2013:**

Site ID: 0502730  
EPA ID: MID980409890  
Facility County: ALLEGAN  
Short Name: CHASE MFG CO  
Congressional District: 04  
IFMS ID: 059C  
SMSA Number: Not reported  
USGC Hydro Unit: 04050003  
Federal Facility: Not a Federal Facility  
DMNSN Number: 0.00000  
Site Orphan Flag: N  
RCRA ID: Not reported  
USGS Quadrangle: Not reported  
Site Init By Prog: Not reported  
NFRAP Flag: Not reported  
Parent ID: Not reported  
RST Code: P  
EPA Region: 05  
Classification: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1000379090**

Site Settings Code: Not reported  
NPL Status: Not on the NPL  
DMNSN Unit Code: Not reported  
RBRAC Code: Not reported  
RResp Fed Agency Code: Not reported  
Non NPL Status: Referred to Removal - NFRAP  
Non NPL Status Date: 01/27/00  
Site Fips Code: 26005  
CC Concurrence Date: / /  
CC Concurrence FY: Not reported  
Alias EPA ID: Not reported  
Site FUDS Flag: Not reported

Alias Comments: Not reported  
Site Description: Not reported

**CERCLIS Assessment History:**

Action Code: 001  
Action: DISCOVERY  
Date Started: / /  
Date Completed: 12/11/80  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 06/28/85  
Priority Level: Higher priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: SITE INSPECTION  
Date Started: / /  
Date Completed: 09/30/86  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: UNILATERAL ADMIN ORDER  
Date Started: / /  
Date Completed: 10/08/87

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1000379090**

Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: Federal Enforcement  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL  
Date Started: 10/08/87  
Date Completed: 05/13/88  
Priority Level: Cleaned up  
Operable Unit: SITEWIDE  
Primary Responsibility: Responsible Party  
Planning Status: Primary  
Urgency Indicator: Time Critical  
Action Anomaly: Not reported

Action Code: 001  
Action: EXPANDED SITE INSPECTION  
Date Started: / /  
Date Completed: 10/31/91  
Priority Level: Recommended for HRS Scoring  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Primary  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

PRP:  
PRP name: HAWORTH, INC.  
WICKES MANUFACTURING COMPANY

**F20**  
**NW**  
**1/4-1/2**  
**0.418 mi.**  
**2207 ft.**

**HAWORTH INC**  
**200 BLUE STAR HWY**  
**DOUGLAS, MI 49406**  
**Site 1 of 6 in cluster F**

**FINDS 1015902244**  
**ECHO N/A**

**Relative:**  
**Higher**

FINDS:

Registry ID: 110046088167

**Actual:**  
**645 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1015902244

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**HAWORTH INC (Continued)**

**1015902244**

Registry ID: 110046088167  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110046088167](http://echo.epa.gov/detailed_facility_report?fid=110046088167)

**F21  
 NW  
 1/4-1/2  
 0.418 mi.  
 2207 ft.**

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS  
 200 BLUE STAR HWY  
 DOUGLAS, MI 49406**  
**Site 2 of 6 in cluster F**

**PA MANIFEST S108851066  
 N/A**

**Relative:  
 Higher**

Manifest Details:

**Actual:  
 645 ft.**

Year:	2006
Manifest Number:	PAH298381
Manifest Type:	TSD Copy
Generator EPA Id:	MIK679614198
Generator Date:	08/30/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD987270725
TSD Date:	Not reported
TSD Facility Name:	ENVIROTROL INC DARLINGTON FACILITY
TSD Facility Address:	118 PARK ROAD
TSD Facility City:	DARLINGTON
TSD Facility State:	PA
Facility Telephone:	269-567-3500
Page Number:	1
Line Number:	1
Waste Number:	D040
Container Number:	40
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	8000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported
Year:	2006
Manifest Number:	001237303FLE
Manifest Type:	TSD Copy
Generator EPA Id:	MIK679614198
Generator Date:	10/26/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD987270725
TSD Date:	Not reported
TSD Facility Name:	ENVIROTROL INC DARLINGTON FACILITY
TSD Facility Address:	118 PARK ROAD
TSD Facility City:	DARLINGTON
TSD Facility State:	PA
Facility Telephone:	269-567-3500
Page Number:	1
Line Number:	1
Waste Number:	D040
Container Number:	25
Container Type:	Metal drums, barrels, kegs

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)**

**S108851066**

Waste Quantity: 5000  
 Unit: Pounds  
 Handling Code: Not reported  
 TSP EPA Id: Not reported  
 Date TSP Sig: Not reported

Year: 2006  
 Manifest Number: 001237306FLE  
 Manifest Type: TSD Copy  
 Generator EPA Id: MIK679614198  
 Generator Date: 12/20/2006  
 Mailing Address: Not reported  
 Mailing City, St, Zip: Not reported  
 Contact Name: Not reported  
 Contact Phone: Not reported  
 TSD EPA Id: PAD987270725  
 TSD Date: Not reported  
 TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
 TSD Facility Address: 118 PARK ROAD  
 TSD Facility City: DARLINGTON  
 TSD Facility State: PA  
 Facility Telephone: 269-567-3500  
 Page Number: 1  
 Line Number: 1  
 Waste Number: D040  
 Container Number: 36  
 Container Type: Metal drums, barrels, kegs  
 Waste Quantity: 7200  
 Unit: Pounds  
 Handling Code: Not reported  
 TSP EPA Id: Not reported  
 Date TSP Sig: Not reported

**F22  
 NW  
 1/4-1/2  
 0.418 mi.  
 2207 ft.**

**VILLAGE OF DOUGLAS CONTAMINATION  
 200 BLUE STAR HWY  
 DOUGLAS, MI 49406  
 Site 3 of 6 in cluster F**

**MI PART 201 S110093282  
 MI INVENTORY N/A  
 MI WDS**

**Relative:  
 Higher  
 Actual:  
 645 ft.**

**PART 201:**  
 Facility ID: 3000032  
**Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring)**  
 Source: Furniture & Fixtures  
 SAM Score: 42  
 SAM Score Date: 03/26/2004  
 Township: 03N  
 Range: 16W  
 Section: 16  
 Quarter: NE  
 Quarter/Quarter: SE  
 Pollutants: Ni; TCE

**INVENTORY:**  
 Bea Number: Not reported  
 Township: Douglas  
 District: Kalamazoo

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**VILLAGE OF DOUGLAS CONTAMINATION (Continued)**

**S110093282**

Data Source: Part 201  
 Latitude: 42.63989  
 Longitude: -86.21122

**WDS:**

Site Id: MIT270011521  
 WMD Id: 414505  
 Site Specific Name: HAWORTH INC  
 Mailing Address: PO BOX 549  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**F23  
 NW  
 1/4-1/2  
 0.418 mi.  
 2207 ft.**

**VILLAGE OF DOUGLAS CONTAMINATION  
 200 BLUE STAR HWY  
 DOUGLAS, MI**

**MI RGA PART 201**

**S115662228  
 N/A**

**Site 4 of 6 in cluster F**

**Relative:  
 Higher**

RG A PART 201:

2012	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY
2011	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY
2010	VILLAGE OF DOUGLAS CONTAMINATION	200 BLUE STAR HWY

**Actual:  
 645 ft.**

**F24  
 NW  
 1/4-1/2  
 0.418 mi.  
 2207 ft.**

**HAWORTH INC  
 200 BLUE STAR HWY  
 DOUGLAS, MI 49406**

**RCRA-CESQG**

**1000342008  
 MIT270011521**

**Site 5 of 6 in cluster F**

**Relative:  
 Higher**

RCRA-CESQG:

Date form received by agency: 05/22/2012  
 Facility name: HAWORTH INC  
 Facility address: 200 BLUE STAR HWY  
 DOUGLAS, MI 49406  
 EPA ID: MIT270011521  
 Mailing address: PO BOX 549  
 DOUGLAS, MI 49406  
 Contact: JAMES KOZMINSKI  
 Contact address: Not reported  
 Not reported  
 Contact country: US  
 Contact telephone: (616) 393-1533  
 Contact email: JIM.KOZMINSKI@HAWORTH.COM  
 EPA Region: 05  
 Land type: Private  
 Classification: Conditionally Exempt Small Quantity Generator  
 Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: HAWORTH  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1996  
Owner/Op end date: Not reported

Owner/operator name: HAWORTH  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1996  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/28/2011  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/11/2006  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/17/2004  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2003  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/10/1999  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 10/09/1980  
Site name: HAWORTH INC  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 04/27/2011  
Date achieved compliance: 05/26/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 04/27/2011  
Date achieved compliance: 05/26/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAWORTH INC (Continued)**

**1000342008**

Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 02/16/1999  
Date achieved compliance: 05/04/1999  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/16/1999  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/27/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: State Statute or Regulation  
Date achieved compliance: 05/26/2011  
Evaluation lead agency: State

Evaluation date: 04/27/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 05/26/2011  
Evaluation lead agency: State

Evaluation date: 02/10/1999  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 05/04/1999  
Evaluation lead agency: State

Evaluation date: 05/14/1985  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

**F25**  
**NW**  
**1/4-1/2**  
**0.454 mi.**  
**2399 ft.**

**CHASE MFG CO**  
**281 CHASE RD**  
**DOUGLAS, MI 49406**  
**Site 6 of 6 in cluster F**

**ICIS 1016278065**  
**FINDS N/A**  
**ECHO**

**Relative:**  
**Higher**

ICIS:  
Enforcement Action ID: 05-1987-0524  
FRS ID: 110009292229  
Action Name: CHASE MANUFACTURING  
Facility Name: CHASE MFG CO  
Facility Address: 281 CHASE RD  
DOUGLAS, MI 49406

**Actual:**  
**648 ft.**

Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz  
Facility County: ALLEGAN  
Program System Acronym: ICIS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHASE MFG CO (Continued)**

**1016278065**

Enforcement Action Forum Desc: Administrative - Formal  
EA Type Code: 106  
Facility SIC Code: Not reported  
Federal Facility ID: Not reported  
Latitude in Decimal Degrees: Not reported  
Longitude in Decimal Degrees: Not reported  
Permit Type Desc: Not reported  
Program System Acronym: 14785  
Facility NAICS Code: Not reported  
Tribal Land Code: Not reported

Facility Name: CHASE MFG CO  
Address: 281 CHASE RD  
Tribal Indicator: N  
Fed Facility: Not reported  
NAIC Code: Not reported  
SIC Code: Not reported

Facility Name: CHASE MFG CO  
Address: 281 CHASE RD  
Tribal Indicator: N  
Fed Facility: Not reported  
NAIC Code: Not reported  
SIC Code: Not reported

**FINDS:**

Registry ID: 110009292229

Environmental Interest/Information System  
SUPERFUND (NON-NPL)

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

**ECHO:**

Envid: 1016278065  
Registry ID: 110009292229  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110009292229](http://echo.epa.gov/detailed_facility_report?fid=110009292229)

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

---

<b>G26</b> <b>NNW</b> <b>1/4-1/2</b> <b>0.487 mi.</b> <b>2571 ft.</b>	<b>WEATHERVANE PARTNERS LLC</b> <b>102 BLUE STAR HWY</b> <b>DOUGLAS, MI 49406</b>  <b>Site 1 of 3 in cluster G</b>	<b>MI WDS</b>	<b>S112452435</b> <b>N/A</b>
---	--	---------------	---------------------------------

<b>Relative:</b> <b>Higher</b>  <b>Actual:</b> <b>649 ft.</b>	<b>WDS:</b> Site Id: MIK146550217 WMD Id: 491984 Site Specific Name: WEATHERVANE PARTNERS LLC Mailing Address: P O BOX 821 Mailing City/State/Zip: 49453 Mailing County: ALLEGAN
---	--

---

<b>G27</b> <b>NNW</b> <b>1/4-1/2</b> <b>0.487 mi.</b> <b>2571 ft.</b>	<b>WEATHERVANE PARTNERS LLC</b> <b>102 BLUE STAR HWY</b> <b>DOUGLAS, MI 49406</b>  <b>Site 2 of 3 in cluster G</b>	<b>FINDS</b>	<b>1015832515</b> <b>N/A</b>
---	--	--------------	---------------------------------

<b>Relative:</b> <b>Higher</b>  <b>Actual:</b> <b>649 ft.</b>	<b>FINDS:</b>  Registry ID: 110055060204  Environmental Interest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
---	---

<b>ECHO:</b> Envid: Registry ID: DFR URL:	1015832515 110055060204 <a href="http://echo.epa.gov/detailed_facility_report?fid=110055060204">http://echo.epa.gov/detailed_facility_report?fid=110055060204</a>
--	---

---

<b>G28</b> <b>NNW</b> <b>1/4-1/2</b> <b>0.487 mi.</b> <b>2571 ft.</b>	<b>WEATHERVANE PARTNERS LLC</b> <b>102 BLUE STAR HWY</b> <b>DOUGLAS, MI 49406</b>  <b>Site 3 of 3 in cluster G</b>	<b>RCRA NonGen / NLR</b>	<b>1015753840</b> <b>MIK146550217</b>
---	--	--------------------------	--

<b>Relative:</b> <b>Higher</b>  <b>Actual:</b> <b>649 ft.</b>	<b>RCRA NonGen / NLR:</b> Date form received by agency: 09/20/2012 Facility name: WEATHERVANE PARTNERS LLC Facility address: 102 BLUE STAR HWY DOUGLAS, MI 49406  EPA ID: MIK146550217 Mailing address: P O BOX 821 SAUGATUCK, MI 49453  Contact: RON KRONEMEYER Contact address: Not reported Not reported  Contact country: US Contact telephone: (616) 836-7539 Contact email: Not reported
---	--

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WEATHERVANE PARTNERS LLC (Continued)**

**1015753840**

EPA Region: 05  
 Classification: Non-Generator  
 Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: WEATHERVANE PARTNERS LLC  
 Owner/operator address: Not reported  
 Not reported  
 Owner/operator country: Not reported  
 Owner/operator telephone: Not reported  
 Legal status: Private  
 Owner/Operator Type: Operator  
 Owner/Op start date: 09/20/2012  
 Owner/Op end date: Not reported

Owner/operator name: WEATHERVANE PARTNERS LLC  
 Owner/operator address: Not reported  
 Not reported  
 Owner/operator country: Not reported  
 Owner/operator telephone: Not reported  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: 09/20/2012  
 Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: No  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No

. Waste code: D001  
 . Waste name: IGNITABLE WASTE

Violation Status: No violations found

**H29**  
**ENE**  
**1/4-1/2**  
**0.493 mi.**  
**2604 ft.**

**BRANCH MAINTENANCE GARAGE**  
**486 WATER ST**  
**DOUGLAS, MI**

**MI RGA LUST S115667577**  
**N/A**

**Site 1 of 3 in cluster H**

**Relative:**  
**Lower**

RGA LUST:

2012	BRANCH MAINTENANCE GARAGE	486 WATER ST
2011	BRANCH MAINTENANCE GARAGE	486 WATER ST
2010	BRANCH MAINTENANCE GARAGE	486 WATER ST
2009	BRANCH MAINTENANCE GARAGE	486 WATER ST

**Actual:**  
**622 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BRANCH MAINTENANCE GARAGE (Continued)**

**S115667577**

2008	BRANCH MAINTENANCE GARAGE	486 WATER ST
2007	BRANCH MAINTENANCE GARAGE	486 WATER ST
2006	BRANCH MAINTENANCE GARAGE	486 WATER ST
2005	BRANCH MAINTENANCE GARAGE	486 WATER ST
2004	BRANCH MAINTENANCE GARAGE	486 WATER ST
2003	BRANCH MAINTENANCE GARAGE	486 WATER ST
2001	BRANCH MAINTENANCE GARAGE	486 WATER ST

**H30**  
**ENE**  
 1/4-1/2  
 0.493 mi.  
 2604 ft.

**BRANCH MAINTENANCE GARAGE**  
**486 WATER ST.**  
**DOUGLAS, MI**

**MI RGA LUST**

**S115667576**  
**N/A**

Site 2 of 3 in cluster H

Relative:  
 Lower

RGA LUST:

2000	BRANCH MAINTENANCE GARAGE	486 WATER ST.
1999	BRANCH MAINTENANCE GARAGE	486 WATER ST.
1998	BRANCH MAINTENANCE GARAGE	486 WATER ST.
1997	BRANCH MAINTENANCE GARAGE	486 WATER ST.

Actual:  
 622 ft.

**H31**  
**ENE**  
 1/4-1/2  
 0.493 mi.  
 2604 ft.

**ALLEGAN CO RD COMMISION DOUGLAS**  
**486 WATER ST**  
**DOUGLAS, MI**

**MI RGA PART 201**

**S11565741**  
**N/A**

Site 3 of 3 in cluster H

Relative:  
 Lower

RGA PART 201:

1993	ALLEGAN CO RD COMMISION DOUGLAS	486 WATER ST
1991	ALLEGAN CO RD COMMISION DOUGLAS	486 WATER ST

Actual:  
 622 ft.

**32**  
**NNW**  
 1/2-1  
 0.515 mi.  
 2718 ft.

**SAUGATUCK PUBLIC SCHOOLS-GARAGE**  
**BLUE STAR HIGHWAY**  
**DOUGLAS, MI 49406**

**MI UST**

**U000249333**  
**N/A**

Relative:  
 Higher

UST:

Facility ID: 00016804  
 Facility Type: CLOSED  
 Owner Name: SAUGATUCK PUBLIC SCHOOLS  
 Owner Address: 201 RANDOLPH ST  
 Owner City,St,Zip: DOUGLAS, MI 49406  
 Owner Country: USA  
 Owner Contact: Not reported  
 Owner Phone: (616) 857-1444  
 Contact: PATRICK BORST  
 Contact Phone: (616) 857-8271  
 Date of Collection: 06/26/2007  
 Accuracy: 40  
 Accuracy Value Unit: FEET  
 Horizontal Datum: NAD83  
 Source: STATE OF MICHIGAN  
 Point Line Area: POINT  
 Desc Category: Not reported  
 Method of Collection: Interpolation-Map  
 Latitude: 42.64248  
 Longitude: -86.20828

Actual:  
 640 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

SAUGATUCK PUBLIC SCHOOLS-GARAGE (Continued)

U000249333

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 550  
Product: Diesel  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status:** **Removed from Ground**  
Capacity: 550  
Product: Gasoline  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3  
**Tank Status:** **Removed from Ground**  
Capacity: 550  
Product: Gasoline  
Install Date: 04/21/1985  
Remove Date: 06/06/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

33  
SW  
1/2-1  
0.516 mi.  
2727 ft.

**BLOKS REFUSE SERVICE SLF  
129TH STREET  
DOUGLAS, MI 49406**

**FINDS 1006838567  
N/A**

**Relative:  
Higher**

FINDS:

Registry ID: 110013995347

**Actual:  
647 ft.**

Environmental Interest/Information System  
AIR EMISSIONS CLASSIFICATION UNKNOWN



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

34  
NE  
1/2-1  
0.524 mi.  
2766 ft.

**METALLURGICAL HIGH VACUUM CORP**  
471 WASHINGTON ST  
DOUGLAS, MI 49406

RCRA NonGen / NLR  
FINDS  
ECHO

1000149213  
MID027114123

**Relative:**  
**Lower**

RCRA NonGen / NLR:

**Actual:**  
**612 ft.**

Date form received by agency: 09/05/1996  
Facility name: METALLURGICAL HIGH VACUUM CORP  
Facility address: 471 WASHINGTON ST  
DOUGLAS, MI 49406  
EPA ID: MID027114123  
Mailing address: 471 S WASHINGTON  
DOUGLAS, MI 49406  
Contact: GEOFF HUMBERSTONE  
Contact address: 471 WASHINGTON ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (616) 857-1488  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 09/06/1996  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 09/06/1996  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METALLURGICAL HIGH VACUUM CORP (Continued)**

**1000149213**

Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/07/1989  
Site name: METALLURGICAL HIGH VACUUM CORP  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003591970

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000149213  
Registry ID: 110003591970  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003591970](http://echo.epa.gov/detailed_facility_report?fid=110003591970)

**I35**  
**East**  
**1/2-1**  
**0.554 mi.**  
**2926 ft.**

**INTERURBAN TRANSIT AUTHORITY**  
**100 WILEY ST**  
**DOUGLAS, MI 49406**  
**Site 1 of 2 in cluster I**

**RCRA-CESQG 1007097518**  
**MIK366242642**

**Relative:**  
**Lower**  
**Actual:**  
**620 ft.**

RCRA-CESQG:  
Date form received by agency: 08/27/2003  
Facility name: INTERURBAN TRANSIT AUTHORITY  
Facility address: 100 WILEY ST  
DOUGLAS, MI 49406  
EPA ID: MIK366242642  
Mailing address: PO BOX 649  
DOUGLAS, MI 49406  
Contact: NIEL CARLSON  
Contact address: 100 WILEY ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (269) 857-3848  
Contact email: Not reported  
EPA Region: 05  
Classification: Conditionally Exempt Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INTERURBAN TRANSIT AUTHORITY (Continued)**

**1007097518**

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: CHERIE GILLER, EXECUTIVE DIRECTOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Municipal  
Owner/Operator Type: Operator  
Owner/Op start date: 05/07/1980  
Owner/Op end date: Not reported

Owner/operator name: CHERIE GILLER, EXECUTIVE DIRECTOR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Municipal  
Owner/Operator Type: Owner  
Owner/Op start date: 05/07/1980  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

**INTERURBAN TRANSIT AUTHORITY (Continued)**

**1007097518**

Violation Status: No violations found

<b>I36</b> East 1/2-1 0.554 mi. 2926 ft.	<b>INTERURBAN TRANSIT AUTHORITY</b> <b>100 WILEY ST</b> <b>DOUGLAS, MI 49406</b>  Site 2 of 2 in cluster I	<b>FINDS</b> <b>ECHO</b>	<b>1007136059</b> <b>N/A</b>
--	--	-----------------------------	---------------------------------

Relative:  
Lower

FINDS:

Registry ID: 110015840697

Actual:  
620 ft.

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1007136059  
 Registry ID: 110015840697  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015840697](http://echo.epa.gov/detailed_facility_report?fid=110015840697)

<b>J37</b> NE 1/2-1 0.564 mi. 2977 ft.	<b>BOB MEEUWSEN</b> <b>221 WASHINGTON ST</b> <b>DOUGLAS, MI 49406</b>  Site 1 of 2 in cluster J	<b>MI WDS</b>	<b>S111946919</b> <b>N/A</b>
--	---	---------------	---------------------------------

Relative:  
Lower

WDS:

Site Id: MIG000038368  
 WMD Id: 416927  
 Site Specific Name: BOB MEEUWSEN  
 Mailing Address: 221 S WASHINGTON  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

Actual:  
613 ft.

<b>K38</b> North 1/2-1 0.590 mi. 3113 ft.	<b>JOHNSONS AMOCO SERVICE DOUGLAS</b> <b>BLUE STAR HWY &amp; CENTER ST</b> <b>DOUGLAS, MI</b>  Site 1 of 4 in cluster K	<b>MI RGA PART 201</b>	<b>S115658847</b> <b>N/A</b>
---	---	------------------------	---------------------------------

Relative:  
Lower

RGA PART 201:

1991 JOHNSONS AMOCO SERVICE DOUGLAS BLUE STAR HWY & CENTER ST

Actual:  
630 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**K39**  
**North**  
**1/2-1**  
**0.590 mi.**  
**3114 ft.**  
**DEAN JOHNSON**  
**314 FREMONT ST**  
**DOUGLAS, MI 49406**  
**Site 2 of 4 in cluster K**

**MI UST** **U003211944**  
**N/A**

**Relative:**  
**Lower**

UST:

**Actual:**  
**632 ft.**

Facility ID: 00039423  
Facility Type: CLOSED  
Owner Name: DEAN JOHNSON  
Owner Address: 314 FREMONT ST  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-4127  
Contact: DEAN JOHNSON  
Contact Phone: (616) 857-4127  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64257  
Longitude: -86.20831

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: 1000  
Product: Diesel  
Install Date: 01/01/1973  
Remove Date: 09/17/1997  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: No Valve At Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2  
**Tank Status: Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 01/01/1973  
Remove Date: 09/17/1997  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: No Valve At Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**K40**  
**North**  
**1/2-1**  
**0.590 mi.**  
**3114 ft.**

**JOHNSONS STANDARD 28867**  
**BLUE STAR HWY & CENTER ST**  
**DOUGLAS, MI 49406**

**SEMS-ARCHIVE** **1000320550**  
**RCRA NonGen / NLR** **MID981187453**

**Site 3 of 4 in cluster K**

**Relative:**  
**Lower**

SEMS-ARCHIVE:  
Site ID: 503441  
EPA ID: MID981187453  
Federal Facility: N  
NPL: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**Actual:**  
**630 ft.**

**Following information was gathered from the prior CERCLIS update completed in 10/2013:**

Site ID: 0503441  
Federal Facility: Not a Federal Facility  
NPL Status: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: JOHNSONS AMOCO SERVICE STATION  
Alias Address: Not reported  
MI

Program Priority:

Description: Great Lakes

CERCLIS-NFRAP Assessment History:

Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 02/02/90  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: / /  
Date Completed: 02/02/90  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 08/13/87  
Priority Level: Low priority for further assessment

Action: DISCOVERY  
Date Started: / /  
Date Completed: 12/31/85  
Priority Level: Not reported

RCRA NonGen / NLR:

Date form received by agency: 12/31/2001  
Facility name: AMOCO OIL CO  
Facility address: BLUE STAR HWY  
DOUGLAS, MI 49406  
EPA ID: MID981187453  
Mailing address: P O BOX 352917  
TOLEDO, OH 43635  
Contact: KEVIN ENDRISS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHNSONS STANDARD 28867 (Continued)**

**1000320550**

Contact address: BLUE STAR HWY  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (419) 842-1553  
Contact email: Not reported  
EPA Region: 05  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: AMOCO OIL CO  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1970  
Owner/Op end date: Not reported

Owner/operator name: AMOCO OIL CO  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1970  
Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA, INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 10/16/2002  
Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA, INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 10/16/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOHNSONS STANDARD 28867 (Continued)**

**1000320550**

Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/16/1991  
Site name: AMOCO OIL CO  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

**J41**  
**NNE**  
**1/2-1**  
**0.591 mi.**  
**3123 ft.**

**DOUGLAS MARINE CORP**  
**160 WASHINGTON ST**  
**DOUGLAS, MI 49406**  
**Site 2 of 2 in cluster J**

**MI BEA S110482757**  
**MI WDS N/A**

**Relative:**  
**Lower**  
  
**Actual:**  
**611 ft.**

BEA:  
Secondary Address: Not reported  
BEA Number: 108  
District: Kalamazoo  
Date Received: 11/12/1997  
Submitter Name: Haworth Incorporated  
Petition Determination: Not reported  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: Not reported  
Reviewer: unas\_pl  
Division Assigned: Not reported

WDS:

Site Id: MID089964613  
WMD Id: 397755  
Site Specific Name: DOUGLAS MARINE CORP  
Mailing Address: PO BOX 522  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**L42**  
**North**  
**1/2-1**  
**0.599 mi.**  
**3165 ft.**

**CENTER (294) STREET, WEST**  
**294 W. CENTER STREET**  
**ALLEGAN (County), MI 49406**

**Site 1 of 2 in cluster L**

**MI INVENTORY**    **S114033214**  
**N/A**

**Relative:**    INVENTORY:  
**Lower**        Bea Number:    201301870PL  
                   Township:       Douglas  
**Actual:**       District:        Kalamazoo  
**630 ft.**        Data Source:    BEA  
                   Latitude:       Not reported  
                   Longitude:      Not reported

**L43**  
**North**  
**1/2-1**  
**0.599 mi.**  
**3165 ft.**

**CENTER (294) STREET, WEST**  
**294 W. CENTER STREET**  
**DOUGLAS, MI 49406**

**Site 2 of 2 in cluster L**

**MI BEA**    **S113717174**  
**N/A**

**Relative:**    BEA:  
**Lower**        Secondary Address: Not reported  
                   BEA Number:     1870  
**Actual:**       District:        Kalamazoo  
**630 ft.**        Date Received:   05/29/2013  
                   Submitter Name: Coastal Real Estate Holdings IV, LLC  
                   Petition Determination: No Request  
                   Petition Disclosure: 0  
                   Category:        Not reported  
                   Determination 20107A: No Request  
                   Reviewer:        spauldie  
                   Division Assigned: RRD

**K44**  
**North**  
**1/2-1**  
**0.605 mi.**  
**3197 ft.**

**METROPOLITAN TITLE COMPANY**  
**25-29 BLUE STAR HIGHWAY**  
**DOUGLAS, MI**

**Site 4 of 4 in cluster K**

**MI BEA**    **S104910881**  
**N/A**

**Relative:**    BEA:  
**Lower**        Secondary Address: Not reported  
                   BEA Number:     300  
**Actual:**       District:        Kalamazoo  
**628 ft.**        Date Received:   09/14/1999  
                   Submitter Name: Lighthouse Realty Co., Inc.  
                   Petition Determination: Affirmed  
                   Petition Disclosure: 1  
                   Category:        No Hazardous Substance(s)  
                   Determination 20107A: No Request  
                   Reviewer:        kieslinb  
                   Division Assigned: Storage Tank Division

Secondary Address: Not reported  
 BEA Number: 301  
 District: Kalamazoo  
 Date Received: 09/14/1999  
 Submitter Name: Kiama Properties  
 Petition Determination: Affirmed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METROPOLITAN TITLE COMPANY (Continued)**

**S104910881**

Petition Disclosure: 1  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: kieslinb  
Division Assigned: Storage Tank Division

**45  
NNE  
1/2-1  
0.637 mi.  
3364 ft.**

**GAS CENTER  
50 CENTER  
DOUGLAS, MI 49419**

**MI AST A100206476  
N/A**

**Relative:  
Lower**

AST:

Facility ID: 92003303  
Facility Phone: (616) 857-9411  
Owner Name: GAS CENTER  
Owner Address: 50 CENTER  
Owner City,St,Zip: DOUGLAS, MI 49419  
Owner County: USA  
Owner Contact: Not reported  
Owner Telephone: (269) 751-5171  
District: Region 3 - Kalamazoo District Office  
Contact: Richard Quaid  
List Status: CLOSED  
Date of Collection: 09/18/2006  
Accuracy: 15 METERS  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Description Category: Not reported  
Method of Collection: Interpolation-Map  
Horizontal Datum: NAD83  
Latitude: 42.6436230  
Longitude: -86.199663

Tank Id: 2  
Tank Status: Removed from Premises  
Capacity (in gallons): 8000  
Installation Date: Not reported  
Substance Stored: LPG  
Removed/Closed Date: 04/06/1995

Tank Id: 1  
Tank Status: Removed from Premises  
Capacity (in gallons): 12000  
Installation Date: Not reported  
Substance Stored: LPG  
Removed/Closed Date: 02/23/1995

**Actual:  
609 ft.**

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**M46**  
**NNW**  
**1/2-1**  
**0.664 mi.**  
**3504 ft.**

**MI DEQ VILLAGE OF DOUGLAS  
CENTER & FERRY ST  
DOUGLAS, MI 49406**

**Site 1 of 10 in cluster M**

**PA MANIFEST**    **S116738112**  
**N/A**

**Relative:**  
**Lower**

Manifest Details:

Year: 2013  
Manifest Number: 001237371FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 01/10/2013  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: Not reported  
TSD Date: Not reported  
TSD Facility Name: Evoqua Water Technologies LLC  
TSD Facility Address: 118 Park Rd  
TSD Facility City: Darlington  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 9  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: PAD987270725  
Date TSP Sig: Not reported

**Actual:**  
**624 ft.**

**M47**  
**NNW**  
**1/2-1**  
**0.664 mi.**  
**3504 ft.**

**MI DEPT/ENVIRONMENTAL QUALITY  
CENTER & FERRY ST  
DOUGLAS, MI 49406**

**Site 2 of 10 in cluster M**

**MI WDS**    **S111973834**  
**N/A**

**Relative:**  
**Lower**

WDS:

Site Id: MIK679614198  
WMD Id: 473345  
Site Specific Name: MI DEPT/DEQ/REMEDICATION & REDEVELOPMENT DIV  
Mailing Address: 7953 ADOBE  
Mailing City/State/Zip: 49009  
Mailing County: KALAMAZOO

**Actual:**  
**624 ft.**

**M48**  
**NNW**  
**1/2-1**  
**0.664 mi.**  
**3504 ft.**

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS  
CENTER & FERRY STREET  
DOUGLAS, MI 49406**

**Site 3 of 10 in cluster M**

**PA MANIFEST**    **S109246548**  
**N/A**

**Relative:**  
**Lower**

Manifest Details:

Year: 2012  
Manifest Number: 001237358FLE  
Manifest Type: TSD Copy

**Actual:**  
**624 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Generator EPA Id: MIK679614198  
Generator Date: 03/13/2012  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: Not reported  
TSD Date: Not reported  
TSD Facility Name: Siemens Industries Inc  
TSD Facility Address: 118 Park Rd  
TSD Facility City: Darlington  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 10  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: PAD987270725  
Date TSP Sig: Not reported

Year: 2011  
Manifest Number: 001237353FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 03/08/2011  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 5  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 1250  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2010  
Manifest Number: 001237351FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 09/14/2010  
Mailing Address: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 10  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2009  
Manifest Number: 001237333FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 05/19/2009  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 15  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2009  
Manifest Number: 001237344FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 10/26/2009  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS INDUSTRIES INC  
TSD Facility Address: 118 PARK RD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 9  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3150  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2008  
Manifest Number: 001237327FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 04/23/2008  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 31  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 6000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2008  
Manifest Number: 001237325FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 01/03/2008  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 16  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2008  
Manifest Number: 001237375FLE  
Manifest Type: TSD Copy  
Generator EPA Id: MIK679614198  
Generator Date: 09/25/2008  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: SIEMENS WATER TECHNOLOGIES CORP  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 20  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 4000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237322FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 10/24/2007  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)**

**S109246548**

Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 15  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 3000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237324FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 11/28/2007  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 14  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 2000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237308FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 02/09/2007  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)

S109246548

Waste Number: D040  
Container Number: 31  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 7000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237338FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 07/02/2007  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 27  
Container Type: Metal drums, barrels, kegs  
Waste Quantity: 6000  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

Year: 2007  
Manifest Number: 001237311FLE  
Manifest Type: Not reported  
Generator EPA Id: MIK679614198  
Generator Date: 04/11/2007  
Mailing Address: Not reported  
Mailing City, St, Zip: Not reported  
Contact Name: Not reported  
Contact Phone: 269-567-3529  
TSD EPA Id: PAD987270725  
TSD Date: Not reported  
TSD Facility Name: ENVIROTROL INC DARLINGTON FACILITY  
TSD Facility Address: 118 PARK ROAD  
TSD Facility City: DARLINGTON  
TSD Facility State: PA  
Facility Telephone: Not reported  
Page Number: 1  
Line Number: 1  
Waste Number: D040  
Container Number: 30  
Container Type: Metal drums, barrels, kegs

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT ENVIRONMENTAL QUALITY VILLAGE OF DOUGLAS (Continued)**

**S109246548**

Waste Quantity: 7500  
Unit: Pounds  
Handling Code: Not reported  
TSP EPA Id: Not reported  
Date TSP Sig: Not reported

**M49  
NNW  
1/2-1  
0.665 mi.  
3510 ft.**

**MI DEPT/ENVIRONMENTAL QUALITY  
CENTER & FERRY ST  
DOUGLAS, MI 49406**

**FINDS 1007132767  
ECHO N/A**

**Site 4 of 10 in cluster M**

**Relative:  
Lower**

**FINDS:**

Registry ID: 110015804860

**Actual:  
624 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

**ECHO:**

Envid: 1007132767  
Registry ID: 110015804860  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110015804860](http://echo.epa.gov/detailed_facility_report?fid=110015804860)

**M50  
NNW  
1/2-1  
0.665 mi.  
3510 ft.**

**MI DEPT/ENVIRONMENTAL QUALITY  
CENTER & FERRY ST  
DOUGLAS, MI 49406**

**RCRA-SQG 1007099508  
MIK679614198**

**Site 5 of 10 in cluster M**

**Relative:  
Lower**

**RCRA-SQG:**

Date form received by agency: 04/14/2014  
Facility name: MI DEPT/ENVIRONMENTAL QUALITY  
Facility address: CENTER & FERRY ST  
DOUGLAS, MI 49406

**Actual:  
624 ft.**

EPA ID: MIK679614198  
Mailing address: 7953 ADOBE  
KALAMAZOO, MI 49009

Contact: RAY SPAULDING  
Contact address: Not reported

Contact country: Not reported  
Contact telephone: (269) 567-3532

Contact email: SPAULDINGR1@MICHIGAN.GOV  
EPA Region: 05

Land type: State  
Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT/ENVIRONMENTAL QUALITY (Continued)

1007099508

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: MDEQ/VILLAGE OF DOUGLAS  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: State  
Owner/Operator Type: Owner  
Owner/Op start date: 07/23/2002  
Owner/Op end date: Not reported

Owner/operator name: MDEQ/VILLAGE OF DOUGLAS  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: State  
Owner/Operator Type: Operator  
Owner/Op start date: 07/23/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/25/2011  
Site name: MI DEPT/ENVIRONMENTAL QUALITY  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/20/2010  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2010

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D040  
. Waste name: TRICHTHLORETHYLENE

Date form received by agency: 02/24/2010

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/01/2009

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/15/2009

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 12/15/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/22/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 05/02/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/24/2008

Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/21/2008  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/04/2008  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/01/2008  
Site name: MI DEPT/ENVIRONMENTAL QUALITY  
Classification: Small Quantity Generator

Date form received by agency: 06/08/2007  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/22/2006  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Large Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/23/2002  
Site name: MI DEPT/NATURAL RESOURCES AND ENVIRONMENT  
Classification: Not a generator, verified

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT/ENVIRONMENTAL QUALITY (Continued)

1007099508

Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MI DEPT/ENVIRONMENTAL QUALITY (Continued)

1007099508

Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)  
Enforcement action date: 09/22/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Pre-transport  
Date violation determined: 02/18/2004



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: INFORMAL ACTIONS  
Enforcement action date: 11/16/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/10/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: State Statute or Regulation  
Date violation determined: 02/18/2004  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 03/18/2008  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 11/05/2003  
Date achieved compliance: 09/22/2008  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Federal or State Statute  
Date violation determined: 11/05/2003  
Date achieved compliance: 09/22/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 09/22/2008  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 08/01/2005  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 03/10/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/19/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - Manifest  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: State Statute or Regulation  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 02/18/2004  
Evaluation: CASE DEVELOPMENT INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 11/05/2003  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - General  
Date achieved compliance: 09/22/2008  
Evaluation lead agency: State

Evaluation date: 11/05/2003  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Federal or State Statute  
Date achieved compliance: 09/22/2008

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MI DEPT/ENVIRONMENTAL QUALITY (Continued)**

**1007099508**

Evaluation lead agency: State

**51**  
**North**  
**1/2-1**  
**0.666 mi.**  
**3518 ft.**

**TOWER MARINE**  
**216 PETER'S DRIVE**  
**DOUGLAS, MI 49406**

**US BROWNFIELDS** **1016370589**  
**FINDS** **N/A**

**Relative:**  
**Lower**

**US BROWNFIELDS:**

**Actual:**  
**629 ft.**

Recipient name: Allegan County  
 Grant type: Assessment  
 Property name: TOWER MARINE  
 Property #: Not reported  
 Parcel size: 20.16  
 Property Description: An 1871 site map included with documentation provided by Tower Marine indicated that the eastern portion of the Subject Property was historically residential and contained a school house. No information regarding when these structures were razed was available. Based on a review of historical aerial photographs, the Subject Property was developed as a marina between 1967 and 1974. The Subject Property contained undeveloped beachfront and wooded land from as early as 1938 through the construction of the marina. At the time of ECTs site reconnaissance, the Subject Property was developed as a marina. Four conjoined buildings i.e., the main subject buildings are located in the westernmost portion of the Subject Property that include a store, a hangar/maintenance building, and two warehouses. Ferry boats are built in the warehouse buildings. Boat construction operations include welding, tooling, sanding, and painting.

Latitude: 42.6447419  
 Longitude: -86.2063846  
 HCM label: Address Matching-House Number  
 Map scale: Not reported  
 Point of reference: Entrance Point of a Facility or Station  
 Datum: North American Datum of 1983  
 ACRES property ID: 125683  
 Start date: Not reported  
 Completed date: Not reported  
 Acres cleaned up: Not reported  
 Cleanup funding: Not reported  
 Cleanup funding source: Not reported  
 Assessment funding: 22077  
 Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement  
 Redevelopment funding: Not reported  
 Redev. funding source: Not reported  
 Redev. funding entity name: Not reported  
 Redevelopment start date: Not reported  
 Assessment funding entity: EPA  
 Cleanup funding entity: Not reported  
 Grant type: Hazardous  
 Accomplishment type: Phase II Environmental Assessment  
 Accomplishment count: 0  
 Cooperative agreement #: 00E00361  
 Ownership entity: Private  
 Current owner: Kalamazoo Ferry Company  
 Did owner change: N  
 Cleanup required: No  
 Video available: No  
 Photo available: Yes  
 Institutional controls required: N

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contaminants found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Iron cleaned up: Not reported  
mercury cleaned up: Not reported  
nickel cleaned up: Not reported  
No clean up: Not reported  
Pesticides cleaned up: Not reported  
Selenium cleaned up: Not reported  
SVOCs cleaned up: Not reported  
Unknown clean up: Not reported  
Arsenic contaminant found: Not reported  
Cadmium contaminant found: Not reported  
Chromium contaminant found: Not reported  
Copper contaminant found: Not reported  
Iron contaminant found: Not reported  
Mercury contaminant found: Not reported  
Nickel contaminant found: Not reported  
No contaminant found: Not reported  
Pesticides contaminant found: Not reported  
Selenium contaminant found: Not reported  
SVOCs contaminant found: Not reported  
Unknown contaminant found: Not reported  
Future Use: Multistory Not reported  
Media affected Bluiding Material: Not reported  
Media affected indoor air: Not reported  
Building material media cleaned up: Not reported  
Indoor air media cleaned up: Not reported  
Unknown media cleaned up: Not reported  
Past Use: Multistory Not reported  
Highlights: Not reported  
IC Data Address: Not reported  
Redev Completion Date: Not reported  
# Below Poverty: 77  
% Below Poverty: 6.1%  
# Low Income: 158  
% Low Income: 3.0%  
Meidan Income: 1401  
# Unemployed: 6  
% Unemployed: 77.7%  
# Vacant Housing: 121  
% Vacant Housing: 3.9%

Recipient name: Allegan County  
Grant type: Assessment  
Property name: TOWER MARINE  
Property #: Not reported  
Parcel size: 20.16  
Property Description: Not reported  
Latitude: 42.6447546  
Longitude: -86.2063803  
HCM label: Address Matching-House Number  
Map scale: Not reported  
Point of reference: Entrance Point of a Facility or Station  
Datum: North American Datum of 1983  
ACRES property ID: 142101  
Start date: Not reported  
Completed date: Not reported  
Acres cleaned up: Not reported  
Cleanup funding: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Cleanup funding source:	Not reported
Assessment funding:	3500
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous & Petroleum
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	00E00362
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Meidan Income:	1401
# Unemployed:	6
% Unemployed:	77.7%

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

# Vacant Housing:	121
% Vacant Housing:	3.9%
Recipient name:	Allegan County
Grant type:	Assessment
Property name:	TOWER MARINE
Property #:	Not reported
Parcel size:	20.16
Property Description:	An 1871 site map included with documentation provided by Tower Marine indicated that the eastern portion of the Subject Property was historically residential and contained a school house. No information regarding when these structures were razed was available. Based on a review of historical aerial photographs, the Subject Property was developed as a marina between 1967 and 1974. The Subject Property contained undeveloped beachfront and wooded land from as early as 1938 through the construction of the marina. At the time of ECTs site reconnaissance, the Subject Property was developed as a marina. Four conjoined buildings i.e., the main subject buildings are located in the westernmost portion of the Subject Property that include a store, a hangar/maintenance building, and two warehouses. Ferry boats are built in the warehouse buildings. Boat construction operations include welding, tooling, sanding, and painting.
Latitude:	42.6447419
Longitude:	-86.2063846
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	125683
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	3500
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	00E00361
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Y
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Meidan Income:	1401
# Unemployed:	6
% Unemployed:	77.7%
# Vacant Housing:	121
% Vacant Housing:	3.9%
Recipient name:	Allegan County
Grant type:	Assessment
Property name:	TOWER MARINE
Property #:	Not reported
Parcel size:	20.16
Property Description:	Not reported
Latitude:	42.6447546
Longitude:	-86.2063803
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	142101
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	27000
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	Hazardous & Petroleum
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	00E00362
Ownership entity:	Private
Current owner:	Kalamazoo Ferry Company
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Y
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	20.16
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	20.16
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Highlights:	Not reported
IC Data Address:	Not reported
Redev Completion Date:	Not reported
# Below Poverty:	77
% Below Poverty:	6.1%
# Low Income:	158
% Low Income:	3.0%
Meidan Income:	1401
# Unemployed:	6
% Unemployed:	77.7%
# Vacant Housing:	121
% Vacant Housing:	3.9%

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1016370589**

FINDS:

Registry ID: 110046369443

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)  
is an federal online database for Brownfields Grantees to  
electronically submit data directly to EPA.

**N52**  
**NNE**  
**1/2-1**  
**0.669 mi.**  
**3534 ft.**

**RICHARD QUADE**  
**50 CENTER RD**  
**DOUGLAS, MI 49406**

**MI UST** **U003211808**  
**N/A**

**Site 1 of 9 in cluster N**

**Relative:**  
**Lower**

UST:

**Actual:**  
**602 ft.**

Facility ID: 00039025  
Facility Type: CLOSED  
Owner Name: RICHARD QUADE  
Owner Address: PO BOX 310  
Owner City,St,Zip: DOUGLAS, MI 49406-0310  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 561-2897  
Contact: Richard Quade  
Contact Phone: (616) 561-5574  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64362  
Longitude: -86.19966

Tank ID: 1  
**Tank Status: Removed from Ground**  
Capacity: Not reported  
Product: Gasoline  
Install Date: 01/01/1934  
Remove Date: 05/04/1998  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Suction: Valve at Tank  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**N53 DOUGLAS AMOCO 28876**  
**NNE 10 1/2 S WASHINGTON**  
**1/2-1 DOUGLAS, MI 48152**  
**0.672 mi.**  
**3546 ft. Site 2 of 9 in cluster N**

**MI LUST S102726336**  
**MI INVENTORY N/A**

**Relative:**  
**Lower**

LUST:

Facility ID: 50001810  
 Source: STATE OF MICHIGAN  
 Owner Name: Amoco Petroleum Products  
 Owner Address: 17187 N Laurel Park Ste 365  
 Owner City,St,Zip: Livonia, MI 48152-3954  
 Owner Contact: Jeff Weston  
 Owner Phone: (734) 953-7013  
 Country: USA  
 District: Region 3 - Kalamazoo District Office  
 Site Name: Amoco #28876 (Douglas)  
 Latitude: 42.64311  
 Longitude: -86.20772  
 Date of Collection: 12/27/2006  
 Method of Collection: Interpolation-Map  
 Accuracy: 100  
 Accuracy Value Unit: FEET  
 Horizontal Data: NAD83  
 Point Line Area: POINT  
 Desc Category: Plant Entrance (Freight)

**Actual:**  
**602 ft.**

Leak Number: C-1267-85  
 Release Date: 05/05/1985  
 Substance Released: Not reported  
 Release Status: Closed  
 Release Closed Date: 03/13/2015

INVENTORY:

Bea Number: 201502190PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 199800150PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 199800149PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**N54** DOUGLAS AMOCO  
**NNE** 10 1/2 SOUTH WASHINGTON STREET  
**1/2-1** DOUGLAS, MI 49406  
**0.672 mi.**  
**3546 ft.** Site 3 of 9 in cluster N

**MI AUL** S117577794  
N/A

**Relative:**  
**Lower**

AUL:

**Actual:**  
**602 ft.**

Status:	Recorded
Site Name:	Not reported
Property:	on-site
Land Use Restriction Type:	RC
Program Type:	Part 213
Program Support Assigned User:	Nicholas Ekel
Program Support Assigned Date:	03/20/2015
Legal Description Of Property:	Not reported
Based On The Deq Ref #:	11121315041
MDEQ Reference Number:	RC-RRD-213-15-041
Property Or Description Restricted Area:	Not reported
Lead Division:	RRD
File Name Of Hyperlinked Legal Doc:	U:\KERMIT\11121315041.PDF
Mapped Polygons Area In Acres:	0.43669999999999998
Mapped Polygons Area In Square Miles:	5.9999999999999995E-4
Date Data Entry Started:	05/06/2015
Date Data Entry Finished:	05/06/2015
Individual Or Staff Assoc With The Mapping:	Nicholas Ekel
Program Used To Map Restricted Features:	ArcGIS 10.2
Date Legal Paperwork Stamped/Filed/Register Of Deeds:	02/26/2015
Commercial I Land Use Restriction:	0
Commercial Ii Land Use Restriction:	0
Commercial Iii Land Use Restriction:	0
Commercial Iv Land Use Restriction:	0
Industrial Land Use Restriction:	0
Residential Land Use Restriction:	1
Recreational Land Use Restriction:	1
Multiple Land-Use Restrictions:	0
Site Specific Restrictions:	1
Groundwater Consumption Restrictions:	1
Groundwater Contact Restrictions:	0
Special Well Construction Requirements:	0
Special Building Restrictions:	1
Excavation And Soil Movement Restrictions:	1
Soil Movement Requirements:	0
There Is A Restriction On All Construction:	0
Monitoring Well Protected, No Tampering Or Removal:	0
There Is An Exposure Barrier In Place:	1
There Is A Health And Safety Plan:	0
There Is A Permanent Marker On The Site:	0
Map Comments:	20150320 - LRUR is NOT mapped in KERMIT - Nick Ekel 20150506 - LRUR is mapped in KERMIT - Nick Ekel
Comment:	February 24, 2015 consultant requested DEQ reference #.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**N55** DOUGLAS AMOCO 28876  
**NNE** 10 1/2 S WASHINGTON  
**1/2-1** DOUGLAS, MI  
**0.672 mi.**  
**3546 ft.** Site 4 of 9 in cluster N

**MI RGA LUST** S115673460  
 N/A

**Relative:**  
**Lower**

RGA LUST:

2012	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2011	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2010	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2009	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2008	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2007	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2006	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2005	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2004	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2003	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2001	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
2000	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1999	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1998	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON
1997	DOUGLAS AMOCO 28876	10 1/2 S WASHINGTON

**Actual:**  
**602 ft.**

**N56** DOUGLAS AMOCO 28876  
**NNE** 10 1/2 S WASHINGTON  
**1/2-1** DOUGLAS, MI 49406  
**0.672 mi.**  
**3546 ft.** Site 5 of 9 in cluster N

**MI INVENTORY** S117979285  
 N/A

**Relative:**  
**Lower**

INVENTORY:

Bea Number: Not reported  
 Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.64312  
 Longitude: -86.20773

**Actual:**  
**602 ft.**

**M57** FERRY (14) STREET  
**NNW** 14 FERRY STREET  
**1/2-1** DOUGLAS, MI 49406  
**0.684 mi.**  
**3609 ft.** Site 6 of 10 in cluster M

**MI BEA** S110748308  
**MI WDS** N/A

**Relative:**  
**Lower**

BEA:

Secondary Address: Not reported  
 BEA Number: 1543  
 District: Kalamazoo  
 Date Received: 12/03/2010  
 Submitter Name: Macatawa Bank  
 Petition Determination: No Request  
 Petition Disclosure: 0  
 Category: No Hazardous Substance(s)  
 Determination 20107A: No Request  
 Reviewer: zimontb  
 Division Assigned: RRD

**Actual:**  
**627 ft.**

Secondary Address: Not reported  
 BEA Number: 1544  
 District: Kalamazoo

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRY (14) STREET (Continued)**

**S110748308**

Date Received: 12/03/2010  
Submitter Name: Coastal Real Estate Holdings, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: No Hazardous Substance(s)  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1628  
District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: Douglas Property Development, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1629  
District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: BDR Executive Custom Homes, Inc.  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

Secondary Address: Not reported  
BEA Number: 1630  
District: Kalamazoo  
Date Received: 07/18/2011  
Submitter Name: BDR Management, LLC  
Petition Determination: No Request  
Petition Disclosure: 0  
Category: Not reported  
Determination 20107A: No Request  
Reviewer: zimontb  
Division Assigned: RRD

**WDS:**

Site Id: MIK612445361  
WMD Id: 488793  
Site Specific Name: FORMER WEST SHORE GOLF CLUB  
Mailing Address: 10759 MACATAWA DR  
Mailing City/State/Zip: 49424  
Mailing County: OTTAWA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**M58** WEST SHORE GOLF CLUB  
**NNW** 14 FERRY ST  
**1/2-1** DOUGLAS, MI 49406  
**0.684 mi.**  
**3609 ft.** Site 7 of 10 in cluster M

**MI UST** U000249331  
N/A

**Relative:**  
**Lower**

UST:

**Actual:**  
**627 ft.**

Facility ID: 00033298  
Facility Type: CLOSED  
Owner Name: WEST SHORE GOLF CLUB  
Owner Address: 14 FERRY ST  
Owner City,St,Zip: DOUGLAS, MI 49406  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2500  
Contact: Not reported  
Contact Phone: ( ) -  
Date of Collection: 01/11/2001  
Accuracy: 100  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Plant Entrance (Freight)  
Method of Collection: Address Matching-House Number  
Latitude: 42.64387  
Longitude: -86.21252

Tank ID: 1  
**Tank Status:** Removed from Ground  
Capacity: 560  
Product: Gasoline  
Install Date: 01/10/1985  
Remove Date: 11/11/1991  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**M59** MACATAWA BANK  
**NNW** 14 FERRY ST  
**1/2-1** DOUGLAS, MI 49406  
**0.684 mi.**  
**3609 ft.** Site 8 of 10 in cluster M

**RCRA NonGen / NLR** 1014392376  
MIK612445361

**Relative:**  
**Lower**

RCRA NonGen / NLR:

**Actual:**  
**627 ft.**

Date form received by agency: 01/15/2013  
Facility name: MACATAWA BANK  
Facility address: 14 FERRY ST  
DOUGLAS, MI 49406  
EPA ID: MIK612445361  
Mailing address: 10759 MACATAWA DR  
HOLLAND, MI 49424  
Contact: RICK VANDENBERG  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: (616) 494-1405

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MACATAWA BANK (Continued)**

**1014392376**

Contact email: RVANDENBERG@MACATAWABANK.COM  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 06/01/2011  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 06/01/2011  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

**Historical Generators:**

Date form received by agency: 11/30/2010  
Site name: MACATAWA BANK  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MACATAWA BANK (Continued)**

**1014392376**

Evaluation Action Summary:

Evaluation date: 04/06/2011  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

**M60**  
**NNW**  
**1/2-1**  
**0.684 mi.**  
**3612 ft.**

**MACATAWA BANK**  
**14 FERRY ST**  
**DOUGLAS, MI 49406**  
**Site 9 of 10 in cluster M**

**FINDS 1014732433**  
**ECHO N/A**

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110043185095

**Actual:**  
**627 ft.**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**ECHO:**

Envid: 1014732433  
 Registry ID: 110043185095  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110043185095](http://echo.epa.gov/detailed_facility_report?fid=110043185095)

**M61**  
**NNW**  
**1/2-1**  
**0.684 mi.**  
**3612 ft.**

**FERRY (14) STREET**  
**14 FERRY STREET**  
**ALLEGAN (County), MI 49406**  
**Site 10 of 10 in cluster M**

**MI INVENTORY S114034323**  
**N/A**

**Relative:**  
**Lower**

**INVENTORY:**

Bea Number: 201101628PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201001544PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201001543PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FERRY (14) STREET (Continued)**

**S114034323**

Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201101629PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

Bea Number: 201101630PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**O62  
 NE  
 1/2-1  
 0.696 mi.  
 3677 ft.**

**KALAMAZOO LAKE WTP  
 22 BAYOU STREET  
 DOUGLAS, MI 49406  
 Site 1 of 3 in cluster O**

**ECHO 1018320784  
 N/A**

**Relative:  
 Lower  
 Actual:  
 582 ft.**

ECHO:  
 Envid: 1018320784  
 Registry ID: 110006742007  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110006742007](http://echo.epa.gov/detailed_facility_report?fid=110006742007)

**O63  
 NE  
 1/2-1  
 0.696 mi.  
 3677 ft.**

**KALAMAZOO LAKE WTP  
 22 BAYOU STREET  
 DOUGLAS, MI 49406  
 Site 2 of 3 in cluster O**

**MI NPDES S117977308  
 N/A**

**Relative:  
 Lower  
 Actual:  
 582 ft.**

MI NPDES:  
 Permit Number: MIG640101  
 Permittee PO Box: Y  
 Permittee Email: Not reported  
 Issue Date: 05/19/2015  
 Effective Date: 05/19/2015  
 Expiration Date: 04/01/2020  
 Permittee Name: Kalamazoo Lake WTP  
 Permittee Address: 6449 Old Allegan Road  
 Permittee Addr2: PO Box 789  
 Permittee City,St,Zip: Saugatuck, MI 49453  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Kalamazoo Lake WTP  
 Latitude: 42.642777  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.198055  
 Lon Direction: W  
 Lon Type Code: LON

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KALAMAZOO LAKE WTP (Continued)**

**S117977308**

Hydrologic Unit Code: 4050003  
 Permit Status: In Effect  
 COC Permit Category: Wastewater Discharge from Potable Water Supply  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Marcus Tironi  
 DEQ Permit Compliance Manager Email: tironim@michigan.gov

**O64**  
**NE**  
 1/2-1  
 0.696 mi.  
 3677 ft.

**KALAMAZOO LAKE WTP**  
**22 BAYOU**  
**DOUGLAS, MI 49406**  
 Site 3 of 3 in cluster O

**FINDS 1005551644**  
**N/A**

**Relative:**  
**Lower**

**Actual:**  
**582 ft.**

**N65**  
**NNE**  
 1/2-1  
 0.711 mi.  
 3752 ft.

**DOUGLAS SHELL**  
**30 N WASHINGTON**  
**DOUGLAS, MI 49090**  
 Site 6 of 9 in cluster N

**MI LUST U000249177**  
**MI UST N/A**  
**MI INVENTORY**

**Relative:**  
**Lower**

**Actual:**  
**595 ft.**

**LUST:**  
 Facility ID: 00004516  
 Source: STATE OF MICHIGAN  
 Owner Name: Fleming Brothers Oil Co  
 Owner Address: 6912-109th Avenue  
 Owner City,St,Zip: South Haven, MI 49090  
 Owner Contact: Not reported  
 Owner Phone: (269) 637-5255  
 Country: USA  
 District: Region 3 - Kalamazoo District Office  
 Site Name: Douglas Shell  
 Latitude: 42.64411  
 Longitude: -86.20699  
 Date of Collection: 10/17/2009  
 Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
 Accuracy: 10  
 Accuracy Value Unit: FEET  
 Horizontal Data: NAD83  
 Point Line Area: POINT  
 Desc Category: Not reported

Leak Number: C-0423-92  
 Release Date: 03/19/1992  
 Substance Released: Used Oil  
 Release Status: Closed  
 Release Closed Date: 01/30/2007

Leak Number: C-0631-95  
 Release Date: 06/01/1995  
 Substance Released: Gasoline  
 Release Status: Closed  
 Release Closed Date: 01/30/2007

Leak Number: C-1582-91



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Release Date: 07/30/1991  
Substance Released: Unknown  
Release Status: Closed  
Release Closed Date: 01/30/2007

UST:

Facility ID: 00004516  
Facility Type: ACTIVE  
Owner Name: FLEMING BROTHERS OIL CO  
Owner Address: 6912-109TH AVENUE  
Owner City,St,Zip: SOUTH HAVEN, MI 49090  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (269) 637-5255  
Contact: Tom Fleming  
Contact Phone: (269) 637-5255  
Date of Collection: 10/17/2009  
Accuracy: 10  
Accuracy Value Unit: FEET  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: GPS Code Meas. Standard Positioning Service SA Off  
Latitude: 42.64411  
Longitude: -86.20699

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO-FLEX TOTAL CO,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 2  
**Tank Status:** **Removed from Ground**  
Capacity: 6000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 3  
**Tank Status:** **Removed from Ground**  
Capacity: 6000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 4  
**Tank Status: Removed from Ground**  
Capacity: 4000  
Product: Gasoline  
Install Date: 04/19/1974  
Remove Date: 11/03/2011  
Tank Release Detection: Automatic Tank Gauging,Inventory Control  
Pipe Realease Detection: Automatic Line Leak Detectors  
Piping Material: ENVIRO FLEX,Secondary Containment  
Piping Type: Pressure  
Construction Material: Asphalt Coated or Bare Steel,Lined Interior  
Impressed Device: No

Tank ID: 5  
**Tank Status: Removed from Ground**  
Capacity: 270  
Product: Used Oil  
Install Date: 04/19/1974  
Remove Date: 09/01/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Cathodically Protected Steel,Lined Interior,Polyethylene Tank Jacket  
Impressed Device: No

Tank ID: 6  
**Tank Status: Removed from Ground**  
Capacity: 270  
Product: Used Oil  
Install Date: 04/19/1974  
Remove Date: 09/01/1991  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Galvanized Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 7  
**Tank Status: Currently In Use**  
Capacity: 20  
Product: HOIST TANK

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Install Date: 04/20/1971  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 8  
**Tank Status: Currently In Use**  
Capacity: 20  
Product: HOIST TANK  
Install Date: 04/20/1971  
Remove Date: Not reported  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Unknown  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 9  
**Tank Status: Currently In Use**  
Capacity: 15000  
Product: Gasoline  
Install Date: 11/10/2011  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging, Interstitial Monitoring  
Double Walled Tank  
Pipe Release Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled  
Piping, Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Fiberglass Reinforced Plastic, Double Walled  
Impressed Device: No

Tank ID: 10  
**Tank Status: Currently In Use**  
Capacity: 8000  
Product: Gasoline, Diesel, Dual Compartment  
Install Date: 11/10/2011  
Remove Date: Not reported  
Tank Release Detection: Inventory Control, Automatic Tank Gauging, Interstitial Monitoring  
Double Walled Tank  
Pipe Release Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled  
Piping, Line Tightness Testing  
Piping Material: Fiberglass Reinforced Plastic, Double Walled  
Piping Type: Pressure  
Construction Material: Fiberglass Reinforced Plastic, Double Walled  
Impressed Device: No

**INVENTORY:**

Bea Number: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**DOUGLAS SHELL (Continued)**

**U000249177**

Township: Not reported  
 District: Kalamazoo  
 Data Source: Part 213  
 Latitude: 42.64411  
 Longitude: -86.20699

**N66**  
**NNE**  
 1/2-1  
 0.711 mi.  
 3752 ft.

**DOUGLAS SHELL**  
**30 N WASHINGTON**  
**DOUGLAS, MI**

**MI RGA LUST S115673471**  
**N/A**

**Site 7 of 9 in cluster N**

**Relative:**  
**Lower**

RGA LUST:

2012	DOUGLAS SHELL	30 N WASHINGTON
2011	DOUGLAS SHELL	30 N WASHINGTON
2010	DOUGLAS SHELL	30 N WASHINGTON
2009	DOUGLAS SHELL	30 N WASHINGTON
2008	DOUGLAS SHELL	30 N WASHINGTON
2007	DOUGLAS SHELL	30 N WASHINGTON
2006	DOUGLAS SHELL	30 N WASHINGTON
2005	DOUGLAS SHELL	30 N WASHINGTON
2004	DOUGLAS SHELL	30 N WASHINGTON
2003	DOUGLAS SHELL	30 N WASHINGTON
2001	DOUGLAS SHELL	30 N WASHINGTON
2000	DOUGLAS SHELL	30 N WASHINGTON
1999	DOUGLAS SHELL	30 N WASHINGTON

**Actual:**  
**595 ft.**

**N67**  
**NNE**  
 1/2-1  
 0.711 mi.  
 3752 ft.

**DOUGLAS SHELL**  
**30 N. WASHINGTON**  
**DOUGLAS, MI**

**MI RGA LUST S115673472**  
**N/A**

**Site 8 of 9 in cluster N**

**Relative:**  
**Lower**

RGA LUST:

1998	DOUGLAS SHELL	30 N. WASHINGTON
1997	DOUGLAS SHELL	30 N. WASHINGTON

**Actual:**  
**595 ft.**

**N68**  
**NNE**  
 1/2-1  
 0.711 mi.  
 3752 ft.

**FLEMING OIL CO**  
**30 WASHINGTON ST**  
**DOUGLAS, MI 49406**

**MI AUL S108958253**  
**MI WDS N/A**

**Site 9 of 9 in cluster N**

**Relative:**  
**Lower**

AUL:

Status:	Recorded
Site Name:	Not reported
Property:	30 N. Washington, Douglas
Land Use Restriction Type:	RC
Program Type:	Part 213
Program Support Assigned User:	Nicholas Swartz
Program Support Assigned Date:	05/20/2009
Legal Description Of Property:	Migrated
Based On The Deq Ref #:	11121307004
MDEQ Reference Number:	RC-RRD-213-07-004
Property Or Description Restricted Area:	Migrated
Lead Division:	STD
File Name Of Hyperlinked Legal Doc:	U:\Kermit\11121307004.pdf

**Actual:**  
**595 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEMING OIL CO (Continued)**

**S108958253**

Mapped Polygons Area In Acres: 0.6907999999999997  
Mapped Polygons Area In Square Miles: 1.1000000000000001E-3  
Date Data Entry Started: 05/20/2009  
Date Data Entry Finished: 05/20/2009  
Individual Or Staff Assoc With The Mapping: Nicholas Swartz  
Program Used To Map Restricted Features: ArcInfo 9.3 and IcoMap 4.2  
Date Legal Paperwork Stamped/Filed/Register Of Deeds: 08/07/2006  
Commercial I Land Use Restriction: 0  
Commercial Ii Land Use Restriction: 0  
Commercial Iii Land Use Restriction: 0  
Commercial Iv Land Use Restriction: 0  
Industrial Land Use Restriction: 0  
Residential Land Use Restriction: 0  
Recreational Land Use Restriction: 0  
Multiple Land-Use Restrictions: 0  
Site Specific Restrictions: 1  
Groundwater Consumption Restrictions: 1  
Groundwater Contact Restrictions: 0  
Special Well Construction Requirements: 0  
Special Building Restrictions: 0  
Excavation And Soil Movement Restrictions: 0  
Soil Movement Requirements: 0  
There Is A Restriction On All Construction: 0  
Monitoring Well Protected, No Tampering Or Removal: 0  
There Is An Exposure Barrier In Place: 0  
There Is A Health And Safety Plan: 0  
There Is A Permanent Marker On The Site: 0  
Map Comments: Restriction is NOT mapped in Kermit as of 12262007.LUR is mapped in  
KERMIT as of 20090520 - Nick Swartz  
Comment: Request received on 2/6/2007. 10/16/07 recorded copy received.

WDS:

Site Id: MIG000038594  
WMD Id: 443993  
Site Specific Name: FLEMING OIL CO  
Mailing Address: 30 N WASHINGTON ST  
Mailing City/State/Zip: 49406  
Mailing County: ALLEGAN

69  
North  
1/2-1  
0.742 mi.  
3919 ft.

219 ST PETERS DR  
DOUGLAS, MI 29406

ERNS 2016156605  
N/A

Relative:  
Lower

[Click this hyperlink](#) while viewing on your computer to access  
additional ERNS detail in the EDR Site Report.

Actual:  
621 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

70  
NNE  
1/2-1  
0.794 mi.  
4190 ft.

**WEATHER VAN CLEANERS**  
**102 WASHINGTON ST**  
**DOUGLAS, MI 49406**

**RCRA NonGen / NLR**  
**FINDS**  
**ECHO**

**1000408551**  
**MID982424491**

**Relative:**  
**Lower**

RCRA NonGen / NLR:

**Actual:**  
**591 ft.**

Date form received by agency: 03/07/1988  
Facility name: WEATHER VAN CLEANERS  
Facility address: 102 WASHINGTON ST  
DOUGLAS, MI 49406  
EPA ID: MID982424491  
Mailing address: 102 S WASHINGTON  
DOUGLAS, MI 49406  
Contact: DORI COMPTON  
Contact address: 102 WASHINGTON ST  
DOUGLAS, MI 49406  
Contact country: US  
Contact telephone: (616) 857-2905  
Contact email: Not reported  
EPA Region: 05  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/03/1970  
Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/03/1970  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WEATHER VAN CLEANERS (Continued)**

**1000408551**

Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/22/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

FINDS:

Registry ID: 110003629119

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000408551  
Registry ID: 110003629119  
DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003629119](http://echo.epa.gov/detailed_facility_report?fid=110003629119)

**P71**  
**NNE**  
**1/2-1**  
**0.805 mi.**  
**4249 ft.**

**METROPOLITAN TITLE OFFICE**  
**25-27 BLUE STAR**  
**SAUGATUCK, MI 99999**

**MI LUST** **S103724109**  
**MI INVENTORY** **N/A**

**Site 1 of 2 in cluster P**

**Relative:**  
**Lower**

LUST:

**Actual:**  
**599 ft.**

Facility ID: 50002327  
Source: Not reported  
Owner Name: Nrt Owner  
Owner Address: Unknown  
Owner City,St,Zip: Unknown, MI 99999  
Owner Contact: Not reported  
Owner Phone: Not reported  
Country: USA  
District: Region 3 - Kalamazoo District Office  
Site Name: Texaco Gas Station  
Latitude: 42.64380  
Longitude: -86.20633  
Date of Collection: 01/02/2007  
Method of Collection: Interpolation-Map  
Accuracy: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**METROPOLITAN TITLE OFFICE (Continued)**

**S103724109**

Accuracy Value Unit: FEET  
Horizontal Data: NAD83  
Point Line Area: Not reported  
Desc Category: Not reported

Leak Number: C-0022-99  
Release Date: 01/08/1999  
Substance Released: Unknown  
Release Status: Open  
Release Closed Date: Not reported

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.64381  
Longitude: -86.20633

**P72**  
**NNE**  
**1/2-1**  
**0.806 mi.**  
**4255 ft.**

**UNION STREET & BLUE STAR HIGHWAY**  
**UNION STREET & BLUE STAR HIGHWAY**  
**ALLEGAN (County), MI 49406**

**MI INVENTORY S117731969**  
**N/A**

**Site 2 of 2 in cluster P**

**Relative:**  
**Lower**

**INVENTORY:**

Bea Number: 201502162PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**Actual:**  
**599 ft.**

Bea Number: 201502163PL  
Township: Douglas  
District: Kalamazoo  
Data Source: BEA  
Latitude: Not reported  
Longitude: Not reported

**73**  
**NNW**  
**1/2-1**  
**0.865 mi.**  
**4567 ft.**

**KALICO KITCHEN LTD**  
**312 FERRY ST**  
**DOUGLAS, MI 49406**

**MI INVENTORY S117324933**  
**N/A**

**Relative:**  
**Lower**

**INVENTORY:**

Bea Number: Not reported  
Township: Not reported  
District: Kalamazoo  
Data Source: Part 213  
Latitude: 42.63799  
Longitude: -86.21177

**Actual:**  
**621 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**Q74** SAUGATUCK YACHT SERVICES CO  
**North** 216 ST.PETERS DR  
**1/2-1** DOUGLAS, MI 49453  
**0.869 mi.**  
**4588 ft.** Site 1 of 7 in cluster Q

**MI UST** U003866318  
N/A

**Relative:**  
**Lower**

UST:

**Actual:**  
**583 ft.**

Facility ID: 00001948  
Facility Type: CLOSED  
Owner Name: R.J. PETERSON  
Owner Address: 116 RIVERSIDE DR  
Owner City,St,Zip: SAUGATUCK, MI 49453  
Owner Country: USA  
Owner Contact: Not reported  
Owner Phone: (616) 857-2151  
Contact: R.J . Peterson  
Contact Phone: 616-857-2151  
Date of Collection: 09/18/2006  
Accuracy: 15  
Accuracy Value Unit: METERS  
Horizontal Datum: NAD83  
Source: STATE OF MICHIGAN  
Point Line Area: POINT  
Desc Category: Not reported  
Method of Collection: Interpolation-Map  
Latitude: 42.64643  
Longitude: -86.20880

Tank ID: 1  
**Tank Status:** **Removed from Ground**  
Capacity: Not reported  
Product: Gasoline  
Install Date: 01/01/1970  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 3N  
**Tank Status:** **Removed from Ground**  
Capacity: 2000  
Product: Gasoline  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Realease Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 4S  
**Tank Status:** **Removed from Ground**  
Capacity: 2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAUGATUCK YACHT SERVICES CO (Continued)**

**U003866318**

Product: Gasoline  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 5D  
**Tank Status: Removed from Ground**  
Capacity: 2000  
Product: Diesel  
Install Date: 01/01/1966  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

Tank ID: 2SER  
**Tank Status: Removed from Ground**  
Capacity: 500  
Product: Gasoline  
Install Date: 01/01/1980  
Remove Date: 12/21/1993  
Tank Release Detection: Not reported  
Pipe Release Detection: Not reported  
Piping Material: Bare Steel  
Piping Type: Not reported  
Construction Material: Asphalt Coated or Bare Steel  
Impressed Device: No

**Q75**  
North  
1/2-1  
0.869 mi.  
4588 ft.

**TOWER MARINE**  
**216 SAINT PETERS DR**  
**DOUGLAS, MI 49406**

**RCRA-SQG 1000210860**  
**FINDS MID050951474**  
**ECHO**

**Site 2 of 7 in cluster Q**

**Relative:**  
**Lower**

RCRA-SQG:  
Date form received by agency: 04/27/2016  
Facility name: TOWER MARINE  
Facility address: 216 SAINT PETERS DR  
DOUGLAS, MI 49406  
EPA ID: MID050951474  
Mailing address: PO BOX 188  
DOUGLAS, MI 49406  
Contact: ROLAND J PETERSON  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: (269) 857-2151  
Contact email: Not reported

**Actual:**  
**583 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

EPA Region: 05  
Land type: Private  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: KALAMZOO FERRY CO INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 02/01/1965  
Owner/Op end date: Not reported

Owner/operator name: KALAMZOO FERRY CO INC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 02/01/1965  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 06/09/2015  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

. Waste name: IGNITABLE WASTE

Date form received by agency: 04/08/2014  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 07/10/2012  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 05/04/2011  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/18/2010  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 03/05/2005  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/10/2004  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/24/2003  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/22/1989  
Site name: TOWER MARINE  
Classification: Small Quantity Generator

. Waste code: D001  
. Waste name: IGNITABLE WASTE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOWER MARINE (Continued)**

**1000210860**

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Universal Waste - Small Quantity Handlers  
Date violation determined: 04/27/2011  
Date achieved compliance: 06/20/2011  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/03/2011  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 02/11/1998  
Date achieved compliance: 03/30/1998  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/11/1998  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/27/2011  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Universal Waste - Small Quantity Handlers  
Date achieved compliance: 06/20/2011  
Evaluation lead agency: State

Evaluation date: 01/27/1998  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 03/30/1998  
Evaluation lead agency: State

FINDS:

Registry ID: 110003596092

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

EDR ID Number  
 EPA ID Number

Site Database(s)

---

**TOWER MARINE (Continued)**

**1000210860**

Envid: 1000210860  
 Registry ID: 110003596092  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110003596092](http://echo.epa.gov/detailed_facility_report?fid=110003596092)

**Q76**  
 North  
 1/2-1  
 0.869 mi.  
 4588 ft.

**TOWER MARINE-DOUGLAS**  
**216 ST. PETERS DRIVE**  
**DOUGLAS, MI 49406**  
 Site 3 of 7 in cluster Q

**FINDS 1017768280**  
**ECHO N/A**

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110063867070

**Actual:**  
**583 ft.**

Environmental Interest/Information System

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

**ECHO:**

Envid: 1017768280  
 Registry ID: 110063867070  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110063867070](http://echo.epa.gov/detailed_facility_report?fid=110063867070)

**Q77**  
 North  
 1/2-1  
 0.869 mi.  
 4588 ft.

**TOWER MARINE/KALAMAZOO FERRY CO**  
**216 ST PETERS DR**  
**DOUGLAS, MI**  
 Site 4 of 7 in cluster Q

**MI RGA LUST S115698340**  
**N/A**

**Relative:**  
**Lower**

**RGA LUST:**

2001	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
2000	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1999	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1998	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR
1997	TOWER MARINE/KALAMAZOO FERRY CO	216 ST PETERS DR

**Actual:**  
**583 ft.**

**Q78**  
 North  
 1/2-1  
 0.869 mi.  
 4588 ft.

**TOWER MARINE-DOUGLAS**  
**216 ST PETERS DRIVE**  
**DOUGLAS, MI 49406**  
 Site 5 of 7 in cluster Q

**MI NPDES S118492183**  
**N/A**

**Relative:**  
**Lower**

**MI NPDES:**

Permit Number: MIG690005  
 Permittee PO Box: N  
 Permittee Email: [terrie@towermarine.com](mailto:terrie@towermarine.com)  
 Issue Date: 04/15/2014  
 Effective Date: 04/15/2014

**Actual:**  
**583 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOWER MARINE-DOUGLAS (Continued)**

**S118492183**

Expiration Date: 04/01/2017  
 Permittee Name: Roland J. Peterson, President  
 Permittee Address: 216 St. Peters Drive  
 Permittee Addr2: PO Box 188  
 Permittee City,St,Zip: Douglas, MI 49406  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Tower Marine-Douglas  
 Latitude: 42.648055  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.208333  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: 4050003  
 Permit Status: In Effect  
 COC Permit Category: Dredging Dewatering Water  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Not reported  
 DEQ Permit Compliance Manager Email: Not reported

**Q79**  
**North**  
**1/2-1**  
**0.869 mi.**  
**4588 ft.**

**TOWER MARINE-DOUGLAS**  
**216 ST PETERS DRIVE**  
**DOUGLAS, MI 49406**  
**Site 6 of 7 in cluster Q**

**MI NPDES S118492597**  
**N/A**

**Relative:**  
**Lower**

MI NPDES:

Permit Number: MIS110344  
 Permittee PO Box: N  
 Permittee Email: nancy@towermarine.com  
 Issue Date: 11/16/2011  
 Effective Date: 11/16/2011  
 Expiration Date: 04/01/2016  
 Permittee Name: Tower Marine  
 Permittee Address: 216 St. Peters Drive  
 Permittee Addr2: Not reported  
 Permittee City,St,Zip: Douglas, MI 49406  
 Permit Type: NPDES Certificate of Coverage under General Permit (COC)  
 Facility Name 2: Not reported  
 Facility Name 3: Not reported  
 Facility Name 4: Not reported  
 Designed Name: Tower Marine  
 Latitude: 42.648055  
 Lat Direction: N  
 Lat Type Code: LAT  
 Longitude: -86.208333  
 Lon Direction: W  
 Lon Type Code: LON  
 Hydrologic Unit Code: 4050003  
 Permit Status: Extended  
 COC Permit Category: SW-Industrial CY1  
 DEQ District Email: Kalamazoo  
 DEQ Permit Compliance Manager: Janelle Hohm  
 DEQ Permit Compliance Manager Email: hohmj@michigan.gov

**Actual:**  
**583 ft.**

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**Q80**  
**North**  
**1/2-1**  
**0.869 mi.**  
**4588 ft.**

**TOWER MARINE**  
**216 SAINT PETERS DR**  
**DOUGLAS, MI 49406**  
**Site 7 of 7 in cluster Q**

**MI WDS S111934695**  
**N/A**

**Relative:**  
**Lower**

WDS:  
 Site Id: MID050951474  
 WMD Id: 395969  
 Site Specific Name: TOWER MARINE  
 Mailing Address: PO BOX 188  
 Mailing City/State/Zip: 49406  
 Mailing County: ALLEGAN

**Actual:**  
**583 ft.**

**81**  
**NNW**  
**1/2-1**  
**0.997 mi.**  
**5264 ft.**

**KALICO KITCHEN LTD**  
**312 FERRY STREET**  
**ALLEGAN (County), MI 49453**

**MI INVENTORY S118693682**  
**N/A**

**Relative:**  
**Lower**

INVENTORY:  
 Bea Number: 201602352PL  
 Township: Douglas  
 District: Kalamazoo  
 Data Source: BEA  
 Latitude: Not reported  
 Longitude: Not reported

**Actual:**  
**585 ft.**



Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FENNVILLE	1003871277	CHEVRON CHEMICAL COMPANY	0.8MILE EAST OF CITY	49408	SEMS-ARCHIVE
FENNVILLE	1003871273	CHEVRON CHEMICAL COMPANY	ONE BLK OFF MAIN ON FENNVILLE	49408	SEMS-ARCHIVE
FERRYSBURG	S102726122	FERRYSBURG TERMINAL	2ND ST	49408	MI LUST, MI INVENTORY
LEIGHTON TWP	1003871219	LEIGHTON TOWNSHIP DUMPSITE	KALAMAZOO AVE 130TH & 140TH	49406	SEMS-ARCHIVE

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2016	Telephone: 703-603-8704
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/04/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016	Source: EPA
Date Data Arrived at EDR: 06/30/2016	Telephone: 800-424-9346
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 11/18/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Federal ERNS list**

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016

Date Data Arrived at EDR: 09/29/2016

Date Made Active in Reports: 11/11/2016

Number of Days to Update: 43

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/29/2016

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Annually

## **State- and tribal - equivalent CERCLIS**

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Date of Government Version: N/A

Date Data Arrived at EDR: 10/31/2013

Date Made Active in Reports: 11/20/2013

Number of Days to Update: 20

Source: Dept of Environmental Quality

Telephone: 517-284-5103

Last EDR Contact: 10/24/2016

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: No Update Planned

## **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF: Solid Waste Facilities Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/27/2016

Date Data Arrived at EDR: 09/27/2016

Date Made Active in Reports: 10/19/2016

Number of Days to Update: 22

Source: Dept of Environmental Quality

Telephone: 517-335-4035

Last EDR Contact: 09/27/2016

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Semi-Annually

## **State and tribal leaking storage tank lists**

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/29/2016

Date Data Arrived at EDR: 08/17/2016

Date Made Active in Reports: 11/02/2016

Number of Days to Update: 77

Source: Dept of Environmental Quality

Telephone: 517-373-9837

Last EDR Contact: 11/16/2016

Next Scheduled EDR Contact: 02/27/2017

Data Release Frequency: Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016

Date Data Arrived at EDR: 04/27/2016

Date Made Active in Reports: 06/03/2016

Number of Days to Update: 37

Source: EPA, Region 5

Telephone: 312-886-7439

Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/07/2016  
Date Data Arrived at EDR: 01/08/2016  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 41

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015  
Date Data Arrived at EDR: 10/29/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 67

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016  
Date Data Arrived at EDR: 04/27/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015  
Date Data Arrived at EDR: 10/23/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 118

Source: EPA Region 8  
Telephone: 303-312-6271  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015  
Date Data Arrived at EDR: 02/12/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 112

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015  
Date Data Arrived at EDR: 02/19/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 105

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016  
Date Data Arrived at EDR: 04/29/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 35

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Semi-Annually

***State and tribal registered storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/11/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Varies

## UST: Underground Storage Tank Facility List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/29/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/17/2016	Telephone: 517-241-8847
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 11/16/2016
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: Annually

## UST 2: Underground Storage Tank Listing

A listing of underground storage tank site locations that have unknown owner information.

Date of Government Version: 07/19/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/25/2016	Telephone: 517-241-8847
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Annually

## AST: Aboveground Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 08/03/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/22/2016	Telephone: 517-241-8847
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 11/11/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: No Update Planned

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/28/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/26/2016  
Date Data Arrived at EDR: 02/05/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 119

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015  
Date Data Arrived at EDR: 11/13/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 52

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016  
Date Data Arrived at EDR: 04/27/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 37

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016  
Date Data Arrived at EDR: 04/29/2016  
Date Made Active in Reports: 06/03/2016  
Number of Days to Update: 35

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Semi-Annually

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016  
Date Data Arrived at EDR: 01/08/2016  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 41

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Quarterly

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/29/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 67

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/28/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## ***State and tribal institutional control / engineering control registries***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AUL: Engineering and Institutional Controls

A listing of sites with institutional and/or engineering controls in place.

Date of Government Version: 09/15/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 09/16/2016

Telephone: 517-373-4828

Date Made Active in Reports: 10/19/2016

Last EDR Contact: 11/28/2016

Number of Days to Update: 33

Next Scheduled EDR Contact: 03/13/2017

Data Release Frequency: Varies

## **State and tribal voluntary cleanup sites**

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015

Source: EPA, Region 1

Date Data Arrived at EDR: 09/29/2015

Telephone: 617-918-1102

Date Made Active in Reports: 02/18/2016

Last EDR Contact: 09/26/2016

Number of Days to Update: 142

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Source: EPA, Region 7

Date Data Arrived at EDR: 04/22/2008

Telephone: 913-551-7365

Date Made Active in Reports: 05/19/2008

Last EDR Contact: 04/20/2009

Number of Days to Update: 27

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

## **State and tribal Brownfields sites**

### BROWNFIELDS: Brownfields and USTfield Site Database

All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process. Be aware that this is not a list of all of the potential brownfield sites in Michigan.

Date of Government Version: 01/15/2016

Source: Dept of Environmental Quality

Date Data Arrived at EDR: 02/02/2016

Telephone: 517-373-4805

Date Made Active in Reports: 04/04/2016

Last EDR Contact: 10/24/2016

Number of Days to Update: 62

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

### BROWNFIELDS 2: Brownfields Building and Land Site Locations

A listing of brownfield building and land site locations. The listing is a collaborative effort of Michigan Economic Development Corporation, Michigan Economic Developers Association, Detroit Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007

Source: Economic Development Corporation

Date Data Arrived at EDR: 04/10/2007

Telephone: 888-522-0103

Date Made Active in Reports: 05/01/2007

Last EDR Contact: 11/28/2016

Number of Days to Update: 21

Next Scheduled EDR Contact: 03/13/2017

Data Release Frequency: Varies

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/20/2016  
Date Data Arrived at EDR: 09/21/2016  
Date Made Active in Reports: 11/11/2016  
Number of Days to Update: 51

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 09/21/2016  
Next Scheduled EDR Contact: 01/02/2017  
Data Release Frequency: Semi-Annually

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### **HIST LF: Inactive Solid Waste Facilities**

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/1997  
Date Data Arrived at EDR: 02/28/2003  
Date Made Active in Reports: 03/06/2003  
Number of Days to Update: 6

Source: Dept of Environmental Quality  
Telephone: 517-335-4034  
Last EDR Contact: 02/28/2003  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SWRCY: Recycling Facilities**

A listing of recycling center locations.

Date of Government Version: 07/07/2016  
Date Data Arrived at EDR: 07/11/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 52

Source: Dept of Environmental Quality  
Telephone: 517-241-5719  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Varies

### **INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 10/31/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 10/24/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: No Update Planned

### **IHS OPEN DUMPS: Open Dumps on Indian Land**

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 11/04/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/10/2016
	Data Release Frequency: No Update Planned

### **PART 201: Part 201 Site List**

A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

Date of Government Version: 10/01/2013	Source: Department of Environmental Quality
Date Data Arrived at EDR: 10/03/2014	Telephone: 517-284-5103
Date Made Active in Reports: 10/03/2014	Last EDR Contact: 10/24/2016
Number of Days to Update: 0	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: No Update Planned

### **INVENTORY: Inventory of Facilities**

The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

Date of Government Version: 07/26/2016	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/27/2016	Telephone: 517-284-5136
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 10/26/2016
Number of Days to Update: 36	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Lab Listing**

A listing of clandestine drug lab locations.

Date of Government Version: 05/11/2016	Source: Department of Community Health
Date Data Arrived at EDR: 05/24/2016	Telephone: 517-373-3740
Date Made Active in Reports: 07/05/2016	Last EDR Contact: 10/24/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DEL PART 201: Delisted List of Contaminated Sites

A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion.

A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

Date of Government Version: 08/01/2013	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/01/2013	Telephone: 517-373-9541
Date Made Active in Reports: 09/11/2013	Last EDR Contact: 10/24/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 11/29/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Quarterly

## Local Land Records

### LIENS: Lien List

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC \* 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 07/07/2015	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/24/2015	Telephone: 517-241-7603
Date Made Active in Reports: 08/05/2015	Last EDR Contact: 10/21/2016
Number of Days to Update: 12	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## Records of Emergency Release Reports

### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 09/27/2016
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PEAS: Pollution Emergency Alerting System

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 07/01/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 07/29/2016	Telephone: 517-373-8427
Date Made Active in Reports: 09/01/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 312-886-6186
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 12/08/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 11/17/2016  
Next Scheduled EDR Contact: 11/28/2016  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016  
Date Data Arrived at EDR: 08/17/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 65

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 11/16/2016  
Next Scheduled EDR Contact: 02/27/2017  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 11/08/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 6

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 11/11/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 01/15/2015  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 14

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 09/23/2016  
Next Scheduled EDR Contact: 01/02/2017  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 04/05/2016  
Number of Days to Update: 133

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/22/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 10/24/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 02/24/2014  
Number of Days to Update: 74

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 12/06/2016  
Next Scheduled EDR Contact: 03/20/2017  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2016  
Date Data Arrived at EDR: 08/22/2016  
Date Made Active in Reports: 11/11/2016  
Number of Days to Update: 81

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 11/18/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 127	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/05/2016	Telephone: 202-564-5088
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/11/2016
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Quarterly

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 12/06/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/06/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/28/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/03/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/05/2016	Telephone: 202-343-9775
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 16	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 11/02/2016  
Next Scheduled EDR Contact: 02/13/2017  
Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016  
Date Data Arrived at EDR: 08/01/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 11/23/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/14/2016  
Next Scheduled EDR Contact: 01/23/2017  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016  
Date Data Arrived at EDR: 07/26/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 59

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 11/08/2016  
Next Scheduled EDR Contact: 02/20/2017  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 09/09/2016  
Next Scheduled EDR Contact: 12/05/2016  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016  
Date Data Arrived at EDR: 04/07/2016  
Date Made Active in Reports: 09/02/2016  
Number of Days to Update: 148

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 10/20/2016  
Next Scheduled EDR Contact: 01/16/2017  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 06/30/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 88

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 06/30/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 88

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2016  
Next Scheduled EDR Contact: 01/09/2017  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016  
Date Data Arrived at EDR: 09/01/2016  
Date Made Active in Reports: 09/23/2016  
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 12/01/2016  
Next Scheduled EDR Contact: 03/13/2017  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 12/12/2016
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 12/02/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016	Source: EPA
Date Data Arrived at EDR: 09/07/2016	Telephone: (312) 353-2000
Date Made Active in Reports: 11/11/2016	Last EDR Contact: 12/06/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 11/28/2016
Number of Days to Update: 91	Next Scheduled EDR Contact: 03/13/2017
	Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 12/05/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

## AIRS: Permit and Emissions Inventory Data

Permit and emissions inventory data.

Date of Government Version: 09/21/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 09/22/2016	Telephone: 517-373-7074
Date Made Active in Reports: 10/19/2016	Last EDR Contact: 12/15/2016
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/03/2017
	Data Release Frequency: Varies

## BEA: Baseline Environmental Assessment Database

A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/21/2013  
Date Data Arrived at EDR: 08/23/2013  
Date Made Active in Reports: 09/12/2013  
Number of Days to Update: 20

Source: Dept of Environmental Quality  
Telephone: 517-373-9541  
Last EDR Contact: 11/11/2016  
Next Scheduled EDR Contact: 02/27/2017  
Data Release Frequency: No Update Planned

## COAL ASH: Coal Ash Disposal Sites

Coal fired power plants in Southeast Michigan that have coal ash handling on site.

Date of Government Version: 07/07/2016  
Date Data Arrived at EDR: 07/18/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 45

Source: Dept of Environmental Quality  
Telephone: 586-753-3754  
Last EDR Contact: 06/30/2016  
Next Scheduled EDR Contact: 10/17/2016  
Data Release Frequency: Varies

## DRYCLEANERS: Drycleaning Establishments

A listing of drycleaning facilities in Michigan.

Date of Government Version: 07/20/2016  
Date Data Arrived at EDR: 07/25/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 38

Source: Dept of Environmental Quality  
Telephone: 517-335-4586  
Last EDR Contact: 10/17/2016  
Next Scheduled EDR Contact: 01/30/2017  
Data Release Frequency: Annually

## LEAD CERT: Lead Safe Housing Registry

A listing of Michigan properties included in the Lead Safe Housing Registry.

Date of Government Version: 09/15/2015  
Date Data Arrived at EDR: 09/16/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 14

Source: Department of Community Health  
Telephone: 517-335-9699  
Last EDR Contact: 12/05/2016  
Next Scheduled EDR Contact: 03/20/2017  
Data Release Frequency: Quarterly

## NPDES: List of Active NPDES Permits

General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

Date of Government Version: 05/04/2016  
Date Data Arrived at EDR: 07/07/2016  
Date Made Active in Reports: 09/01/2016  
Number of Days to Update: 56

Source: Dept of Environmental Quality  
Telephone: 517-241-1300  
Last EDR Contact: 10/07/2016  
Next Scheduled EDR Contact: 01/16/2017  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 09/22/2016  
Date Data Arrived at EDR: 09/22/2016  
Date Made Active in Reports: 10/20/2016  
Number of Days to Update: 28

Source: Dept of Environmental Quality  
Telephone: 517-241-1515  
Last EDR Contact: 11/07/2016  
Next Scheduled EDR Contact: 02/06/2017  
Data Release Frequency: Varies

## WDS: Waste Data System

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

Date of Government Version: 08/31/2016  
Date Data Arrived at EDR: 09/01/2016  
Date Made Active in Reports: 10/19/2016  
Number of Days to Update: 48

Source: Dept of Environmental Quality  
Telephone: 517-284-6562  
Last EDR Contact: 11/17/2016  
Next Scheduled EDR Contact: 03/06/2017  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016	Source: Department of Interior
Date Data Arrived at EDR: 06/13/2016	Telephone: 202-208-2609
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 12/09/2016
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/27/2017
	Data Release Frequency: Quarterly

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/20/2016	Telephone: 202-564-2280
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 09/20/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/02/2017
	Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016	Source: EPA
Date Data Arrived at EDR: 08/23/2016	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/22/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA PART 201: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 11/11/2016
Number of Days to Update: 45	Next Scheduled EDR Contact: 02/27/2017
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 08/31/2016	Telephone: N/A
Date Made Active in Reports: 12/12/2016	Last EDR Contact: 10/12/2016
Number of Days to Update: 103	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/03/2016	Telephone: 518-402-8651
Date Made Active in Reports: 09/09/2016	Last EDR Contact: 11/02/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/13/2017
	Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/22/2016	Telephone: 717-783-8990
Date Made Active in Reports: 11/22/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 123	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013	Source: Department of Environmental Management
Date Data Arrived at EDR: 06/19/2015	Telephone: 401-222-2797
Date Made Active in Reports: 07/15/2015	Last EDR Contact: 11/21/2016
Number of Days to Update: 26	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015	Source: Department of Natural Resources
Date Data Arrived at EDR: 04/14/2016	Telephone: N/A
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 12/12/2016
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/27/2017
	Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Day Care Centers, Group & Family Homes

Source: Bureau of REgulatory Services

Telephone: 517-373-8300

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetlands Inventory

Source: Department of Natural Resources

Telephone: 517-241-2254

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

# FACILITY FILE #92003125

http://intranet.deq.state.mi.us/sid/Common/fraMainFrames.asp?UserID=CARSONC&UserName=Cathy%20Carson

**SID Storage Tank Information Database** Facility Status | Logout | Help

Technical Review | Registration | Compliance | LUST | Intent of Closure | Billing | SFC | Enforcement | Cost Recovery | QC / CP | Administration | DEQ Department of Environmental Quality | Summary Reports | Query Writer

View (Read Only) Facility Registration **SID-DEQ**

**Facility Detail**

Facility ID: 92003125

Facility Name: Westwind Koa Campground

Address: 683 BLUE STAR HWY

City: SAUGATUCK

State: MI Zip: 49453

County: Allegan District: Region 3 - Kalamazoo District Office

**Owner Information**

Owner ID: 21965

Owner Name: Westwind Koa Campground

Address: 683 BLUE STAR HWY 6469 WASHINGTON RD SAUGATUCK, MI 49453

Effective Date: 1/18/1992

**Type of Facility**

Distribution Plant

Distribution Point

Industrial

Motor Fueling

LPG

Other: \_\_\_\_\_

**Tank Details**

Registered: 1

Active: 0

Remove/Closed: 1

NRT: 0

**Facility Registration**

Date Registered: 1/18/1992

HMSI Assigned: Chad Sietsema

Billing Code: B

Parcel Number: \_\_\_\_\_

Reason For NRT: \_\_\_\_\_

Indian Reservations or Other Indian Trust Lands:

**Contact Person**

**Operator**

Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

Phone #: ( ) - \_\_\_\_\_

Class A: \_\_\_\_\_

Company: \_\_\_\_\_

Phone #: \_\_\_\_\_

Class B: \_\_\_\_\_

Company: \_\_\_\_\_

Phone #: \_\_\_\_\_

Alternate: \_\_\_\_\_

Company: \_\_\_\_\_

Phone #: \_\_\_\_\_

**Certification**

**By Owner / Representative**

Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

Date: 1/18/1992

**By HMSI**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Comments**

DUPLICATE OF 9203325

**SID Storage Tank Information Database** Facility Status | Logout | Help

Technical Review | Registration | Compliance | LUST | Intent of Closure | Billing | SFC | Enforcement | Cost Recovery | QC / CP | Administration | DEQ Department of Environmental Quality | Summary Reports | Query Writer

View (Read Only) Tank Registration **SID-DEQ**

**Facility Detail**

Facility ID: 92003125

Facility Name: Westwind Koa Campground

Address: 683 BLUE STAR HWY SAUGATUCK, MI 49453

**Owner Information**

Owner ID: 21965 | Westwind Koa Campground

Address: 683 BLUE STAR HWY 6469 WASHINGTON RD SAUGATUCK, MI 49453

**Plan Review Detail**

Arch. Installer: \_\_\_\_\_

Status: \_\_\_\_\_ Well Head Protection Unit:

Date Received: \_\_\_\_\_ Secondary Containment Zone:

Approval Date: \_\_\_\_\_ Exclusion Zone:

**Substance Stored**

Select	Substance	Comments
<input type="checkbox"/>	LPG	
<input type="checkbox"/>	Gasohol	
<input type="checkbox"/>	Kerosene	
<input type="checkbox"/>	Waste Oil	
<input type="checkbox"/>	Used Oil	
<input type="checkbox"/>	Hazardous Substance	

**Tank Registration**

Tank ID: 1

Date Registered: 9/1/1991

Status of Tank: Removed from Premises

Action on Tank: \_\_\_\_\_

Date of Installation: 1/1/1958 Age of Tank: 59 yrs.

Capacity: 1,000 Gallons Billable Tank:

Tagged: Not Tagged

**Closure of Tank**

Date Last Used: 9/30/1991 Filled with Inert Material (only for UST): \_\_\_\_\_

Date Tank Closed: 9/30/1991 Reason Tank was not Removed (only for UST): \_\_\_\_\_

Date Notified: 9/30/1991

**Installer's Certification**

Installer Name: \_\_\_\_\_

Company/Manufacturer: DELTA

Title/Serial #: 68262 Date: \_\_\_\_\_

**Comments**

Last updated on 5/8/1992 by System Administrator

**APPENDIX C**

### Appendix C - Wellhead Protection Management Strategies

WHPP Management Activity	Lead Agency	Completion Date/Frequency
Develop partnership agreements with local agencies to help implement wellhead protection. This will be done through the general water agreement.	KLSWA Manager	2020
Update the CSI	KLSWA Manager	Updated 2017 Update every 3 years as possible
Update County GIS with Wellhead (WHPA) information	Allegan County Health/KLSWA Manager	2018/On-going
Abandoned Well Management Program (AWMP). Encourage plugging of abandoned wells.	Allegan County Health	On-going
Hold Wellhead Protection Team Meetings	KLSWA Manager	Quarterly during grant periods, annually otherwise
Develop model groundwater ordinance for use by governmental entities in WHPAs	KLSWA Manager	2019
Recommend the use an environmental checklist for new businesses locating in the City\and surrounding Townships.	KLSWA Manager	2019
Amend zoning concerning - site plan review process to include environmental concerns related to WHP, Environmental Check List	KLSWA Manager with other assistance	On-going
Promoting the proper disposal of Household Hazardous Waste	Allegan County Health/KLSWA Manager	On-going

<b>WHPP Management Activity</b>	<b>Lead Agency</b>	<b>Completion Date/Frequency</b>
On-Lot Septic Systems  Promote best management practices (including plumbing septic systems on a 3-5 year cycle within the WHPAs)	Allegan County Health, Saugatuck Township, City of Saugatuck, The City of the Village of Douglas	On-going
Monitor Known Contaminated Sites	KLSWA Manager	On-going
Communicate with Township regarding significant findings from VOC Monitoring (per ordinance)	Saugatuck Township, KLSWA Manager	On-going
Educate water plant staff regarding the WHPP	KLSWA Manager	Annual/On-going
Water plant staff to review the Emergency Response Plan	KLSWA Manager	Annual/On-going
Contact the County Health Sanitarian, MDEQ District staff, City/Township and County WHP Team	KLSWA Manager	Annual/On-going

**APPENDIX D**



## APPENDIX D

### CONTINGENCY PLAN

This Contingency Plan contains sensitive personal information. It is not being provided in this public version of the plan. If you wish to review this portion of the plan, please contact KLSWA directly.

## **APPENDIX E**

**EVALUATION  
OF  
POTENTIAL  
COMMUNITY WATER SUPPLY  
WELL SITES**

*Kalamazoo Lake Sewer and Water Authority*



**PREPARED FOR:  
KALAMAZOO LAKE  
SEWER AND WATER AUTHORITY**

September 2015  
Project No. 3243

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	SITE IDENTIFICATION.....	1
3.0	WELL SITING CRITERIA AND DATA SOURCES .....	1
4.0	SUPPORTING DISCUSSION.....	2
4.1	HYDROGEOLOGY AND POTENTIAL WELL CAPACITY.....	2
4.2	ISOLATION.....	3
4.3	PRELIMINARY WELLHEAD PROTECTION AREAS .....	4
4.4	EXISTING WELL SITES AND POTENTIAL FOR CONFLICTS.....	4
4.5	GROUNDWATER QUALITY .....	4
4.6	POTENTIAL FOR IMPACT TO LAKES AND STREAMS .....	6
4.7	LOCATION RELATIVE TO WATER DISTRIBUTION .....	6
4.8	CURRENT AND FUTURE LAND USE.....	7
5.0	FINDINGS .....	7
6.0	USE OF THE FINDINGS RECOMMENDATIONS.....	8

## LIST OF FIGURES

Figure 1	Map of Potential Well Sites, Potential Sources of Contamination
Figure 2	Map of Glacial Drift Thickness
Figure 3	Map of Bedrock Type
Figure 4	Map of Glacial Deposits
Figure 5	Map of Glacial Yield
Figure 6	Existing Wellhead Protection Areas, Watersheds and Local Wells
Figure 7	MDEQ Map Showing Area Arsenic Concentrations in Groundwater (in text)
Figure 8	MDEQ Map Showing Area Nitrate Concentrations in Groundwater (in text)
Figure 9	Detailed Site Maps (showing property boundaries)

## LIST OF APPENDICES

Appendix 1	Summary Sheets
Appendix 2	Isolation Distances: Part 127, Act 368, P.A. 1978 and Act 399, P.A. 1976

## 1.0 INTRODUCTION

Fleis & VandenBrink (F&V) was retained by the Kalamazoo Lake Sewer and Water Authority (KLSWA) to identify and help prioritize future community water supply well sites. Identifying sites that will meet the well siting requirements established by the Michigan Department of Environmental Quality (MDEQ) and that will provide a long-term sustainable source of drinking water is an important planning objective of the KLSWA.

KLSWA is looking to abandon existing well sites #1 and #2 and is also planning to develop well sites with approximately 1,000 to 1,400 gallons per minute (gpm) of new and replacement capacity which will help meet projected demands. KLSWA wants to develop two to three well sites capable of providing this capacity.

The findings of this evaluation are intended to help focus physical investigations of sites and eventually lead to securing the well sites for future use. Follow-up investigations such as additional research and hydrogeological investigations will be necessary to verify these preliminary findings and confirm conditions of a site are favorable for siting a community well. Such investigations require additional time and financial resources. One of the purposes of this analysis is to help optimize these efforts.

The investigation generally focused on the area depicted on Figure 1, although priority was given to sites on the south side of the distribution area which are preferred by the KLSWA.

F&V evaluated sites based on a variety of criteria. The criteria used are based on MDEQ requirements and F&V's experience with locating sustainable community water supplies. This report further describes the process used in our evaluation.

This work was completed as part of KLSWA ongoing Wellhead Protection efforts. Siting wells is a required element of the State's Wellhead Protection Program.

## 2.0 SITE IDENTIFICATION

Site identification has been an iterative process between F&V and the KLSWA. F&V has been working with KLSWA representatives to determine future water supply needs and discuss potential site areas. F&V has also met with the KLSWA Wellhead Protection Team (Team) to present its findings and discuss site options. During the course of our investigations, seven potential well site areas were identified and evaluated. These sites are shown on Figure 1. Although it is recognized that access to some of these sites for investigations may not be granted, we still completed an evaluation of the sites as future conditions may change.

## 3.0 WELL SITING CRITERIA AND DATA SOURCES

There are many variables to consider when siting high-capacity community water wells. The following factors were considered by F&V in assessing potential well sites. Also listed are the data sources we reviewed to examine each criteria. Much of the data used by F&V in this analysis came from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield.

- Hydrogeology and Potential Well Capacity – The Michigan Department of Environmental Quality (MDEQ) and U.S. Geological Survey (U.S.G.S.) Groundwater Inventory Map (GWIM) including:
  - Locations of domestic and other wells
  - Wellhead Protection Areas (WHPAs)

- Glacial deposits yield estimates
- Glacial transmissivity estimates
- Glacial drawdown estimates
- Geologic setting (glacial landforms and quaternary geology)
- Standard Isolation Distances from Sources of Property Boundaries and Sources of Contamination
- Projected New Wellhead Protection Areas
- Existing Well Sites and Potential for Conflict
- Groundwater Quality – MDEQ Arsenic and Nitrate data
- Known and Potential Sources of Contamination – State databases listing Part 201 sites (state-listed sites of contamination), Part 111 sites (state hazardous waste sites), Part 211 sites (underground storage tank sites), Part 213 sites (leaky underground storage tank sites), USEPA National Priority List sites (federal Superfund sites)
- Potential for Impacts to Streams and Lakes – Michigan Water Withdrawal Assessment Tool
- Water Distribution System – KLSWA utility maps
- Current and Future Land Use – Planning maps

Other:

- Wetlands – National Wetlands Inventory maps.
- Flood Insurance Maps (FEMA).

There were some important criteria that were not evaluated as part of this process. These include the availability of a site and the cost of a site. These can be important factors when considering a site and will need to be evaluated at some point in the evaluation process.

## 4.0 SUPPORTING DISCUSSION

F&V has summarized information regarding each of the potential well sites on Summary Sheets. These sheets are provided in Appendix A. The Summary Sheets provide data for each site. In the case where the data were limited or not readily available, a TBD (to be determined) designation was assigned. As future data are gathered, these characteristics should be determined for the sites. F&V also assigned a confidence level for the data. This percentage represented our estimated level of confidence that the information is representative of characteristics at the site. Our assignment of these levels is based on our experience with working on these types of data.

The following information is intended to supplement the summarized information contained on the Summary Sheets.

### 4.1 HYDROGEOLOGY AND POTENTIAL WELL CAPACITY

F&V reviewed the hydrogeological characteristics of the area. The thickness of the glacial drift in the Study Area is approximately 50-400 feet (see Figure 2). Underlying the glacial drift is the Mississippian-Aged Coldwater Shale (see Figure 3). This bedrock formation is not generally considered a viable source for usable quantities of groundwater.

The surficial glacial deposits of the Study Area are primarily lacustrine (lake-deposited) sand and gravel with deposits of dune sand along the lakeshore and fine-textured glacial tills south of the Village of Douglas (see Figure 4) Lacustrine sand and gravels are generally conducive to water supply development and siting large-capacity wells. Tills vary in their ability to provide groundwater. Ultimately, the viability of a well site must be determined through site-specific data collection.

Regional groundwater flow directions in the Study Area are toward Lake Michigan. This information can be used to help determine preliminary WHPAs for potential well sites (described later in this report).

The MDEQ has prepared a map of glacial yield (see Figure 5). This map incorporates information regarding glacial drift thickness, the composition (grain-size and thickness) of the glacial materials, specifically the coarse-grained materials (sands and gravels). The MDEQ map can be used as a rough estimate of the ability of a given location to yield groundwater. This information is on the site Summary Sheets. According to MDEQ, glacial yields in the Study Area are generally favorable for high-capacity wells. Higher glacial yields appear to be in the northern portion of the Study Area. Lowest yields appear to be to the southwest and east of the Village of Douglas and along the lakeshore in the Campbell Road area.

## 4.2 ISOLATION

The MDEQ requires community supply wells to maintain certain isolation from potential sources of contamination. Isolation areas are based on minimum isolation distances outlined in Part 127, Act 368, P.A. 1978 and Act 399, P.A. 1976. The MDEQ has identified required/recommended isolation areas for public water supply wells in a document titled "Minimum Well Isolation Distances". A copy of this document is provided in Appendix 2. Below are some typical isolation areas identified in the MDEQ guidance document:

- 200 feet from property boundaries
- 200 feet of any sewer or storm water line
- 200 feet of any roadway
- 200 feet of railroads
- 200 feet of wetlands or drains
- 300 feet of oil and gas wells
- 2,000 feet of leaking UST (LUST) sites
- 2,000 feet of MDEQ Part 201 Contaminated Sites
- 2,000 feet of MDEQ Part 111 Hazardous Waste Sites
- 2,000 feet of landfills

Various state and federally listed sites are shown on Figure 1.

In more recent years, the MDEQ has put less emphasis on fixed radii from potential sources of contaminating and more weight in understating the hydrogeology around a well site. With an understanding of the potential WHPA for a well site, isolation areas may need to be increased or decreased in certain directions.

Any new well should be 200 feet from property boundaries, surface waters and any potential source of contamination. The MDEQ will occasionally provide variances to this isolation requirement. This would be authorized on a case-by-case basis. Such variances are often hard to get without clear justification.

Isolation information is provided in the Summary Sheets provided in Appendix 1.

One site of particular importance in evaluating potential water supply sites on the south side of the Kalamazoo River is the Village of Douglas site at 200 Blue Star Highway. F&V conducted a Freedom of Information Act (FOIA) review of this site at the MDEQ Kalamazoo District Office, the district that manages the site. This site is the original Haworth, Inc. plant. F&V was able to review technical reports and gain a much better understanding of the nature and extent of contamination at the Village of Douglas site.

TCE was released from the site resulting in significant groundwater contamination. The plume extends from the plant property north/north west to Wicks Creek and Kalamazoo Lake. Various other contaminants are associated with this site, including breakdown products of TCE and 1,1,1-trichloroethane.

Some source-area remedial activities (air sparging and soil vapor extraction) have been employed, but F&V did not identify any remediation of the downgradient portions of the plume.

Locating a Large Quantity Withdrawal (LQW) in the vicinity of this site, especially north and west of the site, is not recommended. Significant hydrogeological evaluations would need to be performed to show that contaminants associated with this site would not be captured by operating supply wells. These investigations will be costly and only likely to confirm this area is not viable for siting a production well.

### **4.3 PRELIMINARY WELLHEAD PROTECTION AREAS**

A wellhead protection area, as defined in Michigan, means the area which has been approved by the department in accordance with the state of Michigan wellhead protection program, which represents the surface and subsurface area surrounding a water well or well field, which supplies a public water supply, and through which contaminants are reasonably likely to move toward and reach the water well or well field within a 10-year time of travel.

The wellhead protection areas for the KLSWA supply wells and other area Type 1 and Type 2 supply wells have been delineated. These areas are shown on Figure 6. Basic hydrogeological principles can be applied to establish preliminary WHPAs for future well sites. Such an evaluation is beyond the scope of this work. That said, the following general observations are noted:

- Many of the proposed well sites are within existing WHPAs for existing KLSWA wells.
- These WHPAs can be used to help estimate the WHPAs of new well fields located in those areas.
- Additional pumping in the existing WHPAs will tend to expand the size of the WHPAs in length or width.

This information was considered as we evaluated potential sources of contamination in the area.

### **4.4 EXISTING WELL SITES AND POTENTIAL FOR CONFLICTS**

Operating high-capacity wells will result in drawdown. The drawdown is greatest in the area of the operating wells and decreases exponentially away from the pumping. Other wells (such as residential/domestic, agricultural or community supply wells) can experience drawdown as a result of operation of a high capacity well. Drawdown from a high-capacity municipal well can be detrimental if it is substantial enough.

The primary factors that determine the amount of drawdown at a well are its distance from the pumping center, its depth of completion relative to the pumping well (i.e., is it in the same aquifer), the pumping rate of the production well and aquifer characteristics.

F&V reviewed available well records in the vicinity of the proposed well sites to evaluate the number of wells around the potential well sites. These wells are shown on Figure 6. There are a limited number of residential wells in the areas of the proposed well sites. Potential interference issues should be a part of any future site-specific testing.

### **4.5 GROUNDWATER QUALITY**

Groundwater quality is an important consideration in evaluating a potential well site. Water quality data for a specific site are usually not available until a well is installed and groundwater is sampled. Water quality from nearby locations can be used to evaluate general water quality trends. Such information may be available from the local health department or the MDEQ and beneficial to establish regional trends such as areas of high nitrates or arsenic.

Arsenic – Arsenic is a naturally occurring element that is found in groundwater. The current Maximum Contaminant Level (MCL) for arsenic is 10 ug/L. Mapping by the MDEQ suggest the only area where arsenic may exceed this standard is in the southern portion of the Study Area.



Figure 7 – MDEQ Map Showing Area Arsenic Concentrations in Groundwater

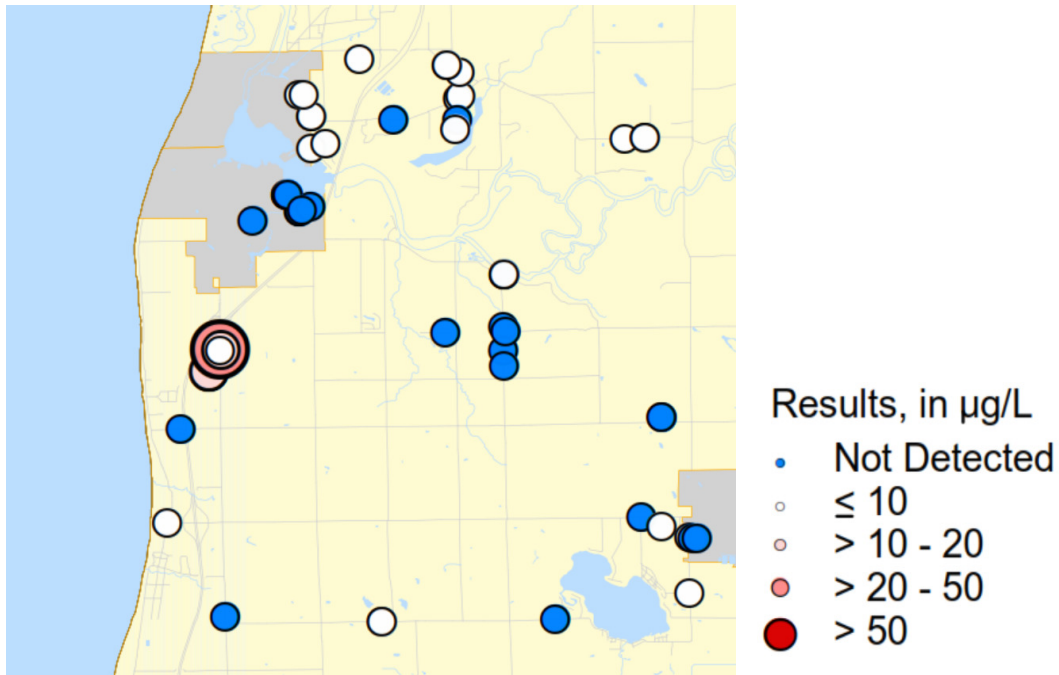
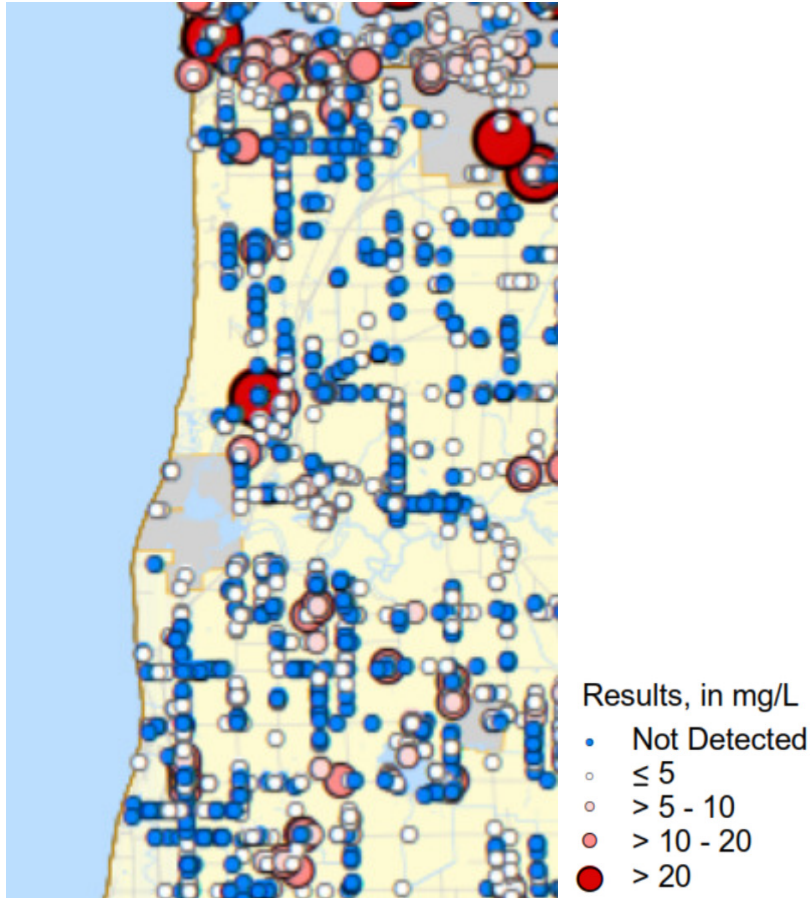


Figure 8 – MDEQ Map Showing Nitrate Concentrations in Groundwater



Nitrates – Nitrates in groundwater are typically associated with the application of nitrogen-based fertilizers and/or livestock facilities. The MCL for nitrate is 10 mg/L. According to MDEQ mapping, nitrates are a potential concern in the northern portion of the Study Area.

Because water quality can vary considerably in relatively short distances, it is important that water quality data be collected from any site that is being considered for a well before there is a commitment to purchase that site.

#### **4.6 POTENTIAL FOR IMPACT TO LAKES AND STREAMS**

The Water Use Program was established through Part 327, Great Lakes Preservation, of the Natural Resources and Environmental Protection Act in 2008 to carry out obligations of the Great Lakes – St. Lawrence River Basin Water Resources Compact. The program is administered by the Water Resources Division (WRD) of the Department of Environmental Quality (DEQ).

Part 327 has established a process to evaluate whether Large Quantity Withdrawals (LQWs) (generally defined as a withdrawal of 100,000 gallons averaged over a 30 day period) will have an impact on a stream. The MDEQ developed a tool/model called the Water Withdrawal Assessment Tool (WWAT). The WWAT uses data from a site to determine whether pumping will cause an Adverse Resource Impact (ARI). An ARI generally means the stream is likely to be depleted to a level where it will no longer support characteristic fish populations. Pumping is not allowed to cause an ARI. The WWAT determines whether a withdrawal is a Zone A, B, C or D. A Zone D withdrawal indicates an ARI likely.

Most sites evaluated were Zone A withdrawals which means they are not likely to cause an ARI. Some were identified as being Zone B withdrawals. Zone B withdrawals will need further review by the MDEQ before they can be considered.

Although Part 327 addresses lakes, there has been no “tool” developed for establishing whether a lake is likely to be impacted by a LQW. The current definition of lake impact is flow. Section vii reads: Decreasing the level of a lake or pond with a surface area of 5 acres or more through a direct withdrawal from the lake or pond in a manner that would impair or destroy the lake or pond or the uses made of the lake or pond, including the ability of the lake or pond to support characteristic fish populations, or such that the ability of the lake or pond to support characteristic fish populations is functionally impaired. As used in this subparagraph, lake or pond does not include a retention pond or other artificially created surface water body.

No lakes have been deemed to be at risk from any of the identified well sites.

The area of interest is divided up into three watersheds (Figure 6). Two of the watersheds are subwatersheds to the Kalamazoo River; the other is a watershed to Lake Michigan.

Our preliminary assessment using this tool suggests that LQWs in most of the areas of interest are not likely to result in an ARI. The one possible exception would be the potential well sites in the 62<sup>nd</sup> Street area. A LQW in this area has the potential to develop an ARI. As such, the availability of viable well sites in this area may be more limited.

#### **4.7 LOCATION RELATIVE TO WATER DISTRIBUTION**

The proximity of a site to water supply infrastructure can be an important consideration for siting a community supply well. Ideally, it would best to site wells or well fields close to existing mains capable of accommodating the anticipated water supply from the well field. If not, additional costs will be incurred to connect a well field.

F&V did not review data regarding connections to the proposed well sites as it was beyond the scope of this evaluation. Connection points, pipeline routes and sizes, water quality and system pressures are some of the variables that will need to be evaluated when considering a potential well site.

## 4.8 CURRENT AND FUTURE LAND USE

Current and future land use is often a consideration in site community wells. It is important to determine if a property is an acceptable use or if there will need to be some sort of variance granted for use of a parcel as a well field site. It's also important to identify whether a well field site is in an area that may not be consistent with a new well, such as a proposed industrial park.

## 5.0 FINDINGS

The Summary Sheets provide a tabulated record of the findings from each site evaluation. Key aspects of each site area are discussed below. Details of each site area are shown on Figure 8.

### Site Areas

1. This area is located hydraulically downgradient of the Village of Douglas contamination site. As such, we do not recommend further consideration of this area because LQWs have the potential to capture groundwater contaminants.
2. This site area is in what has been categorized by the MDEQ as a high yield area. Finding a parcel that meets MDEQ isolation requirements from property boundaries (200 feet) and surface water (200 feet) will be difficult. This area should be considered for reevaluation should such a parcel or parcels be identified. Any evaluation of this area should also include an evaluation of the Village of Douglas site and the potential to capture contamination from the site.
3. According to MDEQ, this site is located in an area of moderate yield. This site is also located just north of an area where MDEQ mapping has indicated the potential for arsenic levels in groundwater at concentrations above the MCL. There is a closed LUST site east of this site along Blue Star Highway. There are no indications this site is a threat. There are properties in this area that are large enough to accommodate one or more water supply wells. That said, there are significant wetland areas which make access and finding specific well sites difficult. Site specific testing would be necessary to confirm that the site has characteristics favorable for a Type I supply.
4. According to MDEQ, this site is located in an area of moderate yield. There is an active LUST site (bus garage) to the north of this site. This LUST site is downgradient of the site. Additionally, F&V did a FOIA review of this site and determined groundwater contamination at this site is very limited. That said, additional investigations would be needed to rule out the LUST site as a potential source of contamination. There are properties in this area that are large enough to accommodate one or more water supply wells. Site specific testing would be necessary to confirm that the site has characteristics favorable for a Type I supply.
5. According to MDEQ, this site is located in an area of moderate yield. This site is too small to site a well and meet a 200-foot setback from property lines. This site should not be considered further.
6. According to MDEQ, this site is located in an area of moderate to high yield. There is an active LUST site (bus garage) to the south of this site. Further evaluation would be necessary to ensure it would not be a concern. This property is narrow which limits the ability to put a supply well in the southern portion of the property and maintain a 200-foot setback from the property boundaries. A well or wells in the northern portion of this site, near the tennis court, can meet the 200-foot isolation setback from the property boundary and surface waters. F&V understands that

a test well in this area drilled in the past yielded good volumes of groundwater (700 gpm). No data was provided to F&V to support this finding. Site specific testing would be necessary to confirm that the site has characteristics favorable for a Type I supply.

7. This site is located in a relatively high yield area according to MDEQ mapping. There are no known sources of contamination in this area and there are parcels large enough to accommodate well sites and maintain 200-foot isolation from property boundaries. Access to the northern portion of this site area will be difficult due to the topography and surface waters. Site specific testing would be necessary to confirm that the site has characteristics favorable for a Type I supply.

## 6.0 USE OF FINDINGS RECOMMENDATIONS

The findings can be used to help the KLSWA prioritize future well sites. Site-specific testing will need to be done to augment the information contained in this report. We recommend this sampling be done prior to purchase of a site.

It's important to note that many of the characteristics of a site are preliminary and subjective. Before a site or sites are selected, review criteria should be reevaluated based on the needs of the community at that time.

Limiting characteristics that were identified as part of this evaluation may be eliminated by further evaluations.








F&V recommends this plan be periodically reviewed and updated to reflect future changes. Examples of site changes that may warrant updates to this analysis include:

- the installation of new large capacity wells in the area,
- the availability of new geological information,
- the discovery of a new source of contamination, or changes in the nature and extent of a known sources of contamination, and
- changes in the water system distribution system.



**FIGURES**

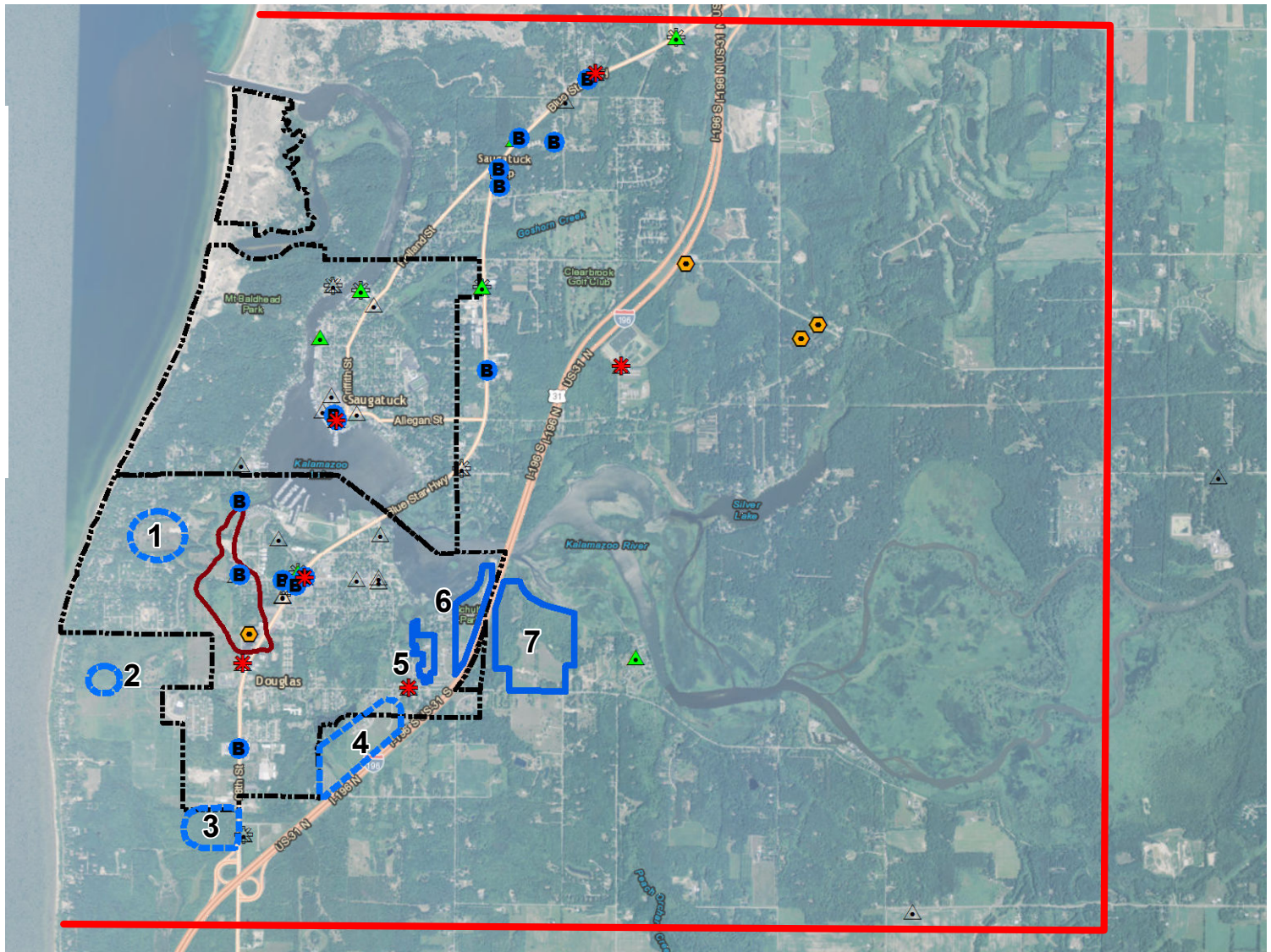


**Legend**

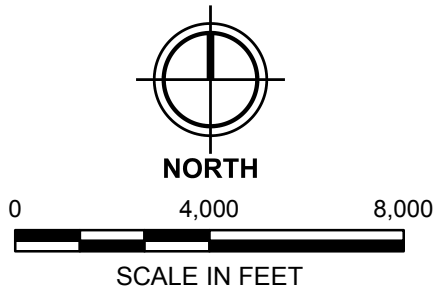
-  Open LUST site
-  Baseline Environmental Assessment
-  Part 201 Contaminated site
-  Active UST site
-  Closed LUST site
-  Closed UST site
-  Village of Douglas 201 Plume Area

**Investigated Sites**

-  Specific Property Not Defined
-  Specific Property



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community  
 Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors  
 Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community  
 Shapefiles and location information downloaded from MiGDL Center for Geographic Information (<http://www.mcgi.state.mi.us/mgdl/>); Michigan GIS Open Data Portal (<http://gis.michigan.opendata.arcgis.com/>); and MDEQ Environmental Mapper (<http://web1.mcgi.state.mi.us/environmentalmapper/mcgi.aspx>).  
 Additional data was drawn from available information and existing figures.



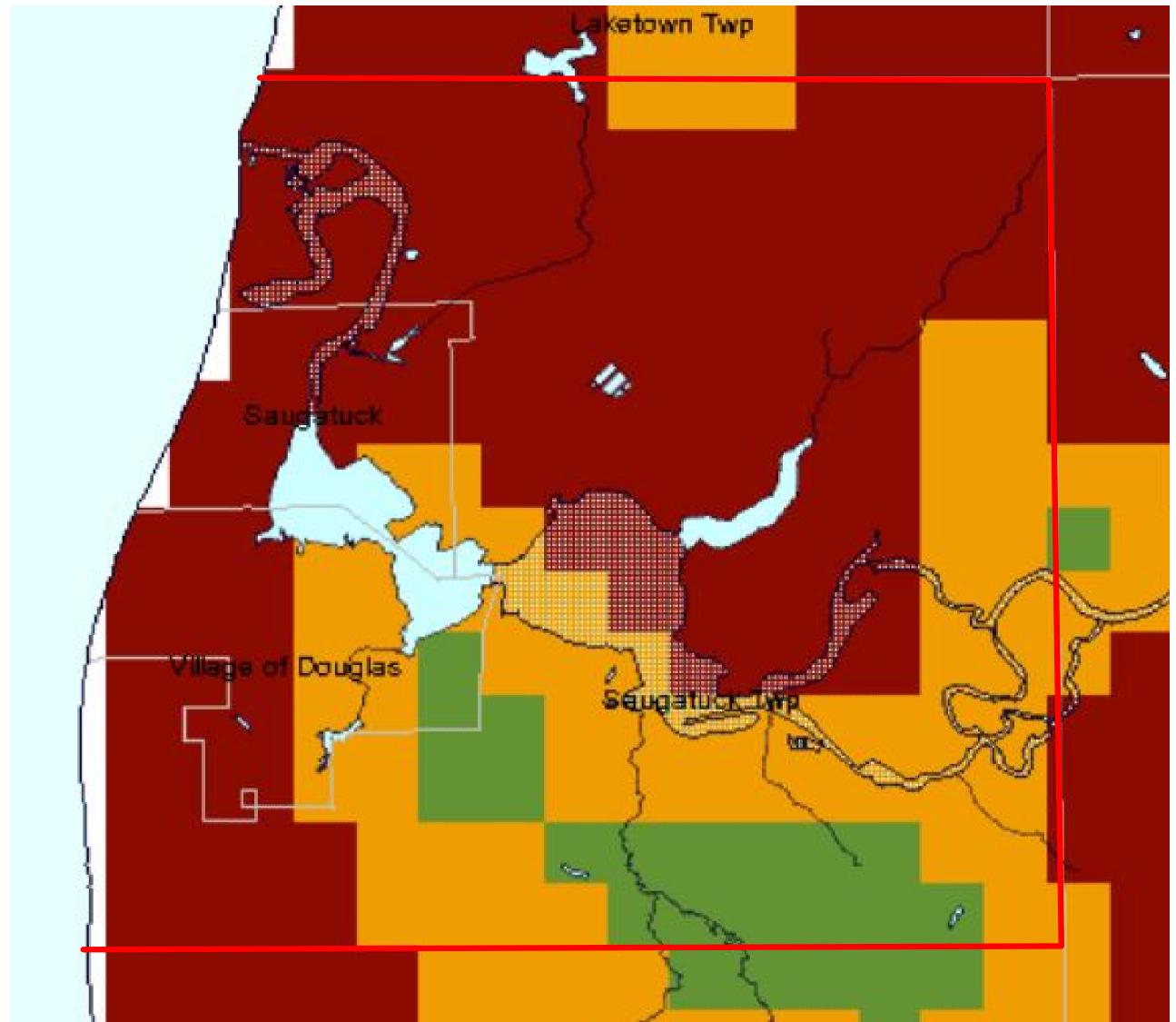
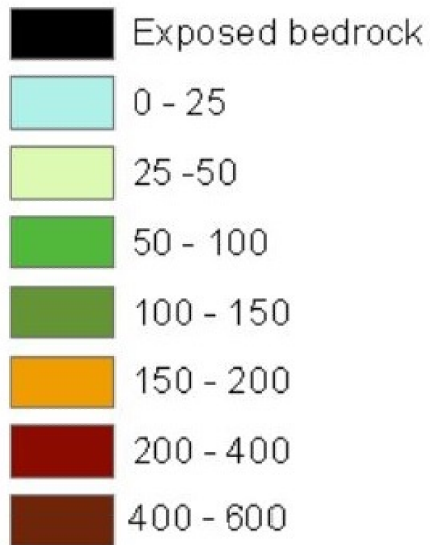
**KAL. LAKE SEWER & WATER AUTHORITY**  
**SAUGATUCK TWP., ALLEGAN CO., MI**  
**WATER SUPPLY INVESTIGATION**

**FIGURE 1: MAP OF POTENTIAL WELL SITES, POTENTIAL SOURCES OF CONTAMINATION**

F&V PROJECT NO. 2343



### Glacial Thickness (feet)



MAP AND LEGEND ARE COPIED FROM FORMER MICHIGAN GROUNDWATER MAPPING WEBSITE ([www.gwmap.rgis.msu.edu](http://www.gwmap.rgis.msu.edu))



KAL. LAKE SEWER & WATER AUTHORITY  
SAUGATUCK TWP., ALLEGAN CO., MI  
WATER SUPPLY INVESTIGATION

FIGURE 2: MAP OF GLACIAL DRIFT THICKNESS

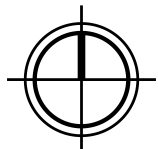
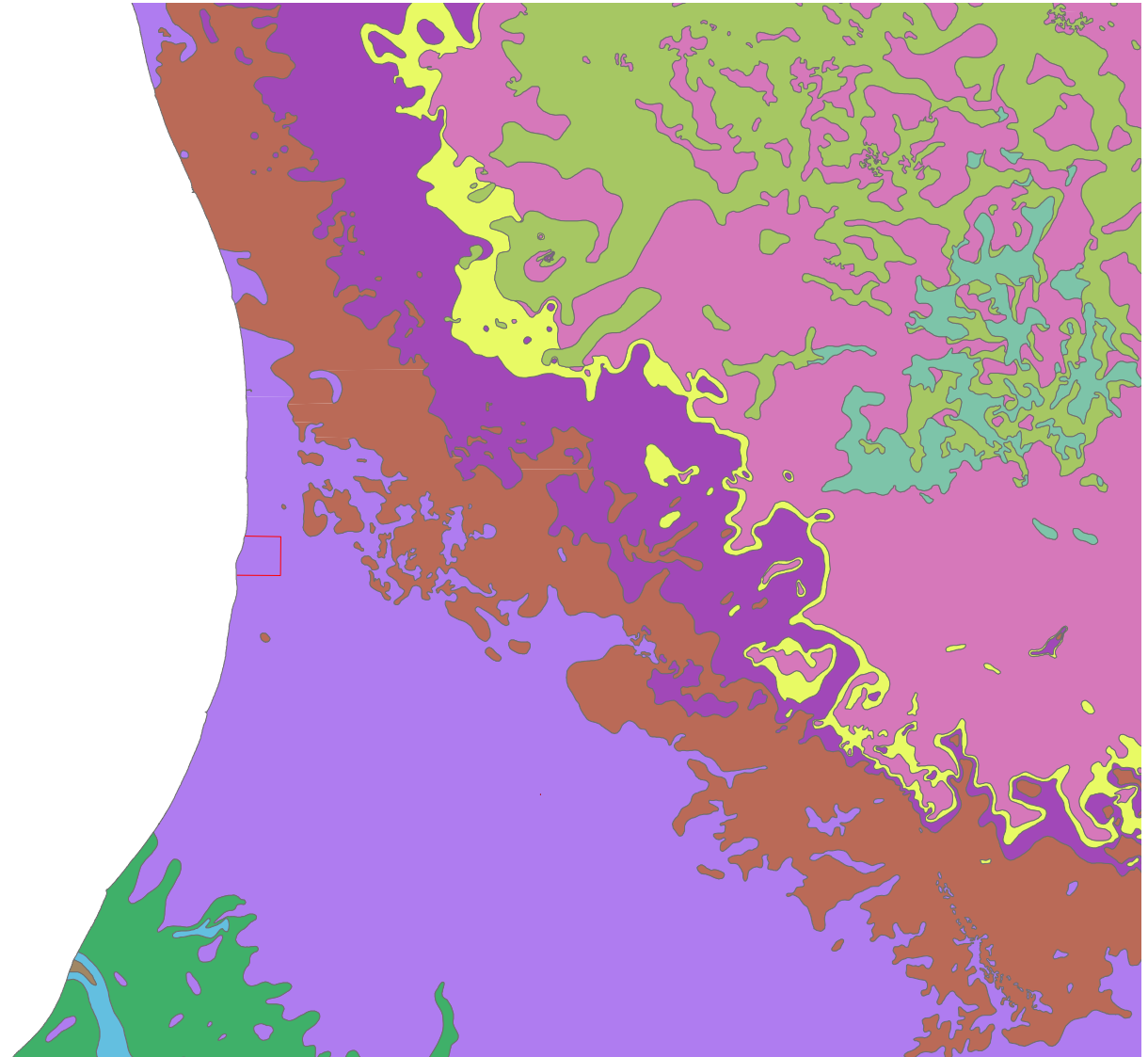
F&V PROJECT NO. 2343



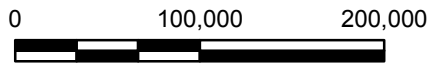


**Legend**

- |  |   |
|--|---|
|  ANTRIM SHALE                   |  MACKINAC BRECCIA                |
|  ARCHEAN GRANITE & GNEISSIC     |  MANISTIQUE GROUP                |
|  ARCHEAN ULTRAMAFIC             |  MANITOULIN DOLOMITE             |
|  ARCHEAN VOLCANIC & SEDIMENTARY |  MARSHALL FORMATION              |
|  BADWATER GREENSTONE            |  MENOMINEE & CHOCOLAY GROUPS     |
|  BASS ISLAND GROUP              |  MICHIGAMME FORMATION            |
|  BAYPORT LIMESTONE              |  MICHIGAN FORMATION              |
|  BEDFORD SHALE                  |  MUNISING FORMATION              |
|  BELL SHALE                     |  NEGAUNEE IRON FORMATION         |
|  BEREA SANDSTONE & BEDFORD      |  NONESUCH FORMATION              |
|  BIG HILL DOLOMITE              |  OAK BLUFF FORMATION             |
|  BIJIKI IRON FORMATION          |  PAINT RIVER GROUP               |
|  BLACK RIVER GROUP              |  PALMS FORMATION                 |
|  BOIS BLANC FORMATION           |  POINT AUX CHENES SHALE          |
|  BURNT BLUFF GROUP              |  PORTAGE LAKE VOLCANICS          |
|  CABOT HEAD SHALE               |  PRAIRIE DU CHIEN GROUP          |
|  CHOCOLAY GROUP                 |  QUEENSTON SHALE                 |
|  COLDWATER SHALE                |  QUINNESEC FORMATION             |
|  COLLINGWOOD SHALE MEMBER       |  RANDVILLE DOLOMITE              |
|  COPPER HARBOR CONGLOMERATE     |  RED BEDS                        |
|  DETROIT RIVER GROUP            |  RIVERTON IRON FORMATION         |
|  DUNDEE LIMESTONE               |  SAGINAW FORMATION               |
|  DUNN CREEK FORMATION           |  SAINT IGNACE DOLOMITE           |
|  ELLSWORTH SHALE                |  SALINA GROUP                    |
|  EMPEROR VOLCANIC COMPLEX      |  SIAMO SLATE & AJIBIK QUARTZITE |
|  ENGADINE GROUP               |  SIEMENS CREEK FORMATION       |
|  FREDA SANDSTONE              |  STONINGTON FORMATION          |
|  GARDEN ISLAND FORMATION      |  SUNBURY SHALE                 |
|  GOODRICH QUARTZITE           |  SYLVANIA SANDSTONE            |
|  GRAND RIVER FORMATION        |  TRAVERSE GROUP                |
|  HEMLOCK FORMATION            |  TREMPEALEAU FORMATION         |
|  INTRUSIVE                    |  TRENTON GROUP                 |
|  IRONWOOD IRON FORMATION      |  UTICA SHALE MEMBER            |
|  JACOBSVILLE SANDSTONE        |   |



**NORTH**



SCALE IN FEET

**KAL. LAKE SEWER & WATER AUTHORITY  
SAUGATUCK TWP., ALLEGAN CO., MI  
WATER SUPPLY INVESTIGATION**

**FIGURE 3: MAP OF BEDROCK TYPE**

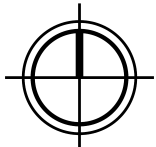
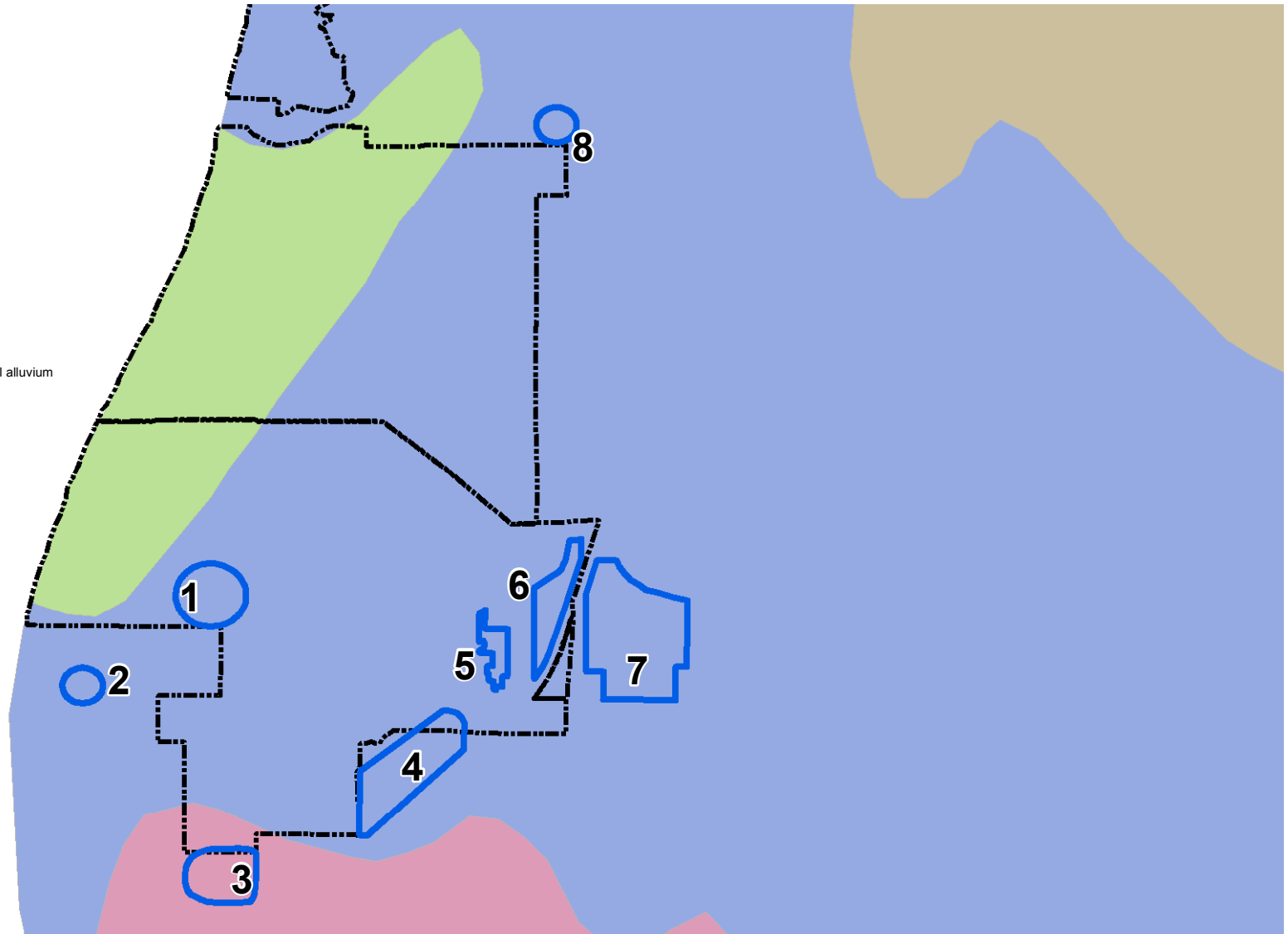
F&V PROJECT NO. 2343



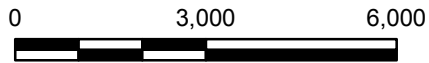


**Legend**

- Artificial fill
- Coarse-textured glacial till
- Dune sand
- End moraines of coarse-textured till
- End moraines of fine-textured till
- End moraines of medium-textured till
- Exposed bedrock surfaces
- Fine-textured glacial till
- Glacial outwash sand and gravel and postglacial alluvium
- Ice-contact outwash sand and gravel
- Lacustrine clay and silt
- Lacustrine sand and gravel
- Medium-textured glacial till
- Peat and muck
- Postglacial alluvium
- Thin to discontinuous glacial till over bedrock
- Water



NORTH



SCALE IN FEET

KAL. LAKE SEWER & WATER AUTHORITY  
 SAUGATUCK TWP., ALLEGAN CO., MI  
 WATER SUPPLY INVESTIGATION



FIGURE 4: MAP OF GLACIAL DEPOSITS

F&V PROJECT NO. 2343




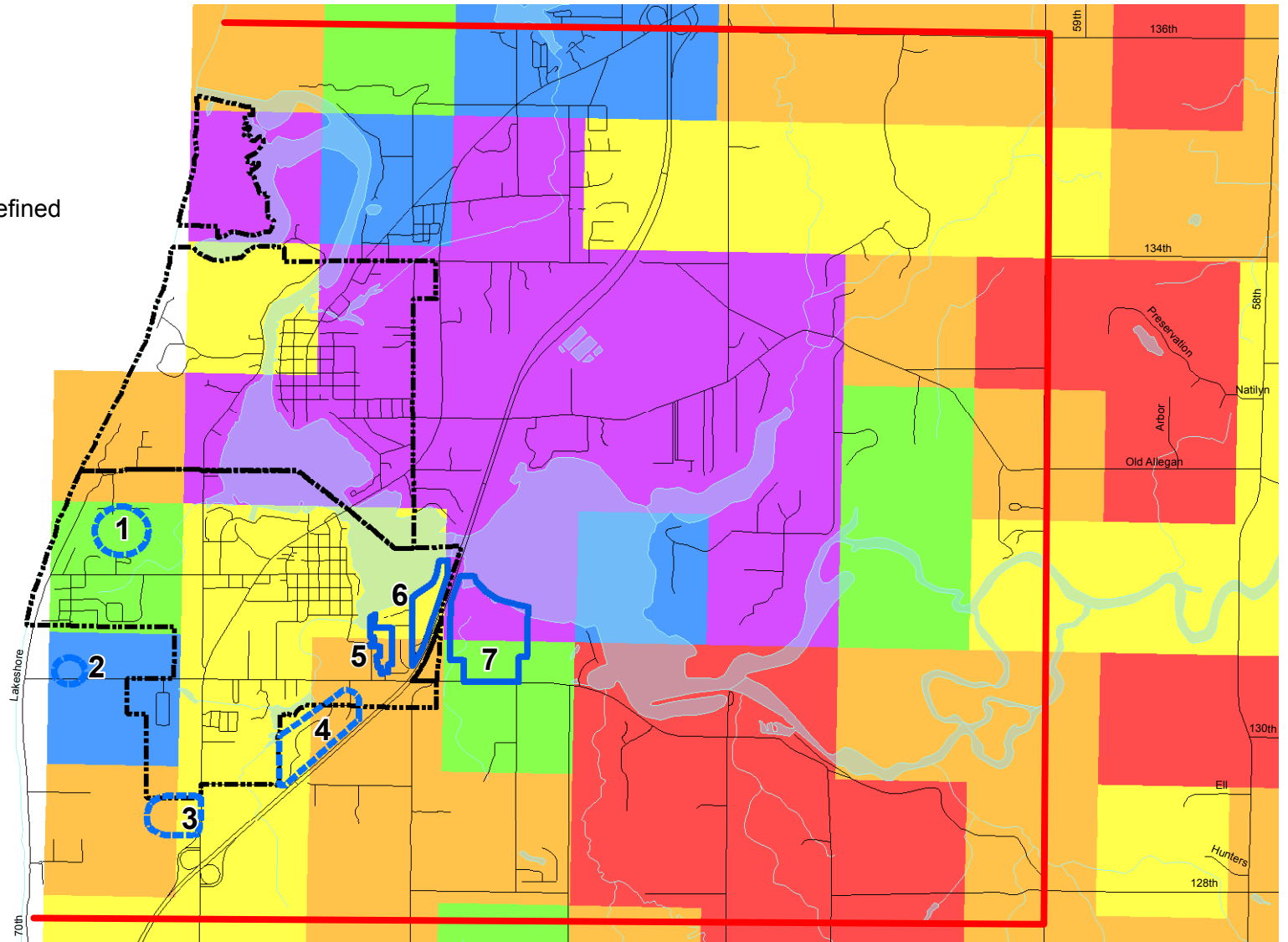
### Legend

#### Investigated Sites

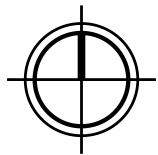
-  Specific Property Not Defined
-  Specific Property

#### MI Glacial Drift Yield

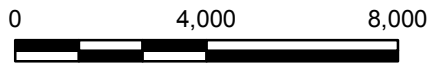
-  0 - 25
-  25 - 100
-  100 - 200
-  200 - 300
-  300 - 400
-  400 - 500
-  500+



Shapefiles and location information downloaded from MIGDL Center for Geographic Information (<http://www.mcgi.state.mi.us/mgdl/>); Michigan GIS Open Data Portal (<http://gis.michigan.opendata.arcgis.com/>); and MDEQ Environmental Mapper (<http://web1.mcgi.state.mi.us/environmentalmapper/mcgi.aspx>). Additional data was drawn from available information and existing figures.



NORTH



SCALE IN FEET

## KAL. LAKE SEWER & WATER AUTHORITY SAUGATUCK TWP., ALLEGAN CO., MI WATER SUPPLY INVESTIGATION

FIGURE 5: MAP OF GLACIAL YIELD

F&V PROJECT NO. 2343

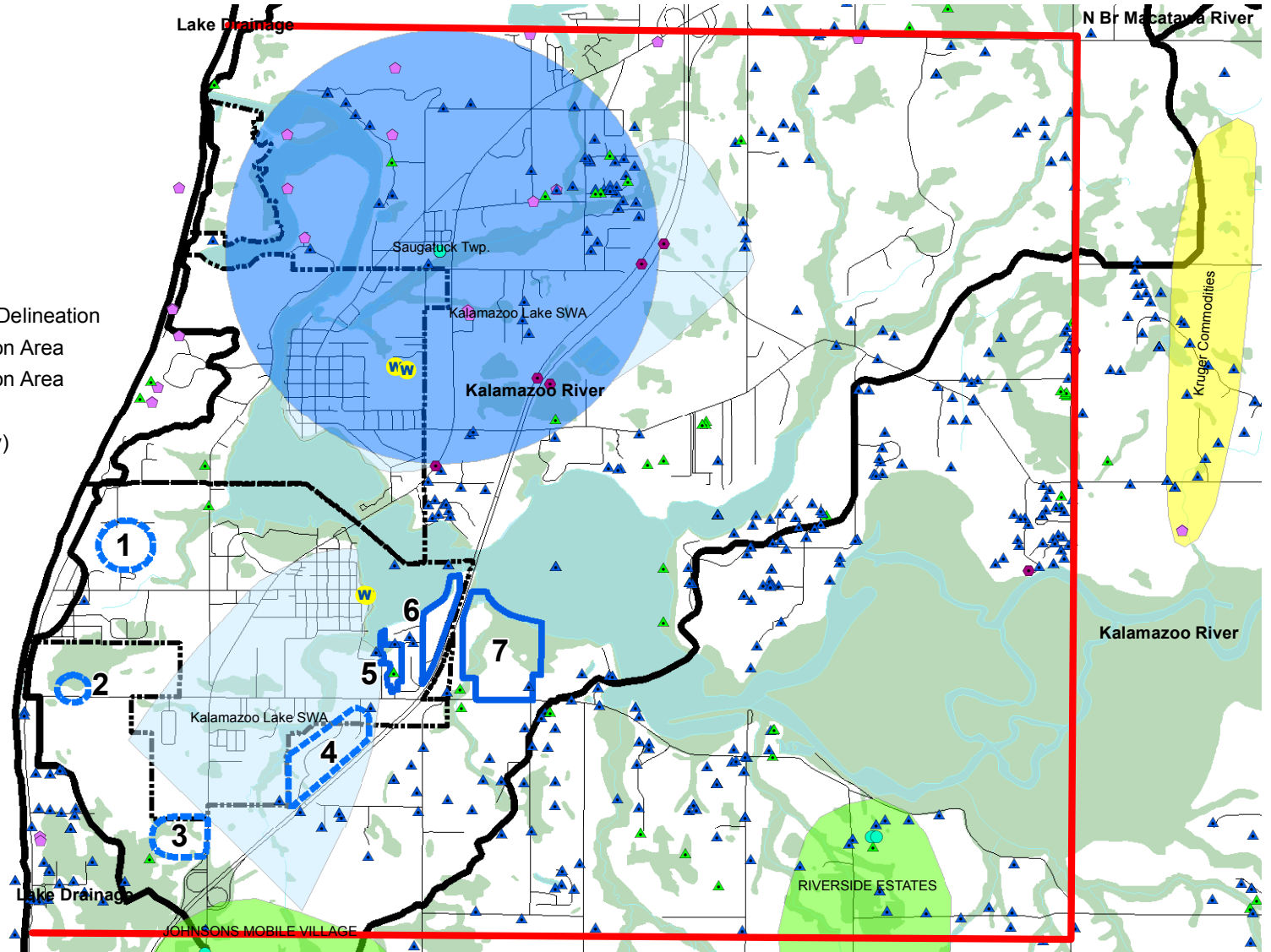


**Legend**

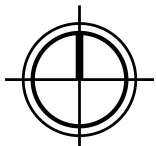
- KLSWA Type I Well
- ▲ Other Water Well
- ▲ Residential Well
- Type I Public Water Supply Well
- Type II Public Water Supply Well
- Type III Public Water Supply Well
- Low Vulnerability Wellhead Area
- Traditional Wellhead Protection Area Delineation
- Type 1 Provisional Wellhead Protection Area
- Type 2 Provisional Wellhead Protection Area
- Watershed Subbasin (Names in bold)
- Wetlands (National Wetland Inventory)

**Investigated Sites**

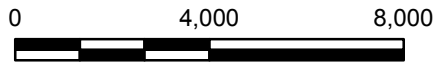
- 1 Specific Property Not Defined
- 2 Specific Property



Shapefiles and location information downloaded from MiGDL Center for Geographic Information (<http://www.mcgi.state.mi.us/mgdl/>); Michigan GIS Open Data Portal (<http://gis.michigan.opendata.arcgis.com/>); and MDEQ Environmental Mapper (<http://web1.mcgi.state.mi.us/environmentalmapper/mcgl.aspx>). Additional data was drawn from available information and existing figures.



NORTH



SCALE IN FEET

**KAL. LAKE SEWER & WATER AUTHORITY**  
 SAUGATUCK TWP., ALLEGAN CO., MI  
 WATER SUPPLY INVESTIGATION

**FIGURE 6: EXISTING WELLHEAD PROTECTION AREAS, WATER SHEDS, AND LOCAL WELLS**

F&V PROJECT NO. 2343







**APPENDIX 1**



### Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION					
Map ID	1				
Site Name	TBD				
Address of Site	Centre Street/Golfview Dr.				
Identified Parcel ID(s)	Specific Parcel Not Determined; Used 59-830-000-00 Below				
GEOGRAPHIC INFORMATION		Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Village	Village of Douglas		None
Owner of Property	80%	Douglas Property Dev. LLC	County Tax Record Search		Property deed
Current Land Use	50%	Residential Vacant	County Tax Record Search		
Current Zoning	TBD	Property Class 402	County Tax Record Search		
Historic use of Site	TBD	TBD			Historical Photos, Sanborn, City Directories
Size of Property (acres)	100%	Parcel is 50 Acres	Parcel Map (not on tax record)		Deed description
Approximate Dimension of Property (feet)	75%	Area of Interest is ~15-- x ~800 feet	Parcel Map <sup>1</sup>		
Can 200-foot isolation from the property boundary be maintained?	TBD	Yes	Parcel Map <sup>1</sup>		Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Stream ~1,000 feet to the East	Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup>		
Is property at risk for flooding?		No	FEMA		
<b>Connection to Water Distribution System</b>					
Distance to connection point (feet)	TBD	TBD			
Size of line at point of connection (in)	TBD	TBD			
POTENTIAL SOURCES OF CONTAMINATION					
Is site in existing Wellhead Protection Area?	100%	No	Map <sup>1</sup>		
<b>Potential Sources of Contamination</b>					
200 foot radius isolation area	50%	None	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>		
2000 foot radius	50%	Yes - Part 201 Plume to the East; BEA to the NE and SE	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>		
Preliminary Wellhead Protection Area	TBD	Yes - as above and USTs	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>		
HYDROGEOLOGY					
Anticipated Aquifer (drift or bedrock. Rational)	50%	Drift	Maps of Hydrogeological Characteristics <sup>1</sup> ; WWAT <sup>2</sup>		
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel	Quaternary Geology Map <sup>1</sup>		
Thickness of glacial drift (include source)	75%	200-400 feet	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)		Area well logs
Glacial Yield - State Groundwater Mapping	100%	300-400 gpm	Glacial Estimated Yield Map <sup>1</sup>		
Underlying Bedrock Formation	100%	Coldwater Shale	Bedrock Geology Map <sup>1</sup>		
Underlying Bedrock Potential as an Aquifer	100%	No	TBD		
Estimated aquifer Thickness (include source)	TBD	TBD	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>		
Depth to Groundwater (water table)	25%	TBD	Depth to Groundwater Map <sup>1</sup>		
Depth to Groundwater (potential aquifer)	TBD	TBD			
<b>Water Withdrawal Assessment Tool</b>					
Exchange of Capacity in Same Watershed? (Y/N)	TBD	TBD			
Increase in Capacity? (Y/N)	TBD	TBD			
If Yes to either above, Zone A, B, C or D	100%	TBD	WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.		
<b>Water Quality (include source)</b>					
(CWSBL = County Wide State Background Level)					
Arsenic	25%	CWSBL: >20-50	State/County Maps from State of MI <sup>3</sup>		Area Samples; Site Specific Sampling
Nitrates	25%	TBD	State/County Maps from State of MI <sup>3</sup>		Area Samples; Site Specific Sampling
Hardness	TBD	TBD			Area Samples; Site Specific Sampling
Iron	TBD	TBD			Area Samples; Site Specific Sampling
Organics	25%	Not positive for VOCs	State/County Maps from State of MI <sup>3</sup>		Area Samples; Site Specific Sampling
Other	TBD	TBD			Area Samples; Site Specific Sampling
<b>Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site</b>					
Aquifer Test Onsite? (Yes/No/Unknown)	50%	Rick's Creek ~1000 feet to the East	Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>		
	TBD	Unknown			
OTHER CONSIDERATIONS					
Desired Well Capacity	TBD	TBD			An evaluation of needed capacity will be confirmed at a future date.
<b>About this Evaluation</b>					
This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.					
<sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library ( <a href="http://www.mcgi.state.mi.us/mgdl/">http://www.mcgi.state.mi.us/mgdl/</a> ); MDEQ, USGS, and MSU Groundwater Mapping Project ( <a href="http://gwmap.rsgis.msu.edu/">http://gwmap.rsgis.msu.edu/</a> ); and <County or other> (<web address>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <a href="http://www.deq.state.mi.us/wwat/">http://www.deq.state.mi.us/wwat/</a> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples <a href="http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500-.00.html">http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500-.00.html</a>					



## Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION				
Map ID	2			
Site Name	TBD			
Address of Site	Wiley Road V/L			
Identified Parcel ID(s)	Specific Parcel Not Determined; Used Parcel 20-017-009-10 Below			
GEOGRAPHIC INFORMATION	Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Township	Saugatuck Township	None
Owner of Property	80%	Raywood Melissa D Trust	County Tax Record Search	Property deed
Current Land Use	50%	402-Residential Vacant	County Tax Record Search	
Current Zoning	100%	R-3B	County Tax Record Search	
Historic use of Site	TBD	TBD		Historical Photos, Sanborn, City Directories etc.
Size of Property (acres)	100%	6.5	County Tax Record Search	Deed description
Approximate Dimension of Property (feet)	75%	~850 x 625 ft. rectangle	Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	100%	Yes	Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Lake Michigan ~ 1500ft W	Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup>	
Connection to Water Distribution System				
Distance to connection point (feet)	TBD	TBD		
Size of line at point of connection (in)	TBD	TBD		
POTENTIAL SOURCES OF CONTAMINATION				
Is site in existing Wellhead Protection Area? (Y/N)	100%	No	Wellhead Protection Areas (WHPAs) Map <sup>1</sup>	
Potential Sources of Contamination				
200 foot radius isolation area	50%	None	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	None	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	TBD		
HYDROGEOLOGY				
Anticipated Aquifer (drift or bedrock. Rational)	50%	Drift	Maps of Hydrogeological Characteristics; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel; lacustrine coarse	Quaternary Geology Map <sup>1</sup>	
Thickness of glacial drift (include source)	75%	200-400 feet	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)	Area well logs
Glacial Yield - State Groundwater Mapping	100%	471 pgm	Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale	Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No	Shale is not known to produce water	
Estimated aquifer Thickness (include source)	TBD	TBD	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	TBD	Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD		
Water Withdrawal Assessment Tool				
Exchange of Capacity in Same Watershed? (Y/N)	TBD	TBD		
Increase in Capacity? (Y/N)	TBD	TBD		
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.	WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
Water Quality (include source)	CWSBL = County Wide State Background Level			
Arsenic	25%	CWSBL: >20-50; ND	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%	<=5 mg/L	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD		Area Samples; Site Specific Sampling
Iron	TBD	TBD		Area Samples; Site Specific Sampling
Organics	25%	Not positive for VOCs	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD		Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	75%	Numerous wetlands to the N	Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD		
OTHER CONSIDERATIONS				
Desired Well Capacity	TBD	TBD		An evaluation of needed capacity will be confirmed at a future date.
About this Evaluation	This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.			
	<sup>1</sup> Shapefiles were downloaded from: Michigan Geographic Data Library ( <a href="http://www.mcgi.state.mi.us/mgdl">http://www.mcgi.state.mi.us/mgdl</a> ); MDEQ, USGS, and MSU Groundwater Mapping Project ( <a href="http://gwmap.rsgis.msu.edu">http://gwmap.rsgis.msu.edu</a> ); and Allegan County's GIS Parcel information website ( <a href="http://cms.allegancounty.org/services/GIS/SitePages/Parcels.aspx">http://cms.allegancounty.org/services/GIS/SitePages/Parcels.aspx</a> ). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <a href="http://www.deq.state.mi.us/wwat/">http://www.deq.state.mi.us/wwat/</a> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples <a href="http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.htm">http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.htm</a>			

### Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION					
Map ID	3				
Site Name	"Blue Star Hwy Vacant"				
Address of Site	Lakeshore Drive; Blue Star Hwy/I96 Exit 36				
Identified Parcel ID(s)	Specific Parcel Not Determined; Used both 20-020-038-00 and 20-020-038-1C				
GEOGRAPHIC INFORMATION		Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Saugatuck Township			None
Owner of Property	80%	Milauckas, Joseph Jr. Trust; Kostyla, Betty & Kostyla, Josph Jr.		County Tax Record Search	Property deed
Current Land Use	50%	Residential and Commercial Vacant		County Tax Record Search	
Current Zoning	TBD	Property Class 402; 202		County Tax Record Search	
Historic use of Site	TBD	TBD			Historical Photos, Sanborn, City Directories
Size of Property (acres)	100%	51.60 Acres and 4.5 Acres		County Tax Record Search	Deed description
Approximate Dimension of Property (feet)	75%	Slightly circular ~1000 x ~1200'		Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	TBD	Yes; depending on which parcel(s) and location within parcels		Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Tannery Creek to the east; wetland partially covering portions of property		Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup>	
Is property at risk for flooding?		No - Zone C		FEMA	
<b>Connection to Water Distribution System</b>					
Distance to connection point (feet)	TBD	TBD			
Size of line at point of connection (in)	TBD	TBD			
POTENTIAL SOURCES OF CONTAMINATION					
Is site in existing Wellhead Protection Area?	100%	No		Wellhead Protection Areas (WHPAs) Map <sup>1</sup>	
<b>Potential Sources of Contamination</b>					
200 foot radius isolation area	50%	None		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	Depending on location: BEA to the north, closed LUST to the east		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	Depending on location: closed LUST ~200' to the east of easternmost parcel		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
HYDROGEOLOGY					
Anticipated Aquifer (drift or bedrock. Rational)	50%	Glacial drift		Maps of Hydrogeological Characteristics <sup>1</sup> ; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel		Quaternary Geology Map <sup>1</sup>	
Thickness of glacial drift (include source)	75%	150-400 feet		Drift Thickness Map (Groundwater Viewer <sup>3</sup> ; not available for download)	Area well logs
Glacial Yield - State Groundwater Mapping	100%	175 / 206 gpm		Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale		Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No		TBD	
Estimated aquifer Thickness (include source)	TBD	TBD		Drift Thickness Map (Groundwater Viewer <sup>3</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	TBD		Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD			
<b>Water Withdrawal Assessment Tool</b>					
Exchange or Capacity in Same Watershed? (Y/N)	TBD	TBD			
Increase in Capacity? (Y/N)	TBD	TBD			
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.		WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
<b>Water Quality (include source)</b>					
Arsenic	25%	Nearby up to 50 ug/L		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%	TBD		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD			Area Samples; Site Specific Sampling
Iron	TBD	TBD			Area Samples; Site Specific Sampling
Organics	25%	TBD		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD			Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	50%	Tannery Creek to the east; wetland partially covering portions of property		Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD			
OTHER CONSIDERATIONS					
Desired Well Capacity	TBD	TBD			An evaluation of needed capacity will be confirmed at a future date.
<b>About this Evaluation</b>					
This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.					





<sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library (<http://www.mcgi.state.mi.us/mgdl>); MDEQ, USGS, and MSU Groundwater Mapping Project (<http://gwmap.rsgis.msu.edu>); and <County or other> (<web address>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <http://www.deq.state.mi.us/wwat/> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3690-76500--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.html)

### Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION					
Map ID	4				
Site Name	"Common Area Light District"				
Address of Site	TBD				
Identified Parcel ID(s)	Specific Parcel Not Determined				
GEOGRAPHIC INFORMATION		Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Saugatuck Township			None
Owner of Property	80%	Pearson Acquisitions LLC		County Tax Record Search	Property deed
Current Land Use	50%	Vacant; Residential Vacant		County Tax Record Search	
Current Zoning	TBD	Property Class 701 & 402		County Tax Record Search	
Historic use of Site	TBD	TBD			Historical Photos, Sanborn, City Directories
Size of Property (acres)	100%	TBD		County Tax Record Search	Deed description
Approximate Dimension of Property (feet)	75%	Irregularly shaped ~2000 x ~1000 square with missing gaps		Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	TBD	Yes, in specific areas within site		Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Pond/wetland on southern parcel		Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup> Digital Elevation Model (DEM) <sup>1</sup> ; Topographic Map	
Elevation (Feet AMSL)		640-660 feet			
Is property at risk for flooding?		No - Zone C		FEMA	
<b>Connection to Water Distribution System</b>					
Distance to connection point (feet)	TBD	TBD			
Size of line at point of connection (in)	TBD	TBD			
POTENTIAL SOURCES OF CONTAMINATION					
Is site in existing Wellhead Protection Area?	100%	Yes - KLSWA		Map <sup>1</sup>	
<b>Potential Sources of Contamination</b>					
200 foot radius isolation area	50%	None		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	None (depending) - BEA to the west and LUST to the northeast		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	Yes - will expand KLSWA WHPA		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
HYDROGEOLOGY					
Anticipated Aquifer (drift or bedrock. Rational)	50%	Glacial drift		Maps of Hydrogeological Characteristics <sup>1</sup> ; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel		Quaternary Geology Map <sup>1</sup> Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)	Area well logs
Thickness of glacial drift (include source)	75%	150-200 feet			
Glacial Yield - State Groundwater Mapping	100%	100-300 gpm		Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale		Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No		TBD	
Estimated aquifer Thickness (include source)	TBD	TBD		Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	<=15 ft		Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD			
<b>Water Withdrawal Assessment Tool</b>					
Exchange of Capacity in Same Watershed? (Y/N)	TBD	TBD			
Increase in Capacity? (Y/N)	TBD	TBD			
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.		WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
<b>Water Quality (include source)</b>					
Arsenic	25%	Nearby up to 50 ug/L		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%			State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD			Area Samples; Site Specific Sampling
Iron	TBD	TBD			Area Samples; Site Specific Sampling
Organics	25%	TBD		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD			Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	50%	Pond/wetland on southern parcel; residential wells to the south		Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD			
OTHER CONSIDERATIONS					
Desired Well Capacity	TBD	TBD			An evaluation of needed capacity will be confirmed at a future date.
<b>About this Evaluation</b>					
This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.					



<sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library (<http://www.mcgi.state.mi.us/mgdl>); MDEQ, USGS, and MSU Groundwater Mapping Project (<http://gwmap.rsgis.msu.edu>); and <County or other> (<web address>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <http://www.deq.state.mi.us/wwat/> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3690-76500--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.html)

### Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION					
Well ID	5				
Site Name	TBD				
Address of Site	329 Water St.				
Identified Parcel ID(s)	59-016-108-00				
GEOGRAPHIC INFORMATION		Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Village of Douglas			None
Owner of Property	80%	TBD		County Tax Record Search	Property deed
Current Land Use	50%	TBD		County Tax Record Search	
Current Zoning	TBD	Property Class 401		County Tax Record Search	
Historic use of Site	TBD	TBD			Historical Photos, Sanborn, City Directories
Size of Property (acres)	100%	TBD		County Tax Record Search	Deed description
Approximate Dimension of Property (feet)	75%	Irregularly shaped ~1500 x 500 ft		Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	TBD	No		Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Kalamazoo Lake and surrounding wetlands adjacent to the northwest		Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup>	
Elevation (Feet AMSL)		600-620 feet		Digital Elevation Model (DEM) <sup>1</sup> ; Topographic Map	
Is property at risk for flooding?		No - Zone C		FEMA	
<b>Connection to Water Distribution System</b>					
Distance to connection point (feet)	TBD	TBD			
Size of line at point of connection (in)	TBD	TBD			
POTENTIAL SOURCES OF CONTAMINATION					
Is site in existing Wellhead Protection Area?	100%	No		Map <sup>1</sup>	
<b>Potential Sources of Contamination</b>					
200 foot radius isolation area	50%	No, but possible depending on location within the property		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	Yes - Open LUST to the SW		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	Yes - LUST; BEA; Cont Site		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
HYDROGEOLOGY					
Anticipated Aquifer (drift or bedrock. Rational)	50%	Glacial drift		Maps of Hydrogeological Characteristics <sup>1</sup> ; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel		Quaternary Geology Map <sup>1</sup>	
Thickness of glacial drift (include source)	75%	50-150 feet		Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)	Area well logs
Glacial Yield - State Groundwater Mapping	100%	100-200 gpm		Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale		Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No		TBD	
Estimated aquifer Thickness (include source)	TBD	TBD		Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	15-30 ft		Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD			
<b>Water Withdrawal Assessment Tool</b>					
Exchange of Capacity in Same Watershed? (Y/N)	TBD	TBD			
Increase in Capacity? (Y/N)	TBD	TBD			
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.		WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
<b>Water Quality (include source)</b>					
Arsenic	25%	ND		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%	Site not identified; <=5 ug/L to the east and west		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD			Area Samples; Site Specific Sampling
Iron	TBD	TBD			Area Samples; Site Specific Sampling
Organics	25%	Site not identified as positive for VOCs (Positive VOCs just N of Kal Lake)		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD			Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	75%	Residential Wells, Irrigation well and wetlands within 2,000 feet; irrigation well on site		Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD			
OTHER CONSIDERATIONS					
Desired Well Capacity	TBD	TBD			An evaluation of needed capacity will be confirmed at a future date.
<b>About this Evaluation</b>					
This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.					



<sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library (<http://www.mcgi.state.mi.us/mgdl>); MDEQ, USGS, and MSU Groundwater Mapping Project (<http://gwmap.rsgis.msu.edu>); and <County or other> (<web address>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <http://www.deq.state.mi.us/wwat/> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3690-76500--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.html)

### Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION					
Map ID	6				
Site Name	Schultz Park				
Address of Site	Wiley Rd., Douglas, MI				
Identified Parcel ID(s)	59-015-002-00				
GEOGRAPHIC INFORMATION		Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Village of Douglas			None
Owner of Property	80%	Village of Douglas		County Tax Record Search	Property deed
Current Land Use	50%	TBD		County Tax Record Search	
Current Zoning	TBD	Property Class 701		County Tax Record Search	
Historic use of Site	TBD	TBD			Historical Photos, Sanborn, City Directories
Size of Property (acres)	100%	~14 acres		Parcel Map (not on tax record)	Deed description
Approximate Dimension of Property (feet)	75%	Triangular ~655 x 1680 x 1350 feet		Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	TBD	Possible in limited areas on site.		Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Kalamazoo Lake and surrounding wetland adjacent to NW corner of site		Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup> Digital Elevation Model (DEM) <sup>1</sup> ; US Topographic Map	
Elevation		600-620			
Is property at risk for flooding?		No - Zone C		FEMA	
<b>Connection to Water Distribution System</b>					
Distance to connection point (feet)	TBD	TBD			
Size of line at point of connection (in)	TBD	8" ?			
POTENTIAL SOURCES OF CONTAMINATION					
Is site in existing Wellhead Protection Area?	100%	No		Map <sup>1</sup>	
<b>Potential Sources of Contamination</b>					
200 foot radius isolation area	50%	No		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	Yes - Open LUST to the SW		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	Yes - LUST; BEA; Cont Site		Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
HYDROGEOLOGY					
Anticipated Aquifer (drift or bedrock. Rational)	50%	Glacial Drift		Maps of Hydrogeological Characteristics <sup>1</sup> ; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel		Quaternary Geology Map <sup>1</sup>	
Thickness of glacial drift (include source)	75%	50-200 feet		Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)	Area well logs
Glacial Yield - State Groundwater Mapping	100%	200-300 gpm		Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale		Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No		TBD	
Estimated aquifer Thickness (include source)	TBD	TBD		Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	15-30 feet		Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD			
<b>Water Withdrawal Assessment Tool</b>					
Exchange of Capacity in Same Watershed? (Y/N)	TBD	TBD			
Increase in Capacity? (Y/N)	TBD	TBD			
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.		WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
<b>Water Quality (include source)</b>					
Arsenic	25%	ND		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%	Site not identified; <=5 ug/L to the east and west		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD			Area Samples; Site Specific Sampling
Iron	TBD	TBD			Area Samples; Site Specific Sampling
Organics	25%	Site not identified as positive for VOCs (Positive VOCs just N of Kal Lake)		State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD			Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	50%	Residential Wells, Irrigation well and wetlands within 2,000 feet.		Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD			
OTHER CONSIDERATIONS					
Desired Well Capacity About this Evaluation	TBD	TBD			An evaluation of needed capacity will be confirmed at a future date.
<p>This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&amp;V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.</p>					



<sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library (<http://www.mcgi.state.mi.us/mgdl>); MDEQ, USGS, and MSU Groundwater Mapping Project (<http://gwmap.rsgis.msu.edu>); and <County or other> (<web address>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <http://www.deq.state.mi.us/wwat/> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3690-76500--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.html)

## Well Site Evaluation - Kalamazoo Lake Sewer & Water Authority

REFERENCE INFORMATION				
Map ID	7			
Site Name	TBD			
Address of Site	6525 Riverside Rd.			
Identified Parcel ID(s)	20-015-023-00			
GEOGRAPHIC INFORMATION	Confidence	Evaluation	Source(s)	Additional Information to Review
Village, City, Township	100%	Township	Saugatuck Township	None
Owner of Property	80%	Dowd, Gary P. and Racehl et al	County Tax Record Search	Property deed
Current Land Use	50%	Residential	County Tax Record Search	
Current Zoning	100%	Proeprty Class 401 - Residential	County Tax Record Search	
Historic use of Site	TBD	TBD		Historical Photos, Sanborn, City Directories etc.
Size of Property (acres)	100%	91.78	County Tax Record Search	Deed description
Approximate Dimension of Property (feet)	75%	Irregular shaped ~2300 x 1800 feet	Parcel Map <sup>1</sup>	
Can 200-foot isolation from the property boundary be maintained?	100%	Yes	Parcel Map <sup>1</sup>	Property description prior to property acquisition
Closest Surface Water or Wetland and Distance	100%	Creek crosses western edge toward Kzoo River which borders to the north;	Topographic Map, Rivers, Drains, National Wetlands Inventory (NWI) <sup>1</sup>	
Connection to Water Distribution System				
Distance to connection point (feet)	TBD	TBD		
Size of line at point of connection (in)	TBD	TBD		
POTENTIAL SOURCES OF CONTAMINATION				
Is site in existing Wellhead Protection Area? (Y/N)	100%	No	Wellhead Protection Areas (WHPAs) Map <sup>1</sup>	
Potential Sources of Contamination				
200 foot radius isolation area	50%	None	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
2000 foot radius	50%	None	Parcel Map, Sites of Contamination, USTs, & Pipelines Maps <sup>1</sup>	
Preliminary Wellhead Protection Area	TBD	TBD		
HYDROGEOLOGY				
Anticipated Aquifer (drift or bedrock. Rational)	50%	Drift	Maps of Hydrogeological Characteristics; WWAT <sup>2</sup>	
Surficial Glacial Deposits (Quaternary Geology)	75%	Lacustrine sand and gravel	Quaternary Geology Map <sup>1</sup>	
Thickness of glacial drift (include source)	75%	50-200 feet	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ; not available for download)	Area well logs
Glacial Yield - State Groundwater Mapping	100%	300-500 gpm	Glacial Estimated Yield Map <sup>1</sup>	
Underlying Bedrock Formation	100%	Coldwater Shale	Bedrock Geology Map <sup>1</sup>	
Underlying Bedrock Potential as an Aquifer	100%	No	Shale is not known to produce water	
Estimated aquifer Thickness (include source)	TBD	TBD	Drift Thickness Map (Groundwater Viewer <sup>1</sup> ) and Depth to Groundwater <sup>1</sup>	
Depth to Groundwater (water table)	25%	TBD	Depth to Groundwater Map <sup>1</sup>	
Depth to Groundwater (potential aquifer)	TBD	TBD		
Water Withdrawal Assessment Tool				
Exchange or Capacity in Same watershed? (Y/N)	TBD	TBD		
Increase in Capacity? (Y/N)	TBD	TBD		
If Yes to either above, Zone A, B, C or D	100%	A: The proposed withdrawal has passed the screening process.	WWAT <sup>2</sup> Assumptions: 1000 gpm, 100 ft, glacial aquifer, continuous pumping.	
Water Quality (include source)	(CWSBL = County Wide State Background Level)			
Arsenic	25%	CWSBL: >20-50; ND	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Nitrates	25%	<=5 mg/L	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Hardness	TBD	TBD		Area Samples; Site Specific Sampling
Iron	TBD	TBD		Area Samples; Site Specific Sampling
Organics	25%	Not positive for VOCs	State/County Maps from State of MI <sup>3</sup>	Area Samples; Site Specific Sampling
Other	TBD	TBD		Area Samples; Site Specific Sampling
Discuss Sensitive Hydrologic Water Features (wells, wetlands, etc) in Vicinity of Site	50%	Nearby wells; sensitive wetlands and creek on property	Topographic Map, NWI, Allegan County Water Wells, & WHPA Maps <sup>1</sup>	
Aquifer Test Onsite? (Yes/No/Unknown)	TBD	TBD		
OTHER CONSIDERATIONS				
Desired Well Capacity	TBD	TBD		An evaluation of needed capacity will be confirmed at a future date.
About this Evaluation				
<p>This evaluation is a planning tool to assist communities in identifying and prioritizing future community supply well locations. The results of this evaluation are intended to reduce the number of test wells needed to meet the goals of the new water supply well. Certain considerations in this evaluation may change over time. Much of the data used by F&amp;V in this analysis is from readily available public information sources. Although these types of data can provide valuable insight into the viability of an area for siting high capacity wells, there are inherent limitations to such data. Certain characteristics of a site cannot be determined with an appropriate degree of certainty until actual field data are collected at the site. Examples of such characteristics include, but are not limited to: aquifer depths and aquifer thicknesses, depth to water, water quality and potential well yield. The information on this table should not be relied on without reading the accompanying written report.</p> <p><sup>1</sup> Shapefiles were downloaded from: Michigan geographic Data Library (<a href="http://www.mcgi.state.mi.us/mgdl">http://www.mcgi.state.mi.us/mgdl</a>); MDEQ, USGS, and MSU Groundwater Mapping Project (<a href="http://gwmap.rsgis.msu.edu">http://gwmap.rsgis.msu.edu</a>); and Allegan County's GIS Parcel information website (<a href="http://cms.allegancounty.org/services/GIS/SitePages/Parcels.aspx">http://cms.allegancounty.org/services/GIS/SitePages/Parcels.aspx</a>). <sup>2</sup> Water Withdrawal Assessment Tool (WWAT) <a href="http://www.deq.state.mi.us/wwat/">http://www.deq.state.mi.us/wwat/</a> <sup>3</sup> State and County Maps for Arsenic, Nitrates and Volatile Organic Compounds (VOCs) from DEQ WaterChem Database, 1983-2003 samples <a href="http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.htm">http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3690-76500--,00.htm</a></p>				



**APPENDIX 2**

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER DIVISION  
GROUNDWATER SECTION – WELL CONSTRUCTION UNIT**

**MINIMUM WELL ISOLATION DISTANCES**  
**(From Contamination Sources and Buildings)**  
**Part 127, Act 368, P.A. 1978 And Act 399, P.A. 1976**

The following lists sources of contamination and the well isolation distances required from those sources by state codes. The Michigan Department of Environmental Quality and local health departments have authority to issue deviations from these minimum isolation distances on a case by case basis. Criteria for issuance of deviations are set forth in R 325.1613 of the Rules for Part 127, and R 325.10809 of the Rules for Act 399.

\* = For the isolation distances marked with a single asterisk, the isolation distance is for a source of contamination which is not specifically listed in the rules. However, the source of contamination is interpreted as belonging in a general contamination source group (example - a sewage holding tank is the same as a septic tank) which is listed in the rules, and therefore, the isolation distance listed in this document is required.

\*\* = For the isolation distances marked with a double asterisk, the isolation distance is from a source of contamination which is not specifically named in the rules. However, the Michigan Department of Environmental Quality has established a recommended isolation distance based on the contaminant involved, the risk to public health, and other factors. Under the general authority of a health officer's responsibility to protect the public health, health officers may modify this recommended isolation distance, either increasing or decreasing it, on a case by case basis.

CONTAMINATION SOURCE	REQUIRED MINIMUM ISOLATION DISTANCE (FEET)		
	Part 127, Act 368 PA 1978	Act 399, PA 1976	
		IIb and III	I and IIa
Agricultural chemical/ fertilizer storage or preparation area	150	800	2000
Animal/poultry yard	50	75	200
Brine wells/injection wells	**150	**800	**2,000
Building or projection thereof	3	3	3
Cemetery/graves	**50	*75	*200
Cesspool	50	75	200
Chemical Storage	150	800	2,000
Contaminant plumes, known (Act 307, LUST sites, etc.)	**150	**800	**2,000
Drainfield	50	75	200
Drywell	50	75	200
Footing Drains	10	10	10
Fuel/chemical storage tanks – Underground or abovegrade and associated piping			
depot/tank farm	300	800	2,000
1,100 gal. or larger, without secondary containment	300	800	2,000
1,100 gal. or larger with secondary containment	50	800	2,000
less than 1,100 gal. that store motor or heating fuel for noncommercial purpose or consumptive use on premises where fuel is stored	50	800	2,000
less than 1,100 gal. that store motor fuel for commercial purpose	*50	800	2,000
located in a basement, regardless of size	*50	800	2,000
Grease trap	50	*75	*200
Kennels	50	*75	*200
Landfill or dump sites (Active or Inactive)	800	800	2,000

Liquid Petroleum (LP) Tanks (See comments on last page)			
Liquid waste draining into the soil	50	*75	200
Metering station for pipelines	*300	*300	*300
Municipal wastewater effluent or sludge disposal area (land surface application or subsurface injection)	300	800	2,000
Oil or gas well	300	300	300
Other wastewater handling or disposal unit	50	*75	*200
Petroleum product processing or bulk storage	300	800	2,000
Pipelines gas, oil, etc.	*300	*300	*300
natural gas (See comments on last page)			
Privy/Outhouse	50	75	200
Seepage pit	50	75	200
Septic tank	50	75	200
Septage waste (land application area)	800	800	2,000
Sewage holding tank	50	*75	*200
Sewage lagoon serving a single family dwelling	50	75	200
Sewage lagoon effluent – land application area	50	800	2,000
Sewage or liquid waste draining into soil	50	*75	*200
Sewage pump chamber, transfer station, or lift station	50	75	200
Sewers			
Buried gravity sewer (sanitary or storm) - Service weight or heavier ductile-iron or cast iron, or schedule 40 PVC, all with watertight joints	10	75	200
Buried pressure sewer (sanitary or storm) Watertight joints (pressure tested after installation to 100 psi), equivalent to Schedule 40 or SDR 21, and meets or exceeds ASTM Specifications D1785-91 or D2241-89	10 (by written deviation only)	75	200
Buried gravity or pressure sewer (sanitary or storm), constructed of materials not meeting the specifications listed in the two categories above, or the materials are unknown	50	75	200
Sump pit			
Receiving other than household waste (footing drain, roof drain, etc.)	10	10	10
Receiving household waste (laundry, softener backwash, sink waste, etc.)	50	75	200
Surface water (lake, river, stream, pond, ditch, etc.)	10	75	200
Unfilled space below ground surface (except an approved basement, basement offset, or crawl space beneath single family dwelling)	10	10	10

**Comments:** Natural gas and liquid petroleum (LP) are not considered sources of ground water contamination because of the volatile gas nature of the fuels. If leaks occur, the gases escape into the atmosphere. Leaked gases do not migrate downward into the soil. Wells should be sufficiently isolated from natural gas lines or LP tanks to minimize the potential for damage to the lines or tanks during well construction or repair, trenching of water lines, etc., and to allow accessibility to the well.

**APPENDIX F**

**Appendix F - Public Participation, Outreach and Education Schedule**

<b>Action/Activity</b>	<b>Objective</b>	<b>Goal</b>	<b>Team Lead, Implementation Date and Frequency</b>
<p><b>Purchase and Install Signs</b> Purchase and install “Drinking Water Supply Area” signs along major roads within the Wellhead Protection Areas</p>	<p>Inform transporters as to the location of the WHPA, create local awareness of the WHPA</p>	<p>Protect the WHPA.</p>	<p>Lead: KLSWA Manager/Township Manager and County Road  Install in 2018</p>
<p><b>Develop Educational Materials</b>  Ideas discussed by Team:</p> <ul style="list-style-type: none"> <li>- Constructing a banner</li> <li>- Develop materials regarding proper disposal of hazardous waste.</li> <li>- Involve community in developing education materials</li> <li>- Develop brochure/flyer</li> </ul>	<p>Educate community regarding groundwater protection efforts</p>	<p>Protect the groundwater supply</p>	<p>Lead: Team  Implement 2018-2019  On-going</p>
<p><b>Household Hazardous Waste Collection and Recycling</b> Develop materials regarding the disposal of these materials</p>	<p>Keep hazardous materials out of the waste stream</p>	<p>Protect the groundwater supply</p>	<p>Lead: Allegan County Health  Implement 2018-19</p>
<p><b>Bill Stuffers</b> Develop brief educational materials that can be inserted into water bills to the residents that show lawn care tips, explain why we should protect our storm drains, give reasons why hazardous waste should be disposed of properly, and why saving water saves you money, etc.</p>	<p>Provide educational material to a large audience.</p>	<p>Protect the groundwater supply</p>	<p>Lead: KLSWA Manager  1x/year in June, combine with the CCR.  On-going</p>
<p><b>Tours</b> The Water and Wastewater Treatment Facilities currently offer tours. The tours offer insight into KLSWA’s Water’s operations and the connection between home/school and water supply and treatment.</p>	<p>Familiarize community members with these important systems.</p>	<p>Educate the community about the municipal water treatment facilities.</p>	<p>Lead: KLSWA Manager  As requested</p>

They also showcase the latest technology in supplying, treating and managing their drinking water.			
<b>Work with Schools</b> The Team discussed meeting with high school science classes	Educate youth about their drinking water	Develop future stewards of the drinking water supply	Lead: Team On-going
<b>Make WHP section on Website (generally increase presence on social media)</b>	Connect with a broad audience, younger demographic	Educate the community regarding the water supply and its protection	Lead: KLSWA Manager Initiate in 2018 On-going
<b>Presentations to Community Groups (Rotary)</b>	Educate business leaders regarding	Educate the community regarding the water supply and its protection	Lead: Douglas Team Representative Initiate in 2018 On-going

**APPENDIX G**

## GUIDANCE FOR WELLHEAD PROTECTION PLAN UPDATES

The State of Michigan has developed the following guidance for communities for the renewal of Wellhead Protection Plans (WHPP).

These steps are:

- Update roles and responsibilities of government units and water supply agencies.
- Update delineation of Wellhead Protection area.
- Update contaminant source inventory within each Wellhead Protection area.
- Update management approaches for protection of source water, including but not limited to education and regulatory approaches.
- Update contingency plans for public water supply sources.
- Update plans for new water sources to minimize potential contamination.
- Update plans for public participation and outreach education.

This guidance document is intended to assist communities with groundwater systems in developing an approvable WHPP. Communities may add other items as appropriate, and are encouraged to submit a work plan for review before proceeding with development of their WHPP.

## PROGRAM ELEMENTS

**Update Basic Information about the Water Supply System and Community.** Update information about the water supply system and community regarding:

- Community location and population
- Present service area (geographic area and population served)
- Number of wells and capacity



- Local program goals for WHP

**Update Roles and Responsibilities of Government Units and Water Supply Agencies.** Update information about the WHP Team regarding:

- Roles and responsibilities of each new team member
- New organizations or agencies involved
- Intergovernmental agreements or memoranda that have been updated or initiated
- Person or agency responsible for the periodic update of the local Plan
- Date the Plan was last updated

**Update Delineation of Wellhead Protection Area.** Update information about the WHPA regarding:

- New geological data that should be incorporated into the current WHPA
- Other updates made to the current WHPA
- Updated map of the current WHPA that includes the wellfield location, municipal boundaries, and topographic contours
- Changes in well usage or flow rates in the current WHPA (i.e., well abandonment, new wells, etc.)
- Installation of new well(s) that have been delineated (include new WHPA and map)
- Installation of new well(s) that have not been delineated (include timetable for delineating the new well/s)
- Changes and/or updates to watershed boundaries and/or surface water runoff patterns (optional)
- Changes and/or updates to storm water drainage system and facilities, including storm water basins (optional)

**Update Contaminant Source Inventory within each Wellhead Protection Area (WHPA).** Update information about the Contamination Source Inventory, including:

- Date Contaminant Source Inventory was last updated
- Updated Map which displays potential and existing sources of contamination within the WHPAs

✓ Review the following lists to determine if changes have been made within the WHPAs:

- Sites of Environmental Contamination (201 sites), Remediation and Redevelopment Division (RRD), MDEQ (Part 201 of Act 451) (<https://secure1.state.mi.us/FacilitiesInventoryQueries/>)
- Underground Storage Tank List, Remediation and Redevelopment Division (RRD), MDEQ (Part 211 of Act 451) ([http://www.deq.state.mi.us/sid-web/UST\\_Search.aspx](http://www.deq.state.mi.us/sid-web/UST_Search.aspx))
- Leaking Underground Storage Tank Sites, Remediation and Redevelopment Division (RRD), MDEQ (Part 213 of Act 451) ([http://www.deq.state.mi.us/sid-web/UST\\_Search.aspx](http://www.deq.state.mi.us/sid-web/UST_Search.aspx))
- Oil & Gas Contamination Sites, Office of Oil, Gas, and Minerals (OOGM), MDEQ (Act 61) (<http://ww2.deq.state.mi.us/GeoWebFace/>)
- Hazardous Waste Generators, Office of Waste Management and Radiological Protection (OWMRP), MDEQ (Part 111 of Act 451) (<http://www.deq.state.mi.us/wdspi/>)
- Groundwater Discharge Permits, Groundwater Permits Unit, Water Resources Division (WRD), MDEQ (517) 284-5570 (Part 31 of Act 451)
- Landfill/Solid Waste Disposal Site List, Office of Waste Management and Radiological Protection (OWMRP), MDEQ (Part 115 of Act 451) (<http://www.deq.state.mi.us/wdspi/>)
- Federal National Priorities List; EPA, Region 5 (CERCLA & Superfund) (<http://www.epa.gov/superfund/sites/npl/index.htm>)
- Environmental Mapper <http://www.mcgi.state.mi.us/environmentalmapper/>
- Other sites of concern
- Federal permits for Class V wells (Underground Injection Control Program) [Optional]

**Update Management Approaches for Protection of Source Water, including but not limited to Education and Regulatory Approaches.** Update information about the management activities identified in the WHPP, including:

✓ List the management activities identified in your Wellhead Protection Program Plan:

- Abandoned well search and closure program
- Zoning ordinance provisions for wellhead protection
- Facility inspections or a hazardous material survey
- Disseminated information to businesses
- Environmental Permit Checklist for new business
- Strategic monitoring within the WHPA
- Inter-agency coordination and communication

Partnerships or agreements with county or state agencies helping to develop program

- Timetable for management program implementation
- Other management approaches

✓ Explain current implantation status of the management activities listed above

- Describe updates and changes that have been made to the management activities listed above
- Explain other management activities that your community has decided to implement

**Update Contingency Plans for Public Water Supply Sources.** Update information about the policies and administrative procedures for water supply emergency response, including:

- Changes and/or updates to contacts in the Contingency Plan
- Changes and/or updates to the response protocol in the event of a hazardous substance spill or other emergency
- Changes in emergency water suppliers (bottled, bulk, etc.)
- Changes and/or updates to the policies and procedures related to water supply replacement
- New employee training on the response protocol
- Water supply emergencies that have occurred since the plan was last updated
- Other items to incorporate that have been learned since the plan was last updated

**Update Plans for New Water Sources to minimize Potential Contamination.** If expansion of the public water supply system (PWSS) is anticipated, include:

If expansion of the public water supply system (PWSS) is anticipated, include:

- Identification of the proposed location, depth, and other descriptive information about the new wells
- Proposed method for incorporating new wells into the wellhead protection program plan
- Determination of the WHPA or the timetable for the WHPA delineation

If expansion of the PWSS was previously anticipated and discussed in the plan, update the plan to include:

- Expansion activities that occurred since the plan was last updated
- Timetable that the expansion activities will or have occurred

**Update Plans for Public Participation and Outreach Education.** List the public education and outreach activities identified in your WHPP Plan:

✓ List the public education and outreach activities identified in your WHPP Plan:

- Local meetings
- Newsletters
- Newspaper articles
- Other media outlets \_\_\_\_\_
- School presentations
- Brochures
- Website
- Wellhead protection signage
- Hazardous waste collection activities
- Other \_\_\_\_\_

✓ Explain the current implementation status of the public education and outreach activities listed above

✓ Describe updates and changes that have been made to the public education and outreach activities listed above

✓ Explain other public education and outreach activities that your community has decided to implement

Note: This is general guidance and each program will be site specific. It is suggested the community develop a draft outline for review before any detailed WHPP is developed.

**APPENDIX H**

## Appendix H

### A

**Aeration zone:** The zone immediately below the land surface where the pores contain both water and air, but are not totally saturated with water. Plant roots can capture the moisture passing through this zone, but it cannot provide water for wells. Also known as the unsaturated zone or vadose zone.

**Aggrade:-** to fill and raise the level of a stream bed by deposition of sediment.

**Alluvium:** - sediment deposited by flowing rivers and consisting of sands and gravels.

**Aquiclude:** Impermeable beds of geologic material that hinder or prevent groundwater movement.

**Aquifer:** An underground geological formation able to store and yield water.

**Aquifer storage and retrieval (ASR):** Use of a well or series of wells to inject surface water into an aquifer during wet weather or low demand periods for purposes of withdrawal and use during drought and/or high demand periods.

**Artesian aquifer:** See confined aquifer.

**Artesian well:** A well tapping a confined aquifer. Water in the well rises above the top of the aquifer under artesian pressure, but does not necessarily reach the land surface; a flowing artesian well is a well in which the water level is above the land surface.

**Artificial recharge:** Putting water back into groundwater storage from surface water supplies such as irrigation, or induced infiltration from streams or wells. Includes aquifer storage and retrieval (ASR).

### B

**Bankfull discharge** - that discharge of stream water that just begins to overflow in the active floodplain. The active floodplain is defined as a flat area adjacent to the channel constructed by the river and overflowed by the river at recurrence interval of about 2 years or less. Erosion, sediment transport, and bar building by deposition are most active at discharges near bankfull. The effectiveness of higher flows, called over bank or flood flows, does not increase proportionally to their volume above bankfull in a stable stream, because overflow into the floodplain distributes the energy of the stream over a greater area. See also channel-forming and effective discharge.

**Baseflow:** Streamflow coming from groundwater seepage into a stream or river. Groundwater flows underground until the water table intersects the land surface and the flowing water becomes surface water in the form of springs, streams/ rivers, lakes and wetlands. Baseflow is the continual contribution of groundwater to rivers and is an important source of flow between rainstorms.

**Best Management Practices (BMP):** Structural, nonstructural, and managerial techniques recognized to be the most effective and practical means to reduce surface water and groundwater contamination while still allowing the productive use of resources.

**Brackish:** Mixed fresh and salt water.

## C

**Capillary water:** Just above the water table, in the aeration zone, is capillary water that moves upward from the water table by capillary action. This water can move slowly and in any direction. While most plants rely upon moisture from precipitation that is present in the unsaturated zone, their roots may also tap into capillary water or into the underlying saturated zone.

**Channel-forming Discharge** - a theoretical discharge which would result in a channel morphology close to the existing channel. See also effective and bankfull discharge.

**Collection site:** A stream, lake, reservoir, or other body of water fed by water drained from a watershed.

**Condensation:** The process in the hydrologic cycle by which a vapor becomes a liquid; the opposite of evaporation.

**Cone of depression:** The zone around a well in an unconfined aquifer that is normally saturated, but becomes unsaturated as a well is pumped, leaving an area where the water table dips down to form a cone shape. The shape of the cone is influenced by porosity and the water yield or pumping rate of the well. The land surface overlying the cone of depression is referred to as the area of influence.

**Confined aquifer:** (also known as artesian or pressure aquifers) exist where the groundwater is bounded between layers of impermeable substances like clay or dense rock. When tapped by a well, water in confined aquifers is forced up, sometimes above the soil surface. This is how a flowing artesian well is formed.

**Confining layer:** Geologic material with little or no permeability or hydraulic conductivity. Water does not pass through this layer or the rate of movement is extremely slow.

**Conservation:** The use of water-saving methods to reduce the amount of water needed for homes, lawns, farming, and industry, and thus increasing water supplies for optimum long-term economic and social benefits.

**Consolidated rock:** Tightly bound geologic formation composed of sandstone, limestone, granite, or other rock.

**Consumptive use:** The use of a resource that reduces the supply (removing water from a source like a river, lake or aquifer without returning an equal amount). Examples include the intake of water by plants, humans, and other animals and the incorporation of water into the products of industrial or food processing.

**Contaminant:** Any substance that when added to water (or another substance) makes it impure and unfit for consumption or an intended use.

**Critical Areas** - the geographic portions of the watershed contributing the majority of the pollutants and having significant impacts on the waterbody.

**Critical Depth** - depth of water for which specific energy is a minimum.

**Curve Number** - see Runoff Curve Number.

## D

**Darcy's Law:** Groundwater movement equation developed by Henry Darcy in the mid-1800's.

**Depletion:** The loss of water from surface water reservoirs or groundwater aquifers at a rate greater than that of recharge.

**Design Flow** - projected flow through a watercourse which will recur with a stated frequency. The projected flow for a given frequency is calculated using statistical analysis of peak flow data or using hydrologic analysis techniques.

**Detention** - practices which store stormwater for some period of time before releasing it to a surface waterbody. See also retention.

**Dimensionless Hydrograph** - a general hydrograph developed from many unit hydrographs, used in the Soil Conservation Service method.

**Diffusion:** The movement of a substance from an area of high concentration to an area of low concentration.

**Direct Runoff Hydrograph** - graph of direct runoff (rainfall minus losses) versus time.

**Discharge:** An outflow of water from a stream, pipe, groundwater aquifer, or watershed; the opposite of recharge.

**Discharge area:** The area or zone where groundwater emerges from the aquifer. The outflow may be into a stream, lake, spring, wetland, etc.

**Drainage Divide** - boundary that separates subbasin areas according to direction of runoff.



**Drawdown:** A lowering of the groundwater level caused by pumping.

**Drought:** An extended period with little or no precipitation; often affects crop production and availability of water supplies.

## E

**Effective Discharge** - the calculated measure of channel forming discharge. This calculation requires long-term water and sediment measurements, although modeling results are sometimes substituted. See also channel-forming and bankfull discharge.

**Ephemeral Stream** - a stream that flows only during or immediately after periods of precipitation. See also intermittent and perennial streams.

**Erosion:** The wearing down or washing away of the soil and land surface by the action of water, wind, or ice.

**Evaporation:** The conversion of a liquid (water) into a vapor (a gaseous state) usually through the application of heat energy during the hydrologic cycle; the opposite of condensation.

**Evapotranspiration:** The loss water from the soil through both evaporation and transpiration from plants.

**Filtering:** The soil's ability to attenuate substances by retaining chemicals or dissolved substances on the soil particle surface, transforming chemicals through microbial biological processing, retarding movement, and capturing solid particles.

## F

**Field Capacity** - the amount of water held in soil after gravitational water is drained.

**First Flush** - the first part of a rainstorm that washes off the majority of pollutants from a site. The concept of first flush treatment applies only to a single site, even if just a few acres, because of timing of the runoff. Runoff from multiple or large sites may exhibit elevated pollutant concentrations longer because the first flush runoff from some portions of the drainage area will take longer to reach the outlet.

**Flashiness** - has no set definition but is associated with the rate of change of flow. Flashy streams have more rapid flow changes.

**Flood Hazard Zone** - area that will flood with a given probability.

**Flow rate:** The time required for a volume of groundwater to move between points. Typically groundwater moves very slowly—sometimes as little as inches per year.

**Flux** - the volume of fluid crossing a unit cross-sectional surface area per unit time.

**Fresh water:** Water with less than 0.5 parts per thousand dissolved salts.

## G

**Gaining stream:** A stream in which groundwater discharges contribute significantly to the streamflow volume. The same stream could be both a gaining stream and a losing stream, depending on the conditions.

**Gas (gaseous):** See vapor.

**Gray water:** Domestic wastewater composed of wash water from household sinks, tubs, and washers.

**Groundwater:** Water found in the spaces between soil particles and cracks in rocks underground (located in the saturation zone). Groundwater is a natural resource that is used for drinking, recreation, industry, and growing crops.

**Groundwater basin:** The underground area from which groundwater drains. The basins could be separated by geologic or hydrologic boundaries.

**Groundwater divide:** The boundary between two adjacent groundwater basins, which is represented by a high point in the water table.

**Groundwater under the direct influence (UDI) of surface water:** A groundwater source located close enough to nearby surface water, such as a river or lake, to receive direct surface water recharge. Since a portion of the groundwater source's recharge is from surface water, the groundwater is at risk of contamination from pathogens such as *Giardia lamblia* and viruses, which are not normally found in groundwater.

## H

**Headwater Stream** - the system of wetlands, swales, and small channels that mark the beginnings of most watersheds.

**Hydrogeology:** The study of the interrelationships of geologic materials and processes with water, especially groundwater.

**Hydrologic Analysis** - an evaluation of the relationship between stream flow and the various components of the hydrologic cycle. The study can be as simple as determining the watershed size and average stream flow, or as complicated as developing a computer model to determine the relationship between peak flows and watershed characteristics, such as land use, soil type, slope, rainfall amounts, detention areas, and watershed size.

**Hydrograph** - graph of discharge versus time.

**Hydrologic cycle:** (also known as the water cycle) The paths water takes through its various states--vapor, liquid, solid--as it moves throughout the oceans, atmosphere, groundwater, streams, etc.

**Hydrology** - the occurrence, distribution, and movement of water both on and under the earth's surface. It can be described as the study of the hydrologic cycle.

**Hyetograph** - graph of rainfall intensity versus time.

I

**Impermeable layer:** A layer of material (such as clay) in an aquifer through which water does not pass.

**Impervious** - a surface through which little or no water will move. Impervious areas include paved parking lots and roof tops.

**Induced recharge:** The recharge to an aquifer that occurs when a pumping well creates a cone of depression that lowers an adjacent water table below the level of a stream or lake, causing the stream or lake to lose water to the adjacent groundwater aquifer.

**Infiltration:** Flow of water from the land surface into the subsurface.

**Infiltration Capacity** - rate at which water can enter soil with excess water on the surface.

**Infiltration rate:** The quantity of water that enters the soil surface in a specified time interval. Often expressed in volume of water per unit of soil surface area per unit of time.

**Injection well:** A well constructed for the purpose of injecting treated water, often wastewater, directly into the ground. Water is generally forced (pumped) into the well for dispersal or storage into a designated aquifer. Injection wells are generally drilled into aquifers that are not used as a drinking water source, unused aquifers, or below freshwater levels.

**Integrated management:** Any combination of physical, technical, administrative, and legal practices relating to surface water and groundwater in a manner designed to increase combined benefits or achieve a more equitable apportionment of benefits from both sources. Also referred to as conjunctive use.

**Interflow:** Water that travels laterally or horizontally through the aeration zone during or immediately after a precipitation event and discharges into a stream or other body of water.

**Intermittent Stream** - a stream that flows only during certain times of the year. Seasonal flow in an intermittent stream usually lasts longer than 30 days per year. See also ephemeral and perennial streams.

**Irrigation:** The controlled application of water to cropland, hay fields, and/or pasture to supplement that supplied by nature.

**Invert** - bottom of a channel or pipe.

**J**

**K**

**Karst:** A geologic formation of irregular limestone deposits with sinks, underground streams, and caverns.

**Knickpoint** - a point of abrupt change in bed slope. If the streambed is made of erodible material, the Knickpoint, or downcut, may migrate upstream along the channel and have undesirable effects, such as undermining bridge piers and other manmade structures.

**L**

**Lag Time** - time from the center of mass of the rainfall to the peak of the hydrograph.

**Leachate:** Liquids that have percolated through a soil and that carry substances in solution or suspension.

**Leaching:** The process by which soluble materials in the soil, such as salts, nutrients, pesticide chemicals, or contaminants, are washed into a lower layer of soil or are dissolved and carried away by water.

**Liquid:** The part of the hydrologic cycle in which molecules move freely among themselves but do not separate like those in a vapor/gaseous state.

**Losing stream:** A stream that is losing water to (or recharging) the groundwater system. The same stream could be both a gaining stream and a losing stream, depending on the conditions.

**Losses** - Rainfall that does not runoff, i.e. rainfall that infiltrates into the ground or is held in ponds or on leaves, etc.

**Low Flow** - minimum flow through a watercourse which will recur with a stated frequency. The minimum flow for a given frequency may be based on measured data, calculated using statistical analysis of low flow data, or calculated using hydrologic analysis techniques. Projected low flows are used to evaluate the impact of discharges on water quality. They are, for example, used in the calculation of industrial discharge permit requirements.

**M**

**Maximum contaminant level (MCL):** Designation given by the U.S. Environmental Protection Agency (EPA) to drinking water standards promulgated under the Safe Drinking Water Act. A MCL is the greatest amount of a contaminant allowed in drinking water without causing a risk to human health.

**Mining:** See overwithdrawal

**Monitoring well:** A non-pumping well, generally of small diameter, that is used to measure the elevation of a water table or water quality. A piezometer, which is open only at the top and bottom of its casing, is one type of monitoring well.

**Morphology** - the study of the form and structure of a river, stream, or drain.

**Municipal water system:** A network of pipes, pumps, and storage and treatment facilities designed to deliver potable water to homes, schools, businesses, and other users in a City\or town and to remove and treat waste materials.

## N

**Nonpoint source (NPS) pollution:** Pollution discharged over a wide land area, not from one specific location. These are forms of diffuse pollution caused by sediment, nutrients, organic and toxic substances originating from land use activities which are carried to lakes and streams by surface runoff. Nonpoint source pollution is contamination that occurs when rainwater, snowmelt, or irrigation washes off plowed fields, City\streets, or suburban backyards. As this runoff moves across the land surface, it picks up soil particles and pollutants, such as nutrients and pesticides.

## O

**Overland Flow** - see Runoff.

**Overwithdrawal:** Withdrawal of groundwater over a period of time that exceeds the recharge rate of the supply aquifer. Also referred to as overdraft or mining the aquifer.

## P

**Parallel flow paths:** Layers of groundwater flow that do not mix with other flow layers because groundwater movement is too slow to create sufficient turbulence to cause mixing to occur. This becomes an important factor in the location and movement of contaminants that enter the groundwater.

**Peak Flow** - maximum flow through a watercourse which will recur with a stated frequency. The maximum flow for a given frequency may be based on measured data, calculated using statistical analysis of peak flow data, or calculated using hydrologic analysis techniques. Projected peak flows are used in the design of culverts, bridges, and dam spillways.

**Perched aquifer:** Localized zone of saturation above the main water table created by an underlying layer of impermeable material.

**Perennial Stream** - a stream that flows continuously during both wet and dry times. See also ephemeral and intermittent streams.

**Percolation:** (1) The movement of water through the openings in rock or soil. (2) The entrance of a portion of the streamflow into the channel materials to contribute to groundwater replenishment.

**Permeable/Permeability:** Capable of transmitting water (porous rock, sediment, or soil); the rate at which water moves through rocks or soil.

**Permeable layer:** A layer of porous material (rock, soil, unconsolidated sediment); in an aquifer, the layer through which water freely passes as it moves through the ground.

**Plume:** In groundwater a plume is an underground pattern of contaminant concentrations created by the movement of groundwater beneath a contaminant source. Contaminants spread mostly laterally in the direction of groundwater movement. The source site has the highest concentration, and the concentration decreases away from the source.

**Point source pollution:** Pollutants discharged from any identifiable point, including pipes, ditches, channels, sewers, tunnels, and containers of various types.

**Pollution:** An alteration in the character or quality of the environment, or any of its components, that renders it less suited for certain uses. The alteration of the physical, chemical, or biological properties of water by the introduction of any substance that renders the water harmful to use.

**Pore space:** Openings between geologic material found underground. Also referred to as void space or interstices.

**Porosity:** The ratio of the volume of void or air spaces in a rock or sediment to the total volume of the rock or sediment. The capacity of rock or soil to hold water varies with the material. For example, saturated sand contains about 20% water; gravel, 25%; and clay, 48%.

**Potable water:** Water of a quality suitable for drinking.

**Potentiometric surface:** The potential level to which water will rise above the water level in an aquifer in a well that penetrates a confined aquifer; if the potential level is higher than the land surface, the well will overflow. See artesian well and confined aquifer.

**Precipitation:** The part of the hydrologic cycle when water falls, in a liquid or solid state, from the atmosphere to Earth (rain, snow, sleet).

**Q**

**R**

**Rating Curve** - relationship between depth and amount of flow in a channel.

**Recharge:** Water added to an aquifer. For example: when rainwater seeps into the ground. Recharge may occur artificially through injection wells or by spreading water over groundwater reservoirs.

**Recharge rate:** The quantity of water per unit of time that replenishes or refills an aquifer.

**Recharge zone or area:** An area where permeable soil or rock allows water to seep into the ground to replenish an aquifer.

**Recession Curve** - portion of the hydrograph where runoff is from base flow.

**Reclaimed wastewater:** Treated wastewater that can be used for beneficial purposes, such as irrigating certain plants.

**Recycled water:** Water that is used more than one time before it passes back into the natural hydrologic system.

**Remediation:** Containment, treatment or removal of contaminated groundwater. May also include containment, treatment or removal of contaminated soil above the water table.

**Residence time:** Period of time that groundwater remains in an aquifer.

**Retention** - practices which capture stormwater and release it slowly through infiltration into the ground. See also detention.

**Return flow:** (1) That part of a diverted flow that is not consumptively used and returned to its original source or another body of water. (2) Irrigation water that is applied to an area and which is not consumed in evaporation or transpiration and returns to a surface stream or aquifer.

**Ridge lines:** Points of higher ground that separate two adjacent streams or watersheds; also known as divides.

**Riparian** - pertaining to the bank of a river, pond, or small lake.

**Runoff:** Precipitation that flows over land to surface streams, rivers, and lakes.

**Runoff Coefficient** - ratio of runoff to precipitation.

**Runoff Curve Number** - parameter developed by the Natural Resources Conservation Service (NRCS) that accounts for soil type and land use.

## S

**Safe yield:** The annual amount of water that can be taken from a source of supply over a period of years without depleting that source beyond its ability to be replenished naturally in "wet years."

**Salinization:** The condition in which the salt content of soil accumulates over time to above normal levels; occurs in some parts of the world where water containing high salt concentration evaporates from fields irrigated with standing water.

**Salt marsh:** A low coastal grassland frequently inundated by the tide.

**Salt water:** Water that contains a relatively high percentage (over 0.5 parts per thousand) of salt minerals.

**Salt water intrusion:** Process by which an aquifer is overdrafted creating a flow imbalance within an area that results in salt water encroaching into fresh water supply.

**Saturated thickness:** Total water-bearing thickness of an aquifer.

**Saturated Zone** - (1) those parts of the earth's crust in which all voids are filled with water under pressure greater than atmospheric; (2) that part of the earth's crust beneath the regional water table in which all voids, large and small, are filled with water under pressure greater than atmospheric; (3) that part of the earth's crust beneath the regional water table in which all voids, large and small, are ideally filled with water under pressure greater than atmospheric.

**Scarp** - the sloped bank of a stream channel.

**Sediment** - soil fragmental material that originates from weathering of rocks and is transported or deposited by air, water, or ice.

**Seepage:** (1) The slow movement of water into or out of a body of surface or subsurface water. (2) The loss of water by infiltration into the soil from a canal, ditch, lateral, watercourse, reservoir, storage facility, or other body of water, or from a field.

**Septic system:** Used to treat household sewage and wastewater by allowing the solids to decompose and settle in a tank, then letting the liquid be absorbed by the soil in a drainage field. Septic systems are used when a sewer line is not available to carry wastes to a sewage treatment plant. Also called an onsite wastewater treatment system.

**Simulation Model** - model describing the reaction of a watershed to a storm using numerous equations.

**Sinuosity** - the ratio of stream length between two points divided by the valley length between the same two points.



**Soil** - unconsolidated earthy materials which are capable of supporting plants. The lower limit is normally the lower limit of biological activity, which generally coincides with the common rooting of native perennial plants.

**Soil moisture:** Water contained in the aeration or unsaturated zone.

**Soil Moisture Storage** - Volume of water held in the soil.

**Sole source aquifer:** An aquifer that supplies 50% or more of the drinking water of an area.

**Source water assessment:** A process in which the land area that impacts a public drinking water source is delineated, possible sources of contaminants that could impact that drinking water source are identified, and a determination of the likelihood that the contaminants will reach the drinking water source is made. The federal Safe Drinking Water Act requires states to provide each public water system with a source water assessment. Public water systems are then required to make the assessments available to the public. A community may verify, refine or expand the list of potential contaminants. See Wellhead Protection.

**Wellhead Protection:** Voluntary action taken to prevent the pollution of drinking water sources, including groundwater, lakes, rivers, and streams. Wellhead Protection is developing and implementing a plan to manage land uses and potential contaminants. To be effective, Wellhead Protection should be directed to major threats to the drinking water source identified in the source water assessment. As part of the Wellhead Protection plan, a contingency plan for use in the event of an emergency is developed. Wellhead Protection for groundwater is also called wellhead protection. See source water assessment.

**Spring:** The emergence of groundwater at the land surface, usually at a clearly defined point; it may flow strongly or just ooze or seep out.

**Static water level:** (1) Elevation or level of the water table in a well when the pump is not operating. (2) The level or elevation to which water would rise in a tube connected to an artesian aquifer or basin in a conduit under pressure.

**Stochastic** - model that contains a random component.

**Storage Delay Constant** - parameter that accounts for lagging of the peak flow through a channel segment.

**Storage-Discharge Relation** - values that relate storage in the system to outflow from the system.

**Storm drain:** Constructed opening in a road system through which runoff from the road surface flows into an underground system.

**Stratum, pl. strata:** A layer within the earth's crust that generally consists of the same kinds of soils or rock material.

**Stream Corridor** - generally consists of the stream channel, floodplain, and transitional upland fringe.

**Subbasins** - hydrologic divisions of a watershed that are relatively homogenous.

**Sublimation:** The transition of a substance from the solid phase directly to the vapor phase, or vice versa, without passing through an intermediate liquid phase.

**Subsidence:** A depression of the land surface as a result of groundwater being pumped. Cracks and fissures can appear in the land. Subsidence is virtually an irreversible process.

**Sustainable yield:** See safe yield.

**Substrate:** A layer of material beneath the surface soil.

**Surface water:** Water above the surface of the land, including lakes, rivers, streams, ponds, floodwater, and runoff.

**Synthetic Design Storm** - rainfall hyetograph obtained through statistical means.

**Synthetic Unit Hydrograph** - unit hydrograph for ungaged basins based on theoretical or empirical methods

## T

**Temporary wetland:** A type of wetland in which water is present for only part of the year, usually during wet or rainy seasons; also known as vernal pools.

**Thalweg** - the "channel within the channel" that carries water during low-flow conditions.

**Thermal spring:** Heated groundwater that naturally flows to the land surface.

**Time of Concentration** - time at which outflow from a basin is equal to inflow or time of equilibrium.

**Transmissivity:** A measure of the capability of the entire thickness of an aquifer to transmit water. Also known as coefficient of transmissivity.

**Transpiration:** The process by which water absorbed by plants (usually through the roots) is evaporated into the atmosphere from the plant surface (principally from the leaves).

**Tributary** - a river or stream that flows into a larger river or stream.

**Turbidity:** A cloudy condition in water due to suspended silt or organic matter.

## U

**Unconfined aquifers:** An aquifer in which the water table is at or near atmosphere pressure and is the upper boundary of the aquifer. Because the aquifer is not under pressure the water level in a well is the same as the water table outside the well.

**Unconsolidated rock:** Loosely bound geologic formation composed of sands and gravel.

**Unit Hydrograph** - graph of runoff versus time produced by a unit rainfall over a given duration.

**Unsaturated Zone** - the zone between the land surface and the water table which may include the capillary fringe. Water in this zone is generally under less than atmospheric pressure, and some of the voids may contain air or other gases at atmospheric pressure. Beneath flooded areas or in perched water bodies, the water pressure locally may be greater than atmospheric.

## V

**Vapor:** The state of water in the hydrologic cycle in which individual molecules are highly energized and move about freely; also known as gas/gaseous.

## W

**Wastewater:** Water that contains unwanted materials from homes, businesses, and industries; a mixture of water and dissolved or suspended substances.

**Wastewater treatment:** Any of the mechanical or chemical processes used to modify the quality of wastewater in order to make it more compatible or acceptable to humans and the environment.

**Water (H<sub>2</sub>O):** An odorless, tasteless, colorless liquid made up of a combination of hydrogen and oxygen. Water forms streams, lakes, and seas, and is a major constituent of all living matter.

**Water-bearing rocks:** Several types of rocks can hold water, including: sedimentary deposits (sand and gravel), channels in carbonate rocks (limestone), lava tubes or cooling fractures in igneous rocks, and fractures in hard rocks.

**Water cycle:** See hydrologic cycle.

**Water quality:** The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

**Water quality standards:** Recommended or enforceable maximum contaminant levels of chemicals or materials (such as chlorobenzene, nitrate, iron, arsenic) in water. These levels are established for water used by municipalities, industries, agriculture, and recreationists.

**Watershed:** The land area from which surface runoff drains into a stream, channel, lake, reservoir, or other body of water; also called a drainage basin.

**Watershed Delineation:** determination of watershed boundaries. These boundaries are determined by reviewing USGS quadrangle maps. Surface runoff from precipitation falling anywhere within these boundaries will flow to the water body.

**Water Surface Profile** - plot of the depth of water in a channel along the length of the channel.

**Water Table** - the surface of a groundwater body at which the water pressure equals atmospheric pressure. Earth material below the groundwater table is saturated with water.

**Water treatment plants:** Facilities that treat water to remove contaminants so that it can be safely used.

**Well:** A bored, drilled or driven shaft, or a dug hole whose depth is greater than the largest surface dimension and whose purpose is to reach underground water supplies to inject, extract or monitor water.

**Well closure:** The process of sealing a well that is no longer being used to prevent groundwater contamination and harm to people and animals.

**Well field:** An area in which productive wells are drilled.

**Well siting:** Location of a well placed to best protect water quality, access adequate water quantity, and allow for inspection and maintenance of the well.

**Wellhead protection area:** A protected surface and subsurface zone surrounding a well or well field supplying a public water system to keep contaminants from reaching the well water.

**Wetlands:** Lands where water saturation is the dominant factor in determining the nature of soil development and the types of plant and animal communities. Other common names for wetlands are sloughs, ponds, and marshes.

**Withdrawal:** Water removed from a surface or groundwater source for use.

**X**

**Xeriscaping:** An environmentally friendly form of landscaping that uses a variety of indigenous and drought-tolerant plants, shrubs, and ground cover.

## Y

**Yield** - peak flow divided by drainage area

## Z

# ***GUIDE TO SOURCE WATER ACRONYMS***

## **1.1 Chemical Abbreviations**

2,4-D	2,4-Dichlorophenoxyacetic acid
2,4,5-T	2,4,5-Trichlorophenoxyacetic acid
BOD	Biochemical Oxygen Demand
BEHP	Bis (2-ethylhexyl)phthalate
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
C-46	Hexachlorobutadiene
C-56	Hexachlorocyclopentadiene
C-58	Octachlorocyclopentane
C-66	Hexachlorobenzene
CN	Cyanide
Carbon Tet	Carbon tetrachloride
DCA	Dichloroethane
DCB	Dichlorobenzene
DCE	Dichloroethylene
DCP	Dichloropropane
DCPA	Dimethyl 2,3,5,6, tetrachloroterephthalate
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DMA	Dimethylaniline
Hcl	Hydrochloric acid
MEK	Methyl ethyl ketone
MIBK	Methyl isobutyl ketone
MOCA, MBOC	4,4'-methylene(bis)2-chloroaniline
MTBE	Methyl tertiary butyl ether
OCDD	Octachlorodibenzodioxin
PAH	Polynuclear Aromatic Hydrocarbons
PBB	Polybrominated biphenyl
PCB	Polychlorinated biphenyl
PCE	Perchloroethylene, Tetrachloroethylene
PCH	Polychlorinated hydrocarbons
PCB	Pentachlorophenol
PERC	Perchloroethylene, Tetrachloroethylene
TCA	Trichloroethane
TCDD	Tetrachlorodibenzodioxin
TCDF	Tetrachlorodibenzofuran

TCE	Trichloroethylene
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds

**1.2 Metal Abbreviations**

As	Arsenic
Ba	Barium
Cd	Cadmium
Cr	Chromium
Cu	Copper
Pb	Lead
Hg	Mercury
Ni	Nickel
Se	Selenium
Zn	Zinc

**1.3 Acronyms/Abbreviations/Descriptions**

F	Indicates site is owned by the Federal Government
L	Indicates site is owned by Local Government
S	Indicates site is owned by the State Government
DEQ	Department of Environmental Quality
MDEQ	Department of Environmental Quality
ERD	Environmental Response Division, DEQ
GSD	Geological Survey Division, DEQ
Status	Any of the seven classes in which sites are required to be placed by the Act. A category shall be one of the following: <ol style="list-style-type: none"> <li>1. No Action Taken</li> <li>2. Evaluation/Interim Response - Fund</li> <li>3. Evaluation/Interim Response - PRP/Other</li> <li>4. Final Cleanup - Fund</li> <li>5. Final Cleanup - PRP/Other</li> <li>6. Operation and Maintenance - Fund</li> <li>7. Operation and Maintenance - PRP/Other</li> </ol>
Location Code	An alphanumeric code by which the location may be determined from maps that reference the township and range coordinate system. The location code consists of a county number, township, range, section number, quarter section, and quarter-quarter section. Location codes do not specify areas smaller than 40-acres parcel. Consequently, the codes are approximate locations only and not all property within the coded area is necessarily a site of environmental contamination.

OLPS	Office of Litigation and Program Services, DNR
SAM	Site Assessment Model
SAM Score	Numerical risk assessment score determined by application of Site Assessment Model
SWQD	Surface Water Quality Division, DEQ
WMD	Waste Management Division, DEQ
USTD	Underground Storage Tank Division, DEQ