



Michigan Department of Environment, Great Lakes, and Energy
Remediation and Redevelopment Division

2018 Pilot Project

Statewide Assessment of Restrictive Covenants

Evaluating the effectiveness of restrictive covenants at
41 state-funded projects across Michigan



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Background

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) is aware of over 3,200 restrictive covenants (RCs) recorded on property deeds in Michigan as part of remedial or corrective actions implemented under Michigan's environmental cleanup programs. Currently, Michigan's environmental cleanup statutes require long-term monitoring and reporting program for land or resource use restrictions in limited circumstances. To explore the development of a regular and routine long-term monitoring program, EGLE's Remediation and Redevelopment Division (RRD), developed a process and performed a review of the land or resource use restrictions at 90 randomly selected sites (also referred to as "properties" in this document) across the state in 2017. The results of this study were published in the 2017 Pilot Project Statewide Assessment of Restrictive Covenants. Overall, the majority of sites were in compliance with the restrictions set forth in the RCs.

Project Goal

The RRD has expended state funds from a variety of bond and other appropriated sources for remedial activities at hundreds of sites throughout the state. These state-funded projects included grant and loan projects to incentivize redevelopment, state cleanups to address acute risks, including removal of abandoned underground storage tanks and matching funds for Superfund site cleanups. Therefore, the 2018 Project Study sought to assess compliance with RCs in place at properties where state funds were expended for remedial or corrective actions.

Methodology

The project team conducted "drive-by" reviews for the 2018 Project Study, in contrast to a systematic procedure designed for RRD district project managers to conduct RC reviews in 2017. As part of developing the building blocks for a long-term monitoring program, the project team is evaluating different levels of effort, in order to utilize time efficiently while still achieving the goal of evaluating and assuring compliance with land or resource use restrictions.

Results

As the 2018 Project Study report describes, compliance with the restrictions were categorized by visible conditions at the sites. Site conditions fell into three categories:

1. No evident compliance issues;
2. Noticeable conditions needing attention; and
3. Substantial non-compliance

Of the 41 sites selected and reviewed for compliance, 80.5 percent of sites had no evident compliance issues at the time of the reviews. Overall, results indicated that no sites were in substantial non-compliance with the RC and no immediate exposure risks were observed.

Recommendations

Although the results of the 2017 and 2018 Pilot Projects demonstrated overall compliance with the reviewed RCs, the project team recognizes that the number of RCs assessed in both projects is not adequate to conclude overall compliance with the approximately 3,200 RCs recorded across Michigan. The Project Study identifies the need for and components of a long-term monitoring program of RCs. As an example, the team recommends that completed RC compliance evaluation checklists are placed on Environmental Mapper. In addition, in order to develop a comprehensive land or resource use restriction long-term monitoring program, the project team recommends that future projects develop assessment tools for reviewing compliance with other land or resource use restrictions, such as local ordinances that limit or prohibit the use of groundwater that were previously approved by EGLE. A pilot project in 2019 is planned to develop tools and assess compliance with groundwater use ordinances.

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Acknowledgements

The 2018 project team consisted of the two primary staff members from the Michigan Department of Environment, Great Lakes and Energy (EGLE), Remediation and Redevelopment Division (RRD), Ron Smedley, Brownfield Coordinator in the Brownfield Assessment and Redevelopment Section and Kevin Schrems, No Further Action Specialist in the Compliance and Enforcement Section. Mr. Smedley and Mr. Schrems would like to thank EGLE's Environmental Education Coordinator, Mr. Tom Occhipinti, for providing interns including Nicole Diroff, Joshua Hatfield, Matthew Miller, Matthew Belanger, and Will DeLany, who worked diligently to gather background site information and develop the site fact sheets. Ms. Jodi Potter, RRD Compliance and Enforcement Section Secretary, graciously edited the text and formatted the final report.

Background

Michigan's primary legislative authorities for the state cleanup programs are Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tanks) of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended. Michigan's cleanup programs authorize EGLE to set risk based cleanup standards by considering how the contaminated land will be used in the future.

When remedial actions at a site of contamination do not satisfy the unrestricted residential cleanup criteria, land or resource use restrictions (LRURs) may be used to prevent exposure to environmental contamination that is left in-place at a property. There are various types of LRURs used under Part 201 and Part 213, but the most common are restrictive covenants (RCs). RCs are legal instruments tied to a contaminated property's chain of title that impose land or resource use restrictions on current and future owners of the property.



Cone Drive facility - Traverse City, Michigan (2018)

RCs serve three purposes:

- 1) They inform prospective owners or tenants of the environmental conditions of the property;
- 2) They ensure long-term compliance with use restrictions that are necessary to prevent unacceptable exposure to environmental contamination and;
- 3) They maintain the integrity of the remedy over time.

Multiple sources of information are available regarding RCs related to a property, a neighbor's property, or other property in the community. The Register of Deeds office in each county holds all documents, including RCs, recorded on particular properties. The Michigan Environmental Mapper (www.mcqi.state.mi.us/environmentalmapper) is a tool that allows the public to view sites of contamination, including sites with underground storage tanks and properties with LRURs imposed on them. The user can display the sites based on search criteria by city, county, EGLE district, and Michigan legislative district. In addition, the user can view sites within a certain distance of a location, a land lot, or a stream segment. The results can be printed, with the map, or exported to an Excel spreadsheet.

EGLE is aware of over 3,200 RCs recorded on properties in Michigan as part of remedial or corrective actions implemented under Part 201 and Part 213. Approximately 200 RCs are recorded each year; therefore, the number of RCs will continue to climb as releases of environmental contamination are addressed.

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Under Part 201, a limited number of RCs are monitored through self-reporting inspections. Since 2010, parties seeking a No Further Action (NFA) approval under Part 201 are required to enter into a postclosure agreement with EGLE when the completion of remedial actions result in operation, maintenance, or monitoring (for example, an exposure barrier as indicated in the RC). The postclosure agreement sets for the requirements for long-term monitoring and self-reporting of compliance with the completed remedial actions. It should be noted that NFA submittals are voluntary, so not all completed remedies with RCs will be known to EGLE or monitored. In addition, postclosure agreements are not required for all remedies where a RC has been implemented (for example, a groundwater use restriction that prohibits the installation of wells for human consumption). Many RCs recorded pursuant to Part 201 prior to 2010 are not routinely monitored, unless uniquely required in prior administrative agreements or judicial orders. In addition, Part 213 does not contain a comparable NFA and postclosure agreement statutory provision, thus there is no requirement for long-term monitoring or self-reporting, unless written into an administrative agreement or judicial order.

For programmatic comparison, EGLE's Materials Management Division (MMD) has an established procedure for MMD staff to perform facility inspections (including any LRURs implemented as part of the approved corrective action) and document compliance at a minimum frequency of once every three years. To date, 107 RCs have been recorded as part of corrective actions at MMD facilities. In comparison to the number of RCs recorded at RRD sites of contamination, the universe of RCs being tracked and monitored by MMD staff appears manageable in comparison to the number of RCs recorded for RRD sites of environmental contamination.

2017 Pilot Project Overview

To explore the necessity of a long-term land or resource use restriction monitoring program of RCs under either Part 201 or Part 213, EGLE, RRD initiated a review of the LRURs at 90 randomly selected sites across the state in 2017. These reviews were conducted with the goal of enabling the RRD to determine which types of sites have better compliance rates, improve the long-term compliance with the land or resource use restrictions to protect the public health and environment, verify that subsequent owners and operators have been properly informed of the restrictions and provide an opportunity to educate owners and operators of properties with restrictions of how to best comply with their responsibilities. The outputs developed as part of the 2017 Pilot Project included:

1. A checklist to conduct RC reviews;
2. A systematic procedure for conducting the reviews;
3. Standardized reports on each site analyzed; and
4. A final report with suggestions for improving compliance to guide EGLE, RRD management in future efforts.

The results of the Pilot Project were published in the 2017 Pilot Project Statewide Assessment of Restrictive Covenants.

The 90 sites included a broad range of properties, reflecting a division of 71 percent Part 213 Sites and 29 percent Part 201 Facilities. Most of the properties with RCs were privately owned and had restrictions imposed by the owners/liable parties, with the goal of achieving closure of their releases. Approximately 85 percent of the properties were in substantial compliance with their restrictions.¹

In 2017, the project team looked at the number of property owners that had changed since the restrictions were placed, in order to determine if the new owners were aware of the restrictions and how those restrictions applied to the activities or operations at their properties. The findings indicated that where ownership of properties did not change, there was a higher rate (nearly 35 percent) of owner awareness of the restrictions and what they entailed than if the properties had changed ownership. For those properties where the use changed, or properties were redeveloped, those owners were less likely to understand their obligations or were not aware of the restrictions. Although the RCs are recorded on the property deed and should be disclosed during property transactions, routine monitoring of

¹ 2017 Pilot Project Statewide Assessment of Restrictive Covenants

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properties with land or resource use restrictions can increase awareness of environmental restrictions and emphasize transferring that knowledge to future owners.

2018 Project Focus

In fiscal year 2018, the RRD assessed RCs at properties that had received or are receiving state funds for remedial activities. The RRD and other divisions within EGLE have expended state funds from a variety of bond and other appropriated sources for remedial activities at over one thousand sites



Middleground Landfill - Bay City, Michigan (2018)

throughout the state. More information regarding these sites may be found in EGLE's annual Consolidated Reports, found at: https://www.michigan.gov/egle/0,9429,7-135-3311_4109_9846-89227--,00.html. Projects receiving state funds included state lead or liable party cleanups to address acute risks. The risk management activities included response activities under Part 201, removal of abandoned underground storage tanks (USTs), matching funds for Superfund site cleanups, and grant and loan projects to incentivize redevelopment. Other funding, such as the Municipal Landfill Cost-Share Program was used at the Middleground Landfill located in Bay City, receiving \$885,227 for closure activities.

Decisions taken to mitigate risks through the use of LRURs were made based upon site conditions at the time they were placed. EGLE expended funds generally to address acute risks first and may assist the property owner or developer with determining the appropriate LRUR needed to assure that conditions are in place to protect future users of these properties. As the state has invested funds to reduce risks at certain properties, it is essential for the state to have an established program in place to assure long-term compliance with RCs recorded at these funded properties, and to promote that redevelopment is feasible at properties with RCs. Both public and private entities have been involved with redevelopment of about 20 of the properties assessed in 2018.

Goals for the 2018 Project Study

The goals of this project are:

1. Determine compliance with RCs imposed at sites that have received state funding;
2. Assess the redevelopment potential of sites where RCs have been imposed; and
3. Identify examples where restrictions significantly impacted redevelopment opportunities.

Outputs for the 2018 Project Study

The outputs of this project are:

1. Standardized summary reports on each site analyzed;
2. A database of the sites analyzed, including site review information. This database will be utilized for future projects and site reviews;
3. This technical report and;
4. A set of success stories that identify historic property uses, cleanup activities, and how the imposition of RCs impacted redevelopment of those properties.

Outcomes for EGLE

The following long-term outcomes will help build a foundation for a LRUR compliance assistance and monitoring program:

1. The RRD will be able to better track compliance with LRURs, assuring protection for the public and environment from contamination by using the checklist and database.

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2. The RRD will be able to devise strategies to assist developers in understanding their due care obligations and the goals for a redevelopment project compared to removing or rescinding restrictions through remedial or other closure activities.
3. The RRD will be able to characterize the types of sites with existing RCs that may require additional data to assess the need for continued restrictions or revise existing restrictions, facilitating redevelopment while protecting human health and the environment.

Methodology

The project team determined that it would analyze properties that had recorded RCs as part of the remedy under Parts 201 and 213 and the Superfund program. Properties receiving state monies with RCs imposed as part of the remedy were sorted from the total list of LRURs imposed in Michigan. The list was further refined to those sites where a Baseline Environmental Assessment (BEA) was submitted to EGLE. The scopes of work conducted at these properties included UST removal, contaminated soil removal, demolition, groundwater treatment, monitoring, and other risk management activities, including fencing to limit access and capping. In the eight attached Site Summaries (see Attachment 2), the project team identified the scopes of work conducted, the amounts expended, and the types of risk management activities that were designed to protect the public for the long term.

Sources of data that were utilized included the Environmental Response Network Information Exchange (ERNIE), the Storage Tank Information Database (SID), and the Michigan Environmental Mapper, which contains the files of recorded LRURs. These state databases provided much of the historic background and framework for the site fact sheets. In addition to these state databases, the project team and interns utilized a variety of local and county databases, including geographic information systems and county treasurer's websites to provide parcel specific tax and ownership information.

Based on staff resources and available time, the team was able to complete site reviews of 41 sites in 20 counties across Michigan as shown in Attachment 1. Of those 41 sites:

- 35 sites had one or more recorded RCs;
- 3 sites had recorded Notices of Approved Environmental Remediation;
- 2 sites had *pending* RCs; and
- 1 site had a covenant not to sue recorded that included restrictions.

The team utilized on-line search functions such as Google, Bing, or Yahoo to conduct other research related to the sites, such as news stories or company information. The project team was not constrained in the types of information that they sought, provided it was relevant to the properties that had *pending* or *recorded* restrictions, and to adjoining properties for comparative analysis. While data in the SID is limited to USTs and LUST information, ERNIE varied in the quantity and quality of data due to the level of involvement by EGLE staff regarding a specific project or property. However, the project team found that some relatively high-expenditure state-funded or Superfund sites had missing or inadequate historical, remedial, and status information. The sites with narratives in ERNIE describing the exposure pathways and a history of the cleanup activities completed prior to the recording of the RCs assisted the team in understanding the restrictions and the current property conditions. In the absence of a full file review, this information is important when performing "drive-by" site reviews, especially if conducted by EGLE staff that are not the facility or site project manager.

Implementation

The project team primarily conducted "drive-by" reviews for the 2018 Project Study, in contrast to a systematic procedure using the "Review Guidance Memo" designed for RRD district project managers to conduct RC reviews. As part of developing the building blocks for a long-term monitoring program, the project team is evaluating different levels of effort, in order to utilize time efficiently while still achieving the goal of determining compliance with LRURs. When available, RRD district project managers and district enforcement coordinators accompanied the project team for site reviews. By consolidating the work, less variability was introduced in the process of conducting the reviews, however, the team benefited greatly from the historical knowledge and technical expertise of RRD

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district staff at the sites.

The site visits included visually discerning any discrepancies from what is described in the restriction that may have been evident, using the “Declaration of Restrictive Covenant Compliance Monitoring Checklist” as a guide. The project team developed a new database to enter and analyze data. The project team also oversaw the work of the five interns who assisted with developing the site information sheets and recording conditions during the site visits.

Reviews of site conditions began in March 2018 and continued through August 2018. The project team filled out the site information checklists and took pictures of the properties. The table below shows when site visits were completed. Due to time constraints, one site was reviewed using Google Earth street view photographs to test Google Earth’s capabilities in lieu of a “drive-by” review. Two site reviews in Allegan and Muskegon counties were completed by RRD Superfund project managers because of their unique knowledge of the site conditions. The project team believes that performing a remote review utilizing available web applications and public geographic information systems (GIS) technology in limited situations was valuable in reducing the time to travel to a site and allowing the project team to view historic site conditions.

Table 1. Site Review Visits

District	Date of Review	Counties	Site ID Numbers
Lansing	March 9, 2018	Eaton	23000007, 23000010
Southeast Michigan	March 23, 2018	Oakland, Wayne	63000348, 82000010, 82000048, 82000205, 82000208, 82001595
Lansing and Saginaw Bay	April 3, 2018	Shiawassee, Genesee, Bay, Saginaw	09000002, 09000004, 25000300, 73000406, 78000056
Upper Peninsula	April 5, 2018	Alger	02000046
Grand Rapids	April 17, 2018	Kent	41000031, 41000039, 41000051, 41000114, 41000119, 41000169, 41000202, 41000228
Kalamazoo	May 4, 2018	Berrien, Cass, Kalamazoo	11000320, 11000330, 14000017, 39000140
Cadillac	May 7, 2018	Grand Traverse, Wexford	28000057, 28000201, 83000036
Grand Rapids	June 16, 2018	Montcalm	59000003
Grand Rapids	June 18, 2018	Kent, Muskegon	41000072, 61000005, 61000039, 61000062, 61000063
Jackson	June 27, 2018	Jackson, Washtenaw	38000030, 81000534
Southeast Michigan	July 18, 2018	Oakland	63000392 (review performed via Google Earth)
Grand Rapids and Kalamazoo	July 20, 2018	Allegan, Muskegon	03000030, 61000051 (reviews performed by PMs)
Upper Peninsula	August 9, 2018	Marquette	52000041

Aggregate Site Data and Expenditures Analysis

The project team analyzed the data of the 41 sites that were originally determined to have restrictions filed/recorded or had restrictions proposed for managing long-term obligations. This data is shown in Attachment 3. State and federal match funding amounting to \$95,658,777 was spent at the 41 sites as identified by ERNIE financial data, as of September 2017. Generally, federal match sites received more funding. Site expenditures ranged from \$21,481,480 at Ott/Story/Cordova Chemical Company in Muskegon County to \$0 at the former Ford New Holland site in Oakland County, which was included in the review due to EGLE’s involvement in negotiating, rescinding, and facilitating placement of RCs at the site. Median expenditures were \$948,054 across the 41 sites.

General Land Uses/Redevelopment Status of Sites

In order to provide a framework for the project team's analysis, the sites were categorized into four general land use types and redevelopment status. These categories are:

1. Large parcels of land with limited or no redevelopment potential (usually landfill sites, sites with limited public access, and/or located in floodplains);
2. Vacant industrial or commercial land with the potential for redevelopment;
3. Industrial or commercial properties that have active businesses, but which have not been redeveloped (had existing businesses); and
4. Industrial and commercial land that was redeveloped subsequent to the restrictions being placed.

Categories of Compliance

Compliance with the restrictions were determined by visible conditions at the sites. The team noted any conditions that required attention by the landowners based upon what was evident from publicly accessible locations and from Google Earth street views and overhead imagery. The project team categorized the site conditions into three compliance classifications:

1. No evident compliance issues (NECI);
2. Noticeable conditions needing attention (NCNA) and;
3. Substantial non-compliance.

Overall, no sites appeared to be in substantial non-compliance with the RC. The tables below list the sites by land use/redevelopment status, the type of restrictions filed or pending, and the category/classification of compliance.

Landfill and Limited Development Opportunity Sites

The team reviewed seven sites in the Landfill or Limited Development Opportunity Sites (LF/LDO) category. Properties were categorized as LF/LDO if they had been used for landfills or unregulated dumps, an oil refinery, chemical manufacturers, and were otherwise unsuitable for redevelopment, such as floodplains, or had very limited access. As these sites were generally larger and had more complex remediation or risk reduction requirements, they had higher expenditures, totaling \$30,765,825 in state and federal funding with a median of \$1,583,176. Nearly \$17.65 million was spent at the Zephyr Oil site (61000063) in Muskegon County and about \$7.22 million at the National Plate Glass facility (73000406) in Saginaw County.

Some of the remedial activities conducted by EGLE were designed to limit the long-term risks to surrounding property owners. The restrictions in effect are generally to ensure that the remedies or controls stay in place and that land development is limited. Most of these sites also have groundwater use restrictions, which is understandable given their historic dumping activities, often uncontrolled and in areas with no liners. Volatilization to indoor air exposure risks from methane produced at landfills is often a primary concern. In some cases, the parcels surrounding the landfill sites have been developed, making risk management even more important. For example, the Kent District Library developed the land next to the landfill (41000039) as the new Kentwood Branch library, which opened in 2010². The city maintains a robust methane collection system at the property in order to prevent migration toward the new two-story 46,000-square foot building. The Sumpter-Satterlee Landfill site (82000048) is in a rural area of Wayne County, with residential homes located adjacent to and across the street from the property. The RC included unclear restrictions that limited the property to a site-specific use, without a description of what that use may be. There is no active redevelopment plan for this property, although there is no prohibition from doing so. In order to assure protection of health and the environment and to define the type of future redevelopment that could occur, the existing RC should be revised to describe the appropriate site-specific uses.

National Plate Glass in Saginaw is a 42-acre property which was a former automotive glass manufacturing facility, dismantled in the 1920s. The location of the property on the north bank of the

² The city raised their local property tax millage by .35 mills to help fund the building cost.

Tittabawassee River makes it technically land-locked. There is no immediate access to the property, which has remained open space. Adjoining property uses are agricultural, recreational, residential, commercial, and light industrial. The restrictions limit the potential use of the property by requiring all construction or agricultural use plans to be submitted to EGLE for approval.

Table 2. Landfill and Limited Development Opportunity Sites

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
09000004	Middleground Landfill, Bay City	\$885,227	RC	No evident issues
23000010	Parsons Chemical Works, Inc.	\$27,335	RC	
41000039	Kentwood Landfill	\$1,583,177	RC (modified)	
61000005	Bofors Nobel, Inc.	\$3,072,411	RC	
61000063	Zephyr Inc. - Naph Sol Refining	\$17,653,092	RC	
73000406	National Plate Glass	\$7,218,558	RC	No evident issues, lack of permanent markers
82000048	Satterlee Sumpter Township LF	\$326,025	RC	Noticeable conditions needing attention

Other Industrial or Commercial Sites

The remaining 34 sites were all either industrial or commercial properties with varying types of contamination, ranging from industrial pollutants to petroleum impacted sites such as gas stations. The project team determined that it would be appropriate to break down these properties into three categories based on their development status:

1. Industrial/Commercial Redeveloped (ICR) (20 sites)
2. Industrial/Commercial with Existing Business (ICEB) (5 sites)
3. Vacant Industrial/Commercial with Redevelopment Potential (VICRP) (9 sites)

As state funds were utilized to mitigate acute risks at the properties, including removing contaminated soil, groundwater treatment, demolition, and removing subsurface obstructions including buried tanks or barrels, or to create barriers to the public, the primary goal was not necessarily to facilitate redevelopment. Although in some cases, existing businesses remained at the properties, some were ultimately redeveloped in accordance with RCs that were placed as part of a remedy. Other sites that have not been redeveloped are generally in very depressed real estate markets and may have other obstacles, such as incompatible surrounding land uses, making them unsuitable for redevelopment.

Industrial/Commercial Land Uses that have been Redeveloped (ICR)

Properties were categorized as ICR if they had new uses after state-funded remedial activities took place regardless of when the restrictions were filed. The team conducted reviews of 20 sites in the ICR category. There were 17 sites which had been completely redeveloped or are partially redeveloped. There were BEAs filed for 12 of these sites, allowing new owners to purchase the sites without liability for previous releases. Four other sites are under settlement agreements as part of cleanup activities.

Three other sites that were determined to be partially redeveloped, all of which had BEAs associated with them, included in the reviews were:

1. Portions of the McCoy Creek Industrial Park (11000330) have been redeveloped with a new fitness center and a brewery/farmhouse³. As the restricted areas cover much larger portions of the historic Clark Equipment/Ingersoll-Rand manufacturing complex, these two parcels were more amenable to development. Other portions of the former complex are still awaiting development proposals, including for two multi-family apartments/condominiums to be built adjacent to the fitness center.
2. The former Michigan National Guard/Detroit Artillery Armory (63000348) in Oak Park has also been partially redeveloped. Federal Express (FedEx) developed a new 304,000 square-foot distribution facility that opened in October 2016. FedEx invested approximately \$25 million in the property and it employs 235 workers. The property had been split and the access for the 54-acre parcel (north half) of the property is on Greenfield Road.⁴ The southern portion, where the armory itself was located, is still vacant but has a very high potential for redevelopment.
3. The former Performance Paper⁵ (39000140) in Kalamazoo has been partially redeveloped by Kalamazoo County in 2018 with a new county health and community services office, repurposing the historic warehouse. Other portions of the property with the RC may be redeveloped in the future. An adjoining parcel, also part of the former paper complex, was also redeveloped with the Family Health Center in 2017. This building is a \$15 million, 50,000 square-foot building, serving patients with limited access to health care in the Kalamazoo area.



McCoy Pond Park located in the former McCoy Creek Industrial Park - Buchanan, Michigan (2018)

Table 3. Redeveloped Industrial/Commercial Land Uses

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
09000002	Amoco Former Bay City Terminal	\$2,869,424	RC	No evident issues
11000320	Aircraft Components	\$586,879	RC	
11000330	Buchanan-McCoy Creek Ind. Park	\$15,498	RC	Noticeable conditions needing attention
14000017	U.S. Aviex	\$2,715,537	RC	No evident issues
23000007	Johnson Iron Industries	\$992,837	RC	
28000201	Traverse City Iron Works	\$1,589,993	RC	Noticeable conditions needing attention
39000140	Performance Paper Inc.	\$4,340,562	RC, Easement	No evident issues

³ <http://www.lehmansfarmhouse.com/our-story.html>

⁴ https://www.theoaklandpress.com/news/nation-world-news/fedex-ground-hosts-grand-opening-for-facility-in-oak-park/article_f3e09114-5386-58ba-8b2a-989e5da9e3a7.html

⁵ https://www.michigan.gov/documents/deq/4_NFA_TC_Ducharme-Hatton_PaperMill_505429_7.pdf

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
41000031	H. Brown Co., Inc.	\$289,300	RC and Record of Decision	No evident issues
41000051	Organic Chemicals, Inc.	\$25,184	RC	No evident issues-see site evaluation
41000169	Kessler Property	\$243,977	RC	No evident issues
41000228	American Laundry (former)/Container Waste	\$1,970,396	RC	
52000041	Lake Shore, Inc - Marquette	\$455,055	RC	
61000062	Whitehall Leather	\$1,262,459	RC	Noticeable conditions needing attention
63000348	Detroit Artillery Armory	\$883,751	Notice of Approved Environmental Remediation (NAER)	No evident issues
63000392	Ford New Holland	\$0	RC	No evident issues
78000056	Magnetek	\$4,802,119	Covenant Not to Sue	No evident issues
81000534	Georgetown Cleaners	\$851,134	RC	No evident issues
82000205	Lower Ecorse Creek	\$141,567	RC	Noticeable conditions needing attention
82000208	General Oil Northville	\$986,975	RC	No evident issues
82001595	Marx Manufacturing Corp (former)	\$199,967	NAER	No evident issues

In only four instances, there were relatively minor compliance issues, such as spots of worn-down ground cover at the Lower Ecorse Creek and Buchanan-McCoy Creek sites, uncontained/uncovered soil/debris at the Whitehall Leather site, or slag coming up through the ground cover at the Traverse City Iron Works site. These compliance issues may or may not have been directly addressed in the LRURs, however, they could be easily mitigated by the property owners if directed. Predominantly, most redeveloped locations did not have any noticeable conditions, regardless of the type of LRUR.

Industrial/Commercial Land Use with Existing Businesses (ICEB) (not redevelopment sites)

Properties were categorized as ICEB if they were being utilized by an existing business when the restriction was filed, and which was either still in operation or was being utilized for a similar use as of the site review date. The state and federal expenditures at these five sites was \$2,698,931. Both Tendercare Munising (02000046) and AAR Cadillac Manufacturing (83000036) had BEAs conducted, while the Cone Drive Textron site (28000057) is under an Administrative Order. Dura Plating Corp (41000114) is being utilized by an industrial business. Pro-Met Plating (25000300) is a parking lot for the adjacent parcel, which had two BEAs conducted in 2015. Again, BEAs were utilized by both existing and adjoining property owners to limit their liability and promote reuse or continued use of the restricted properties.

Table 4. Existing Businesses

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
02000046	Tendercare Munising	\$297,002	RC	No evident issues
25000300	Pro-Met Plating	\$458,758	RC	
28000057	Cone Drive Textron	\$29,662	Notice of Migration	No evident issues
41000114	Dura Plating Corp (Former)	\$185	RC	No evident issues
83000036	AAR Cadillac Manufacturing	\$1,913,324	RC	

Vacant Industrial/Commercial Property with Redevelopment Potential (VICRP)

Properties were categorized as VICRP if they were vacant lots, had no active businesses, and/or had treatment buildings present which could be removed in the future. The state and federal expenditures at these nine sites totaled \$36,971,305. Some sites, such as Ott/Story/Cordova Chemical (61000051) and Peerless Plating (61000039), both in Muskegon County, have on-going treatment and monitoring. These cleanups are likely to continue, however the sites themselves may ultimately be redeveloped with revised restrictions. The former Crystal Refining Company (59000003) in Carson City is another such site where on-going groundwater treatment is taking place. The best redevelopment potential for this 12.5-acre former oil refinery might be for recreational or other passive uses because it is bordered by the city's cemetery, a park, and public services buildings. One outstanding aspect of the majority of these sites, is that they are currently fenced-off from surrounding properties, thereby limiting access and potential for trespass or vandalism.

*Peerless Plating Superfund Site - Muskegon, Michigan (2018)***Table 5. Vacant Property with Redevelopment Potential**

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
03000030	Rockwell International Corp.	\$948,054	Pending	No evident issues
38000030	Spring Arbor Wash-N-Dri	\$1,982,370	Restrictive covenant (RC)	No evident issues
41000072	Croff Salvage Yard	\$107,679	RC	Noticeable conditions needing attention
41000119	Spartan Chemical	\$1,162,899	RC	No evident issues
41000202	Hoff Industries (former)	\$78,643	RC	
59000003	Crystal Refinery	\$6,392,258	RC	

Site ID Number	Site Name	Amount of State/Federal Expenditures	Type of Restriction	Compliance with Restrictions
61000039	Peerless Plating	\$3,431,923	RC, Easement	No evident issues
61000051	Ott/Story/Cordova Chemical Co.	\$21,481,480	RC	Noticeable conditions needing attention
82000010	Cooper School Site	\$1,385,999	Pending	No evident issues

RC Compliance Results

Of the 41 sites that were reviewed for compliance, 80.5% had no evident compliance issues at the time of the review. There were eight sites that did have some noticeable conditions that needed attention. These conditions ranged from uncontrolled access, unsecured buildings, soil stockpiles, minor erosion, and potential direct contact issues for unexposed soil; however, no immediate exposure or significant exposure risks were identified.

As described in the Methodology section, the project team also evaluated the effectiveness of the level of RC compliance assessment through conducting a “drive-by” review. Even though the project team attempted to make every reasonable effort to determine site conditions, some properties were not accessed to evaluate building conditions or walk throughout the sites due to private operations or fencing. While immediately noticeable conditions can be observed from outside the property boundary, assessing full compliance with the RC also includes having the technical expertise to adequately understand the basis of the LRURs, and engage with the property owner or operator to educate or answer any questions related to the RC.

Based on the project team’s reviews, properties with active businesses had fewer conditions that required attention. Eight sites among the 11 sites with on-going remedial activities (state, federal, and privately funded) were fenced in. Older state-funded projects, other than landfill sites, tended to be redeveloped at higher rates than current or more recently funded projects. However, recently grant-funded sites such as Whitehall Leather (61000062) and Georgetown Cleaners (81000534) have active groundwater and vapor mitigation systems in place, which have allowed for mixed use and residential redevelopment to take place. In the future, developers should be educated regarding the general flexibility of restrictions, and what is necessary to comply with, modify, or rescind the restrictions. The influence of restrictions is only one factor of whether or not specific properties are redeveloped as several intrinsic, extrinsic, and other supporting factors tend to have the most influence on industrial and commercial redevelopment.⁶ These factors include workforce availability, business climate, local taxes, market demand, transportation, and access to municipal utilities⁷. For residential development, zoning and location (dense urban areas or near water) are often the two driving factors. Overall,



Former Whitehall Leather Company - Whitehall, Michigan (2018)

⁶ A Comparative Study of Factors Influencing Industrial Development, Tyson Neff, Abigail, University of Tennessee, 2004. http://trace.tennessee.edu/utk_chanhonoproj

⁷ Factor Analysis in Industrial Development, Niranjan, Archana, University of Tennessee, Dec. 2003

redevelopment of sites of environmental contamination with existing RCs can and has happened in Michigan.

Lessons Learned

The team identified the following issues in the conduct of the LRUR reviews which may be addressed in future projects:

1. Difficulty determining whether activities undertaken at a site are in compliance with the LRUR or other due care obligations. An example was the Whitehall Leather site which was being redeveloped, and had active construction taking place. Soil and other fill materials were being stockpiled on one portion of the property that was not fenced. A potential due care issue would be that the property owner has not taken reasonable precautions against the reasonably foreseeable acts of a third party (trespass) by not fencing the stockpiled debris from potential direct contact exposure.



Stockpiled debris - Former Whitehall Leather Company - Whitehall, Michigan (2018)

2. It is expected that during the next LRUR project, both the Remediation Information Data Exchange (RIDE) and HPE Content Manager RIDE will be used as data resources. The project team believes that the increased use of HPE Content Manager and RIDE in the future may prove valuable by providing more background on site conditions and remediation activities.
3. Tying datasets together from ERNIE is cumbersome. First, data needs to be downloaded from ERNIE into Microsoft Access. The team utilized the LRUR database to handle some of this complexity by building several queries in order to compare sites with expenditures with facility information and recorded or pending LRURs. ERNIE data was also used to compare BEAs conducted with restricted sites. The project team manually added one site to the list and verified expenditures individually from ERNIE. Updating expenditures in the future will require access to SIGMA.
4. Access to certain sites affecting “drive-by” reviews, specifically those which had limited road frontage or fences. This specifically occurred with the Satterlee Sumpter Landfill and National Plate Glass, where only a portion of the property boundary allowed limited visibility from the road.
5. Naming conventions in ERNIE were misleading. The Cooper School site, for instance, is not a school but across the street from Cooper Elementary. This can be remedied in the new RIDE, where it is possible to allow for historic or other names of sites, as it is a location-based database. In certain instances, like the former Detroit Artillery Armory (DAA), it is a vacant lot with the FedEx distribution facility on the adjoining north property that was once part of the site. It has a different parcel number and address but should be related to the former DAA.
6. Difficulty in finding local parcel information. Some counties have open on-line systems which allow users to search for specific properties via interactive mapping, while others provide a non-GIS search function where users can enter address or parcel identification numbers to locate

property data. Some communities charge for these services, while others are provided for free, albeit with varying levels of data. There is little that the team can do about this in the future, other than to note which communities have open access in comparison to those which do not.

Recommendations

Overall, the project team reaffirms its recommendation from the 2017 Pilot Project that EGLE, RRD should develop a program to routinely monitor compliance with land or resource use restrictions. Although the results of 2017 and 2018 demonstrated compliance with the reviewed RCs, they are not adequate in number to assume overall compliance across Michigan.



Kiwanis Park - Wyandotte, Michigan (2018)

The 2017 Pilot Project results also generated the recommendation for RRD staff to regularly educate property owners about their obligations and make sure that they provide notice to potential purchasers of the presence of restrictions. Property owner education was not a component of the 2018 Project Study, yet the project team recognizes the importance of that task. If a long-term monitoring program of LRURs is implemented, education of the property owners would be a required task. The project team recommends that this information sharing approach is a component of an effective long-term management program. In 2017, a copy of the checklist and photos, along with a brief cover letter summarizing the

compliance evaluation, were mailed to the property owner. At a minimum, the team recommends that a copy of the RC, overall RC compliance guidance, and a self-survey, based on the “Declaration of Restrictive Covenant Compliance Monitoring Checklist”, should be sent to property owners every 5 years to supplement any RRD site visits. As described in the Interstate, Technology, and Regulatory Council’s (ITRC’s) guidance document for Long-term Contaminant Management Using Institutional Controls⁸, “monitoring of land or resource use restrictions refers to actions and procedures that observe, inspect, review, and evaluate activities and land uses to help assure that obligated parties are in compliance with land or resource use restriction requirements”. As emphasized by ITRC, “monitoring land or resource use restrictions not only supports the effectiveness and integrity of the land or resource use restriction but is also paramount to the overall long-term success of the remedy”. ITRC’s survey of monitoring practices in place across the country included:

1. monitoring via coordination with local governments;
2. obligated party inspections and certifications;
3. periodic record reviews and inspections by state agencies;
4. permit programs;
5. land disturbance monitoring via one-call systems; and
6. land use and activity monitoring

Additionally, site conditions should be routinely evaluated to determine if certain restrictions are still necessary at some properties. For example, if the concentrations of a hazardous or regulated substance has decreased below the residential drinking water criteria, perhaps a resource use restriction limiting installation of groundwater wells for drinking water could be removed. Alternatively,

⁸ ITRC (Interstate Technology & Regulatory Council). 2016. Long-Term Contaminant Management Using Institutional Controls. IC-1. Washington, D.C.: Interstate Technology & Regulatory Council, Long-Term Contaminant Management Using Institutional Controls Team. <http://itrcweb.org/Team/Public?teamID=62>.

EGLE review may determine that additional restrictions are necessary to address an exposure pathway not otherwise included in the original RC. In other cases, if there are redevelopment plans for a property with an existing RC in place, then the restrictions should be reviewed to determine their applicability to the new land use and site plan. A trigger may occur during development and submittal of a BEA, which can be cross checked in RIDE to see if a recorded RC is in place at the property proposed for redevelopment.

The 2017 and 2018 projects focused on assessing compliance with RCs, which is one type of LRUR used to address remaining exposure risks at sites of environmental contamination in Michigan. In order to develop a comprehensive LRUR long-term monitoring program, the project team recommends that future projects develop assessment tools for reviewing compliance with other LRURs, such as local ordinances that limit or prohibit the use of groundwater that were previously approved by EGLE.

The 2017 Pilot Project produced compliance monitoring checklists for each of the 90 sites assessed. In addition, the 2018 Project study produced a limited number of single page evaluations complete with site history, a summary of the restrictions, and the project team's evaluation of compliance. The project team recommends that these checklists and evaluations be placed on Environmental Mapper as a separate document listed beneath the "Land Use Restriction Sites" where a PDF file of the land or resource use restriction is available. This information will intrinsically inform the public that EGLE routinely reviews compliance with LRURs as an important element of the cleanup program, and provide assessment information to prospective purchasers, adjacent property owners, and the general public. The state of Kansas, which has a Long-Term Stewardship and Brownfields Unit, places their environmental use control inspection forms on an interactive map (<http://maps.kdhe.state.ks.us/InteractiveEUC/>) similar to Environmental Mapper.

Attachments

Attachment 1 - Map of Site Reviews

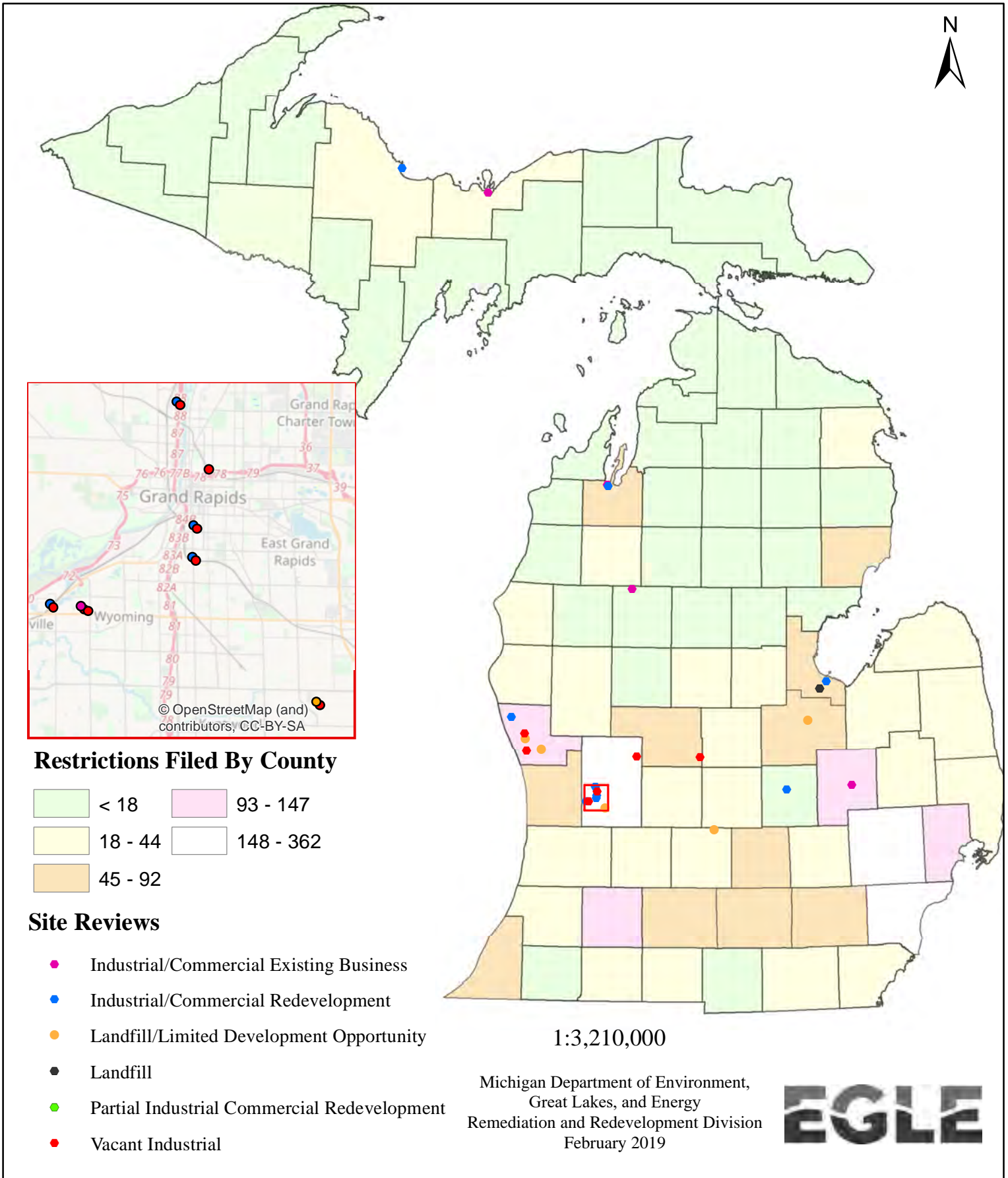
Attachment 2 - Site Summaries

Attachment 3 - Land or Resource Use Restriction Database Checklist Data

ATTACHMENT 1

Map of Site Reviews

2018 Michigan LRUR Site Reviews



ATTACHMENT 2

Site Summaries

AIRCRAFT COMPONENTS

671 NORTH SHORE DRIVE
BENTON HARBOR, MICHIGAN 49022

EGLE REFERENCE NUMBER: RC-SF-201-12-004



Above - 2003 view of Aircraft Components. Google Earth.



Above - 2018 view of Recreation Area facing east.

SITE CHARACTERISTICS AND HISTORY

The 17-acre Aircraft Components, Inc. is located in Benton Harbor, Michigan. Several furniture and printing manufacturing facilities operated on site from the 1910s to the 1950s, however, the major contamination was radioactive. In 1972, new site owner Aircraft Components began warehousing radium-painted gauges salvaged from World War II-era aircraft, which released radium-22 through the buildings as they deteriorated. In 1999, the EPA removed the bulk of radioactive material and the site is part of the Harbor Shores Development. The site is being addressed primarily as a federal, Fund-lead action with State of Michigan consultation.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$582,747.00
- Parcel 11-03-0018-0015-05-0 (Parcels A and B)
 - SEV: \$0
 - TAXABLE: \$0
- Parcel 11-03-0018-0014-02-0 (Parcel C)
 - SEV: \$408,100
 - TAXABLE: \$361,208

REDEVELOPMENT

In 2007, Harbor Shores BHBT Land Development, LLC redeveloped part of the site into the Harbor Shores Golf Course, a premier golf course that has hosted the Senior PGA Championship. Other redevelopment efforts on site include brewery expansion construction.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded on three parcels in 2012 to limit or prohibit:

- Use of groundwater beneath all portions of the property for drinking water purposes.
- For Parcels A and B - residential uses are allowed; however, no basements are allowed, and no buildings shall be constructed unless a vapor barrier is installed to prevent exposure to volatile organic compounds.
- For Parcels A and B - no penetration of soils beneath 12-inches below ground surface.
- Uses of all or portions of the property which interferes with any part of the remedy.
- No residential uses on Parcel C ("Recreational Area").
- Other than routine operation and maintenance of the "Recreational Area", no penetration of soils or the installed soil cover.
- Uses of all or portions of the property which interferes with any part of the remedy.

2018 RESTRICTION COMPLIANCE EVALUATION

In April 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition. EGLE staff anticipates future evaluation of the effectiveness of a vapor intrusion barrier installed in the brewery warehouse designed to protect future workers.

DETROIT ARTILLERY ARMORY

15000 EIGHT MILE ROAD
OAK PARK, MICHIGAN 48237

EGLE REFERENCE NUMBER: NAER-RRD-03-005



Above - 1963 aerial view of the Detroit Artillery Armory.



Above - 2018 view of former Detroit Artillery Armory building location facing northeast towards FedEx facility.

SITE CHARACTERISTICS AND HISTORY

The Detroit Artillery Armory (Armory) was built in 1942 and was used for manufacturing of weapons components and was demolished in 2005. The former Armory occupies a relatively flat parcel that is less than 75 acres in total area. The former Armory was also used to train National Guard troops, store artillery, and serve as a landing site for military planes. Hazardous substances, including lead and arsenic, have been released and or disposed of on the property as a result of the former Armory operations and have resulted in environmental contamination. Lead and arsenic remain present at levels that require restricting the use of the property to industrial and commercial (nonresidential) land uses.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$715,782.47
- Parcel 25-31-326-006
 - SEV: \$602,600
 - TAXABLE: \$414,840
- Parcel 25-31-326-005
 - SEV: \$8,872,300
 - TAXABLE: \$8,872,300

ENVIRONMENTAL RESTRICTIONS

A Notice of Approved Environmental Remediation was recorded in 2003 to limit or prohibit:

- Use of the property to nonresidential land use.

2018 RESTRICTION COMPLIANCE EVALUATION

In March 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

REDEVELOPMENT

In 2015, construction began for a 304,000 square-foot FedEx Ground distribution center. The facility opened in October 2016 and occupies 54 acres of the northern portion of the former Armory property. The company invested approximately \$25 million in the facility, employs more than 235 workers, and operates 24 hours a day, seven days a week. The southern vacant portion of the original Armory property is actively listed for sale and is located along Eight Mile Road close to M-10, I-696, and I-75.

GEORGETOWN CLEANERS

2502-2568 PACKARD STREET
ANN ARBOR, MICHIGAN 48104

EGLE REFERENCE NUMBER: RC-RD-201-12-010



Above - View of Georgetown Cleaners pre-demolition.



Above - 2018 view of The George.

SITE CHARACTERISTICS AND HISTORY

The 6.7 acre subject property consisted of agricultural land with associated residential buildings from at least 1937 until between 1963 and 1969, when the structures were demolished leaving vacant land. In 1973 and 1974 a multi-tenant retail and office center was constructed. Historically, a dry-cleaning facility was in operation along the southern portion of the subject property. Previous subsurface investigations identified both soil and groundwater contamination (chlorinated solvents) within the area of the former dry-cleaning facility (source area). These constituents are commonly found in dry cleaning operations.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$831,235.18
 - SEV: \$16,841,600
 - TAXABLE: \$16,641,256

REDEVELOPMENT

In 2013, demolition of the blighted and vacant Georgetown Mall began to clear the way for constructing the mixed use building. Luxury apartments occupy the upper floors, while the ground level includes space for retail businesses. Other amenities include a fitness center, outdoor pet area, outdoor swimming pool and fireplace, and below ground parking. As part of the redevelopment, a vapor barrier and vapor mitigation system were constructed on the southeast wing of the building.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded in 2012 to limit or prohibit:

- Use or occupancy of the existing buildings or structures or the construction of new structures, unless buildings or structures incorporated engineering controls designed to eliminate the potential of subsurface vapor phase hazardous substances to migrate into any existing buildings or new structures; or perform an evaluation of the potential for any hazardous substances to volatilize into indoor air assures the protection of persons who may be present in the buildings.
- Activities on the property that may interfere with any element of the response activities implemented at the property, including the performance of operation and maintenance activities, monitoring, or other measures necessary to ensure the effectiveness and integrity of the response activities.

2018 RESTRICTION COMPLIANCE EVALUATION

In June 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

H. BROWN CO., INC.

2200 & 2160 TURNER AVENUE NW
WALKER, MICHIGAN 49504

EGLE REFERENCE NUMBER: RC-RRD-201-05-047



Above - View prior to cleanup activities.



Above - 2018 view of warehouse buildings.

SITE CHARACTERISTICS AND HISTORY

The 3.5-acre H. Brown, Co., Inc. site is located in Walker, Michigan. The site is an inactive automobile and forklift battery recycling facility with about 200,000 cubic yards of soil contaminated by lead and other battery-related metals. The site and surrounding area may have been used as a municipal waste disposal landfill before the H. Brown Company began operating on site in 1961. Waste disposal and lead reclamation processes contaminated air, groundwater and soil with lead and volatile organic compounds (VOCs). The site's long-term remedy included the construction of a cover system, comprising three warehouse building foundations, asphalt parking areas and landscaped areas. The remedy also included groundwater monitoring, land use restrictions and long-term maintenance of the cover system.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$68,199.19
- SEV: \$4,917,700
- TAXABLE: \$4,363,329

REDEVELOPMENT

The developer, DBV Partners, L.L.C. constructed three new 120,000 square foot buildings to be leased to tenants for warehousing and light industrial activities. Over \$10 million dollars of private investment was put into the project, and the tenants currently employ about 300 people in total. As of December 2017, EPA had data on 7 on-site businesses. These businesses employed 136 people and generated an estimated \$70,893,666 in annual sales revenue.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded in 2005 to limit or prohibit:

- Excavation, landfilling, mining, invasive construction, or drilling beneath the cover
- Installation of drinking water production wells.
- Consumptive or other use of groundwater underlying the property that could cause exposure of humans or animals to the groundwater.
- Tampering of groundwater monitoring wells.

2018 RESTRICTION COMPLIANCE EVALUATION

In April 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

KENTWOOD LANDFILL

4800 WALMA AVENUE SE
KENTWOOD, MICHIGAN 49512

EGLE REFERENCE NUMBER: RC-SF-201-92-001



Above - 1999 view of Kentwood Landfill. Google Earth.



Above - 2018 view from Kentwood Library facing landfill east.

SITE CHARACTERISTICS AND HISTORY

The 72-acre Kentwood Landfill site is located in Kentwood, Michigan. In the early 1950s, the area was the town dump. It became a licensed solid waste disposal facility in 1966. The City of Kentwood operated the landfill from 1968 to 1970; Kent County operated it from 1971, to 1975. It was capped and closed in early 1976. Landfill operations contaminated soil, leachate and groundwater with hazardous chemicals. Following cleanup, operation and maintenance activities and groundwater monitoring are ongoing. The site is being addressed through federal and state oversight of potentially responsible party actions.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$427,036
- SEV: \$0
- TAXABLE VALUE: \$0

REDEVELOPMENT

In March 2009, the City of Kentwood requested U.S. EPA's approval of a plan for construction of a library on the portion of the Kentwood landfill, in accordance with the 1992 Deed Restriction previously filed on the property deed. In August 2010, a new state-of-the-art, 46,000-square-foot, two-story library facility opened to the public.

2018 RESTRICTION COMPLIANCE EVALUATION

In April 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

ENVIRONMENTAL RESTRICTIONS

A deed restriction was filed in 1992 to limit or prohibit:

- Consumption or other use of groundwater underlying the property.
- Residential, commercial, or agricultural use. Use that would allow the continued presence of humans.
- Installation, removal, construction or use of any buildings, wells, pipes, roads, ditches or any other structures.
- Tampering with, or removal of, any containment or monitoring systems.
- Interference with the performance of work and remedial action.
- Uses shall be consistent with final remedial action, or with the maintenance or remedial measures.

Each of the restrictions listed above allowed for certain activities so long as the U.S. EPA provided final approval. In 2009, the deed restriction was modified to separate the library property from the rest of the landfill property to allow the City to construct the Kentwood Branch Library.

MAGNETEK

300 EAST MAIN STREET
OWOSSO, MICHIGAN 48867

EGLE REFERENCE NUMBER: CNTS-ERD-97-001



Above - MagneTek Facility prior to demolition.



Above - 2018 view of Comstock Inn and Conference Center.

SITE CHARACTERISTICS AND HISTORY

The property has been used for commercial and industrial purposes for decades. Previous site uses dating back to 1918 include family residences, auto garages, a dry cleaner, tire sales, car sales, battery sales, a gas station, and a grocery store. Its most recent previous use, by Magnetek and Universal Electric Company, was the manufacture of fractional horsepower motors, from the late 1940s to December of 1994. This use contaminated the soil with petroleum and hazardous chlorinated solvents. The Magnetek building was vacant between 1994 and 1996 and demolished in the fall of that year. Ownership of the property was transferred from Magnetek to the City of Owosso after a Baseline Environmental Assessment was completed in January, 1996.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$4,802,119.27
- Parcel 050-470-027-001-00
 - SEV: \$732,800
 - TAXABLE: \$732,800

REDEVELOPMENT

Tanglewood Development Corporation purchased the property and built the Comstock Hotel in November 1997. The developers invested over \$5 million in the 64-room hotel and conference center and created 20 new jobs.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded in 1998 to limit or prohibit:

- All activities which may interfere with response activities, operation and maintenance, long term monitoring, or other measures necessary to assure the effectiveness and integrity of a remedial action.
- Use of groundwater underlying the property.
- The floors and walls of the basement comprise an exposure barrier shall not be modified without prior EGLE approval.
- Excavation, drilling or disturbance of soils on the site below a depth of five feet without prior EGLE approval.
- Removal of the asphalt, concrete and landscape cap on the property except for repairs and improvements.
- Uses of the property to a hotel and conference center and other nonresidential uses.

2018 RESTRICTION COMPLIANCE EVALUATION

In April 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

MCCOY CREEK INDUSTRIAL PARK

301 EAST DEWEY STREET
BUCHANAN, MICHIGAN 49107

EGLE REFERENCE NUMBER: RC-RRD-201-05-008



Above - 1980 aerial view of former Clark Equipment plant area subject to restrictive covenant.



Above - 2018 view of McCoy Pond Park.

SITE CHARACTERISTICS AND HISTORY

The McCoy Creek Industrial Park occupies about 72 acres. It is intersected by McCoy Creek, which flows northeast across the site, and joins the St. Joseph River approximately 1/2 mile downstream. A mix of residential, commercial, and industrial properties bound the area. This is the site of the former Clark Equipment Company, a subsidiary of the Ingersoll-Rand Corp. This property was utilized for industrial manufacturing including foundry, metal fabrication, plating, parts degreasing and painting, and assembly.

STATE EXPENDITURES AND PROPERTY VALUE

- EXPENDITURES: \$14,517.45
- Parcel 58-0700-0002-01-6
 - SEV: \$0
 - TAXABLE: \$0

REDEVELOPMENT

Various structures and areas of the former McCoy Creek Industrial Park have been redeveloped. For example, the 12,000 square foot former Clark Testing Lab was purchased in 2015 and redeveloped into the Lehman's Orchard Brewery & Farmhouse. In addition, the 42,000-square-foot Redbud Fitness & Lifestyle center opened in 2017, providing health and wellness opportunities for the community.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded in 2007 to limit or prohibit:

- Excavating any portion of the property except in compliance with an acceptable Health and Safety Plan and Residuals Management Plan.
- Wells shall not be installed on the property for extracting groundwater for potable or domestic purposes.
- The property shall remain covered with either rip rap, pavement, or a 24-inch vegetated fill soil barrier to protect against contact with underlying contaminated soil.
- Property owner shall not remove, cover, obscure, or otherwise alter or interfere with the permanent markers placed at the locations on the property noted in the restrictive covenant.

2018 RESTRICTION COMPLIANCE EVALUATION

In May 2018, staff from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

PERFORMANCE PAPER, INC.

401 EAST ALCOTT STREET
KALAMAZOO, MICHIGAN 49001

EGLE REFERENCE NUMBER: RC-RRD-201-14-068



Above - 2005 View of Performance Paper Demolition.



Above - 2018 view of site redevelopment.

SITE CHARACTERISTICS AND HISTORY

Various paper making industries operated at Performance from 1895 until 1997. Historical paper making operations in the area included de-inking processes that resulted in polychlorinated biphenyl (PCB) contamination to Portage Creek, which divides the property and flowed beneath and between parts of the building foundations. Cleanup of the PCB contamination is being handled by the U.S. Environmental Protection Agency (USEPA), under the Superfund program. Use of contaminated ash and cinder as fill material resulted in heavy metal contamination on the property. Use of petroleum products and solvents resulted in semi-volatile and volatile organic compound contamination. Paper making operations stopped in 1997, and the 27-acre building complex was left vacant.

STATE EXPENDITURES AND PROPERTY VALUE

- Expenditures: \$4,340,562.32
- SEV: \$0
- TAXABLE: \$0

REDEVELOPMENT

A \$600,000 loan was awarded to the City of Kalamazoo to protect public health and safety and revitalize the historic building, located on Bryant Street. The brownfield loan will help finance the safe transport and proper disposal of contaminated soil from the site. 400 Bryant, LLC will rehabilitate the historic building into office space for 160 Kalamazoo County Health and Community Services staff. The City of Kalamazoo has approved a brownfield plan to help pay for other environmental costs and site and public improvements.

ENVIRONMENTAL RESTRICTIONS

A Declaration of Restrictive Covenant was recorded on three parcels in 2017 to limit or prohibit:

- Construction of any building, structure or other property improvement in the Restoration Area, except for the construction, maintenance, repair and replacement of not more than one (1) pedestrian bridge over Portage Creek.
- Planting of any trees, grasses, plants, or other vegetation that are considered invasive species by the EGLE.
- Occupy and use the parcel that causes any damage or alteration to the restoration work conducted by EGLE in the Restoration Area.
- Park or store vehicles and equipment on portions of the Property that are not approved for parking or storage under the approved site plan issued by the City of Kalamazoo for the proposed project on that parcel.

2018 RESTRICTION COMPLIANCE EVALUATION

In May 2018, staff from the Remediation and Redevelopment Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) performed a site visit to evaluate site compliance with the existing restrictions. EGLE staff found the property in compliance with the restrictions and in good condition.

ATTACHMENT 3

Checklist Data from LRUR Database

Number	Reference Number	District office	Current Business Name at Property	City	Property Tax ID Numbers	Land Use Type	Surrounding Land Use Type	Property Ownership Change	Property Excludes Residential Use	Property zoning same since RC recorded	Recorded at Register of Deeds	RC located upon records search	Description of how instrument recorded	Restrictions in RC	Other RC	Alternate ID # WDS/SID/ERNIE	New owner/operator of property	Type of purchase	Current Site conditions description	Improvements, building, activity inconsistent with RC	Need for repairs, other site observations	Compliance Rating
11	RC-RRD-213-15-134, RC-RRD-213-15-34	Upper Peninsula	Tendercare Health Center	Munising	02-051-452-045-00	Commercial	Mixed Uses	FALSE	No	No	TRUE	Yes		Groundwater		2000046			Properties subject to restrictions include a strip of vacant land, driveway, and parking area. Tendercare Munising is built to the north of the vacant land.	A diesel AST is present at the site for running an emergency generator.	Site did not appear to need any repairs.	
7	RC-RRD-201-11-006	Kalamazoo	Rockwell International Corp	Allegan	03-51-200-065-00, 03-51-200-065-065-10	Industrial	Mixed Uses	FALSE	Yes	Yes	FALSE	NA		Land Use	Groundwater, sign/notice	3000030	Jim Liggett/ML Real Estate	Quitclaim Deed	Long term monitoring being conducted, redevelopment project starting.	Improvements not yet started.	No. Two new restrictions on the two individual parcels are being drafted.	NECI
47	RC-RRD-201-14-051	Saginaw Bay	Amoco Former Bay City Terminal	Bay City	160-015-227-002-00	Industrial	Industrial	FALSE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, VI, DC, Containment Cell		9000002			Property used as bulk aggregate facility	No	No. Liable party is conducting ongoing annual inspections as part of a postclosure agreement.	
48	RC-RRD-201-10-021	Saginaw Bay	Middlegrounds Landfill Bay City	Bay City	160-032-326-001-00	Vacant	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Land Use, Direct Contact, Groundwater, Vapor Intrusion		9000004			Landfill area capped and fenced. Surrounding uses are recreational.	No	No	
16	RC-SF-201-12-004	Kalamazoo	Aircraft Components	Benton Harbor	11-03-0018-0015-05-0	Industrial	Mixed Uses	FALSE	No	Yes	TRUE	Yes	Declaration of Restrictive Covenant	Groundwater, Land use and activity use restrictions	Direct contact, no excavation through 12 inch cover, vapor barrier required for occupied buildings	11000330	D&L Sales	Warranty Deed	Residential area redeveloped with new parking lot and North Peak Brewing warehouse. Recreational area is golf course.	No.	No.	NECI
3	RC-RRD-05-008	Kalamazoo	Buchanan-McCoy Creek Industrial Park	Buchanan	Lot 2, Dewey St., Creek Rec Area	Recreational	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, Direct Contact/Exposure	RC-RRD-213-08-009, ORD-RRD-201-06-005, RC-RRD-05-016, RC-RRD-201-05-000 - 013, -12, -014, RC-RRD-201-06-038	11000330	City of Buchanan	Other	Property used as municipal park (McCoy Pond Park). Permanent markers are visible and in excellent condition.	No.	Minor rutting due to moles.	NCNA
19	RC-RD-201-11-030, RC-RD-201-11-021	Kalamazoo	U.S. Aviox	Niles	14-020-029-074-00, 14-020-029-063-00	Industrial	Residential, Agricultural	FALSE	Yes	TRUE	TRUE	Yes		Groundwater, Land Use, VI		14000017	AVX Properties		dichloromethane plume decreasing with some still above health-based criteria. DIE below criteria, DIE not detected in groundwater well tests, carbon disulfide detected in one well below criteria	No.	-074, assessed at \$5,100, -063, assessed at \$24,800	NECI
4	RC-ERD-01-006	Lansing	Johnson Iron Industries	Charlotte	200 024 200 010 00	Industrial	Residential	FALSE	Yes	Yes	TRUE	Yes		Land Use		23000007	City of Charlotte		Property used as municipal park, including skating rink, RC track, and sledding hill.	No.	No.	NECI
20	RC-SF-201-13-005	Lansing	Parsons Chemical Works, Inc.	Grand Ledge	030-010-200-010-00	Industrial	Industrial	FALSE	Yes	Yes	TRUE	Yes		Direct contact/Exposure Barrier		23000010	original owner		Site is currently vacant land, vegetative (grass) cover.	None.	None.	NECI
57	RC-RRD-201-08-003	Lansing	Pro-Met Plating	Flint	47-31-255-036	Industrial	Mixed Uses	TRUE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, Excavation, Construction		25000300	Blue Hawaiian Pools	Warranty Deed	Site currently used for parking for adjoining property.	No	None	NECI
5	RC-RRD-201-16-053	Cadillac	Cone Drive Operations, Inc	Traverse City	51-670-001-00	Industrial	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, Infiltration Barrier, Fencing	Cone Drive Textron is still the property owner.	28000057			Industrial operations	No.	No.	NECI
6	RC-RRD-201-05-032	Cadillac	Midtown Center Condos & River's Edge Development (Traverse City Iron Works)	Traverse City	28-51-103-008-00	Residential, Commercial	Mixed Uses	FALSE	No	Yes	TRUE	Yes		Land Use		28000201			Property used as condominium development. Restrictive covenant does not contain restrictions that assure the landscaping remains in place. The facility is inspected on an annual basis.	No.	Yes. Site photos were sent to the consultant. Limited repairs are needed in the landscaping areas.	NCNA
68	RC-RRD-201-15-019	Jackson	Spring Arbor Wash-N-Dri	Spring Arbor Township	000-12-21-101-001-03	Vacant	Mixed Uses	FALSE	No	Yes	TRUE	NA		Groundwater	Due Care compliance	38000030	Spring Arbor Ice Cream, LLC - possible sale to 311 West Main LLC	Quitclaim Deed	Open space, parking area. Frosty Boy, agricultural surrounding.	None	No	NECI
26	RC-RRD-201-14-068	Kalamazoo	Performance Paper Inc.	Kalamazoo	06-27-221-001, 06-27-213-002, 06-27-224-001	Industrial	Mixed Uses	TRUE	No	Yes	TRUE	Yes		Avoid restoration area, prohibit buildings, approved vegetation		39000140	Kalamazoo County	Warranty Deed	Site under development during review, soil piles evident from construction	No	Site cleanup after construction	NECI
70	RC-RRD-201-05-047	Grand Rapids	H. Brown Co., Inc.	Walker	41-13-12-401-013, 41-13-12-401-016, 41-13-12-401-017	Industrial	Industrial	TRUE	Yes	Yes	TRUE	Yes		Groundwater	Record of Decision	41000031	DBV Partners LLC	Warranty Deed	3 large warehouses, property is well maintained	No	-013: Equalized \$1659100, Taxable: \$1463321 -016: Equalized \$1658600, Taxable: \$1466691 -017: Equalized \$1600000, Taxable: \$1433517	NECI
71	RC-SF-201-92-001	Grand Rapids	Kentwood Landfill	Kentwood	41-18-27-401-001	Vacant	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Land Use, Groundwater	No other activity unless approved by EPA	41000039	City of Kentwood	Warranty Deed	Site is fenced with active methane capture	No	Methane flare installed in 2017	NECI
72	RC-SF-201-13-001	Grand Rapids	Organic Chemicals, Inc.	Grandville	41-17-08-426-003	Industrial	Industrial	TRUE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, Construction, Exposure Barrier		41000051	4-J Trucking Inc	Warranty Deed	Property used by trucking business, is well maintained, some soil stockpiles.	No	Origin of soil stockpiles should be determined. Stockpile outside of barrier locations.	NECI
73	RC-RRD-03-008	Grand Rapids	Croff Salvage Yard- Kent County Road Commission	Oakfield Township	41-08-10-426-003, -004	Vacant	Residential, Vacant	TRUE	No	Yes	TRUE	Yes		Groundwater	VI for construction and direct contact restrictions	41000077	Kent County Road Commission	Other	Both lots, 11887 and 11883 Lincoln Lake Road are vegetated and have aggregate storage, site is fenced.	No	Area within property boundary has possible lead contamination that is not controlled or surveyed. Additional assessment may be warranted.	NCNA
74	RC-ERD-01-015	Grand Rapids	Dura Plating Corp (Former) Go-Fast Productions	Wyoming	41-17-09-45-1055 (-024)	Industrial	Industrial, Residential	TRUE	Yes	Yes	TRUE	Yes		Land Use	Groundwater use, direct contact, particulate soil inhalation	41000114	Williams Rentals LLC	Warranty Deed	Industrial building in good shape, surrounded by paved parking and access drives.	No	parcel number in ERNIE needs to be verified with county parcel id number. June 9, 2008 sold to current owner.	NECI
75	RC-RRD-03-007	Grand Rapids	Spartan Chemical- Vacant	Wyoming	41-17-09-451-013	Industrial	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Groundwater	Monitoring wells, vapor intrusion for new building construction, SVE system	41000119	Kent County Treasurer	Other	Site is fenced, has active SVE system, mainly vacant.	No	Long term monitoring and site investigation, future remedial actions possible.	NECI
76	RC-ERD-02-004	Grand Rapids	Kessler Property- Modern Fire and Security Systems, Inc.	Grand Rapids	41-17-01-276-003	Industrial	Mixed Uses	TRUE	Yes	Yes	TRUE	Yes		Groundwater	Subsurface excavation with HASP, restriction land use to non-residential	41000169	Daniels Real Estate Holdings Co. LLC	Quitclaim Deed	Property has been redeveloped for industrial/commercial use. West parcel is lawn area.	No. Property has been redeveloped. 8/23/2004 sale.	None. SEV= \$225,000.	
77	RC-RRD-201-10-012	Grand Rapids	Hoff Industries (Former)	Grand Rapids	41-14-19-330-017	Vacant	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Land Use	No construction without approval, Groundwater, Vapor Intrusion, exposure barrier.	41000202	Michigan Land Bank, selling to new purchaser	Quitclaim Deed	Site is currently vacant lot, gravel covered.	No	None	NECI
78	RC-ERD-01-001	Grand Rapids	American Laundry (Fmr)/Container Waste	Grand Rapids	41-14-31-151-011	Commercial	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Other- DC compliance	Land use restriction to non-residential, groundwater, subsurface excavation, indoor air inhalation	41000228	US Postal Service	Other	Site occupied by Postal Service	No	630 Division Avenue South, SEV= \$0. Sold in 2013 for \$1 million. BEA #B201303534GR	NECI
83	RC-RRD-201-14-012	Upper Peninsula	Lake Shore, Inc - Mtq City	Marquette	0370070	Residential	Residential	FALSE	No	Yes	TRUE	Yes		Direct contact/Exposure Barrier		52000041			Site condos, currently 3 constructed, remaining area is grass lot.	No	None	
2	RC-RRD-201-15-018	Grand Rapids	Crystal Refining Co	Carson City	59-051-700-040-00	Industrial	Residential	FALSE	Yes	Yes	TRUE	Yes		Land Use, Groundwater, Direct Contact/Exposure, Vapor Intrusion		59000003	Michigan Land Bank		Site is fenced and signage is posted. Treatment system is outside of property boundary.	No.	No.	NECI
88	RC-SF-201-12-002	Grand Rapids	Bofors Nobel, Inc.	Eggleston Township	11-032-300-0005-00	Industrial	Mixed Uses	FALSE	Yes	Unknown	TRUE	NA	Restriction filed in 1982	Other	No vehicles, no excavation or construction, maintain fence	61000005			Open space and former waste lagoons, treatment system building	No buildings present	None	NECI
90	RC-SF-201-13-002, RC-SF-201-13-003, RC-RRD-201-12-030, RC-RD-201-12-029,	Grand Rapids	Peerless Plating	Muskegon Township	61-10-033-300-0010-00,	Industrial	Industrial, Commercial	FALSE	Yes	Yes	TRUE	Yes		Land Use	Prohibit migration activities, no wells, no interference of MWs, no soil disturbance, no drilling, digging or removing buildings.	61000039	State of Michigan- 2554 Getty Street	Warranty Deed	Building is being used for storage of response activity equipment, and is a protective structure	No	No	NECI
91	RC-SF-201-14-009, RC-SF-201-14-010, RC-SF-201-14-011	Grand Rapids	Ott/Story/Cordova Chemical Co.	North Muskegon	61-10-008-100-0039-00	Mostly Vacant	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Groundwater	Land Use, Vapor Intrusion	61000051	Muskegon County, Nugent Sand (subdivided)	Other	Vacant industrial park with active groundwater treatment facility	No	Attractive nuisance for old office building	NCNA
92	RC-RRD-201-10-014	Grand Rapids	Whitehall Leather	Whitehall	61-22-033-100-0075-0, 61-22-028-300-0009-0	Vacant	Residential	FALSE	No	Yes	FALSE	Yes		Groundwater, Direct Contact, VI, Do not disturb element of work plan (air sparge system)	Direct Contact, VI, Do not disturb element of work plan (air sparge system).	61000062	Maple Street Land Investments LLC	Warranty Deed	900 Lake Street	No	May not be filed correctly? Follow up with District. Recommend reevaluation of RC post-construction activities.	
93	RC-ERD-99-013, RC-ERD-99-012	Grand Rapids	Zephyr Inc. - Naph Sol Refining	North Muskegon	61-10-008-100-0039-00 (1222 Holton)	Industrial	Mixed Uses	FALSE	Yes	Yes	TRUE	Yes		Groundwater	Construction limitations, soil movement, any exacerbation, no interference with response activities.	61000063	Brink Terminal Services Inc.	Warranty Deed	1222 Holton Road	No	On-going remedial actions and wetland restoration.	NECI

32	NAER-RRD-03-005	SE Michigan	Detroit Artillery Armory	Oak Park	25-31-32E-006 (front parcel) taxable value - 414,840, assessed value is 602,600\$; (back parcel) - 21200 Greenfield Road, 25-31-32E-005, assessed and taxable value is \$8,872,300.	Vacant	Mixed Uses	TRUE	Yes	Yes	TRUE	Yes		Land Use (Generic Industrial and Generic Commercial II, III, IV).		63000348	FedEx		Northern portion of property used as a FedEx Distribution facility (redevelopment).	No	No	NECI
8	RC-RRD-201-11-004	SE Michigan	Ford New Holland	Troy		Commercial	Mixed Uses	TRUE	Yes	Unknown	TRUE	Yes		Land Use, Groundwater, Direct contact/Exposure Barrier	Remedial Action Plan	63000392	Grand Sakwa New Holland Shopping		Parking lot and driveway as identified in RC appears to be intact. Routine repair work was completed in August of 2017.	No.	No.	NECI
102	RC-RRD-03-044	Saginaw Bay	National Plate Glass	Saginaw	12-4-33-4013-000	Vacant	Mixed Uses	FALSE	NA	Yes	FALSE			Land Use, Groundwater, VI, Excavation		73000406			Vacant	No	Restrictive Covenant indicates permanent markers in place, but staff did not observe permanent markers present during inspection.	NCNA
103	CNTS-ERD-97-001	Lansing	Magnetek	Owosso	050-470-027-001-00	Commercial	Commercial	TRUE			TRUE			Land Use, Groundwater, Direct Contact		78000056	Comstock Inn and Conference Center	Warranty Deed	Property used as Comstock Inn and Conference Center	No	No	
108	RC-RD-201-12-010	Jackson	Georgetown Cleaners	Ann Arbor	09-12-04-403-010	Residential	Residential	TRUE	No	Yes	TRUE	NA	NA	Vapor Intrusion	None	81000534	The George	Warranty Deed	Property is redeveloped as mixed use residential and commercial, luxury apartments	No	No	NECI
35	Proposed, related IC is adjacent	SE Michigan	Cooper School Site	Westland		Vacant	Residential	FALSE			FALSE	No				82000010			Site is fenced, methane system in place.	No	No	NECI
37	RC-RRD-201-15-039	SE Michigan	Satterlee Sumpster Twp LF	Sumpster Twp	81-04-999-0008-001	Vacant	Residential	FALSE	Yes	Yes	TRUE	Yes		Land Use, special building, soil movement, exposure barrier, groundwater use		82000048	Colleen Liddel, Satterly Site, LLC		Site is currently vacant, with thick vegetation. Site is fenced in.	No improvements.	None observed.	NCNA
39	RC-SF-201-04-001	SE Michigan	Kiwanis Park (Lower Ecorse Creek)	Wyandotte	57-001-04-0011-00	Recreational	Residential	FALSE			FALSE	Yes		Groundwater, direct contact		82000205			Municipal park.	No.	High traffic areas slightly impacted (entrance, swingset, beneath picnic table). Recommend pavement for entrance pathway. Recommend creating an elevated sandbox (like a raised bed).	NCNA
10	RC-RD-201-15-043	SE Michigan	General Oil Northville	Northville	48004020002302, 48004020003001	Commercial	Mixed Uses	TRUE	Yes	Yes	FALSE	Yes		Groundwater, Vapor Intrusion, Infiltration Barrier		82000208	some owners are likely to be aware.	Warranty Deed	Property has been subdivided and mostly redeveloped as industrial	No.	None visible.	
42	NAER-ERD-00-007	SE Michigan	Kroger	Taylor	60-008-99-0023-000	Commercial	Commercial	FALSE	NA	No	FALSE	NA		Land Use (commercial IV)		82001595	Kroger	Warranty Deed	Site used as a Kroger and CVS.	No	No	
109	RC-RRD-201-05-028	Cadillac	AAR Cadillac Manufacturing-AAR Mobility Systems	Cadillac	100560001200	Industrial	Industrial, Residential	FALSE	Yes	Yes	TRUE	Yes		Direct contact/Exposure Barrier	Infiltration, exposure barrier, groundwater	83000036			Industrial property in operation, fenced area next to railroad tracks.	No	No	NECI