



West Michigan Shoreline **Brownfields** Inventory and Plan for Implementation

October 2006



WMSRDC
WEST MICHIGAN SHORELINE
REGIONAL DEVELOPMENT COMMISSION

**WEST MICHIGAN SHORELINE
REGIONAL DEVELOPMENT COMMISSION
(WMSRDC)**

The WMSRDC is a regional council of governments representing 127 local governments in the West Michigan counties of Lake, Mason, Muskegon, Newaygo, Oceana, and northern Ottawa.

The mission of WMSRDC is to promote and foster regional development in West Michigan... through cooperation amongst local governments.



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IN MEMORY OF

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INTRODUCTION

The West Michigan Shoreline Regional Development Commission was created in 1970 under state enabling legislation and has been involved in economic development since its inception. While work in the first few years was targeted to assisting counties and local communities, the Commission was designated by the U.S. Department of Commerce, Economic Development Administration as an Economic Development District in 1976. Subsequently, work has involved the annual preparation of a Comprehensive Economic Development Strategy (previously an Overall Economic Development Program) and the implementation of significant development projects. To date, 55 development projects in the region have received funding from the EDA through the CEDS process conducted by the Economic Development District.

While the funding of these projects has had a significant and positive impact on the region's economy, the economy has experienced a shift from a primarily manufacturing base to a more diversified base. This shift is not peculiar to the region but has left in its wake a number of "brownfields" which are, according to the State of Michigan, "abandoned, idle or under-used industrial and commercial properties where expansion or redevelopment is complicated by real or perceived environmental conditions". These sites are often, but not always, in urban areas and can include gas stations and dry cleaners.

The identification of brownfields is a difficult process because of many areas of ambiguity. There is no official designation process for the identification of brownfields, although either communities or property owners can suggest classification of properties as such. Michigan's environmental law does not include a definition of brownfields. There is not even universal agreement on a definition. For instance, the U.S. Environmental Protection Agency's (EPA's) definition is very similar to the State's but refers to industrial or commercial facilities (instead of properties) and specifies a concern for environmental contamination (rather than environmental conditions). Michigan, compared to other states and EPA, has an expansive interpretation of its brownfields definition that includes blighted and functionally obsolete properties in core communities, sites with leaking underground storage tanks, and landfills.

The concept of returning contaminated properties, which have been abandoned or are not being utilized, to a different but economically productive use while addressing environmental concerns is an important aspect of community development. It is referred to as brownfield redevelopment and has been a hot topic since deterrents to it, which accompanied early legislation regarding contaminated sites, were addressed. There is universal agreement regarding the potential economic and environmental benefits of brownfield redevelopment, some of which are listed below.

- Assistance in recovering or retaining municipal tax-base
- Creation or retention of jobs
- Economies of scale with existing infrastructure costs
- Tax breaks and incentives
- Federal and state grants
- Removal of blight
- Protection of human health and the environment
- Alternative to greenfield (undeveloped land, especially when unpolluted) development

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 had the unintended effect of discouraging brownfield redevelopment and encouraging greenfield development instead. CERCLA said that all parties associated at any time with a contaminated site are potentially responsible for paying for its cleanup forever (strict/joint/several liability). Michigan's pre-1995 environmental cleanup and redevelopment efforts were also constrained by laws which awarded liability for cleanup along with the purchase of contaminated property. Needless to say, developers and investors shied away from the liability and expense of brownfield sites in favor of cheaper and uncontaminated sites in rural or suburban areas.

While the overall benefits of CERCLA and early state laws in addressing contamination are undeniable, their adverse and unintended consequences required correction. Today, Michigan is considered by many to be one of the leading states for brownfield redevelopment. This may be attributed to Michigan legislation; such as the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act 451, as amended; that has made investment in brownfields more attractive by allowing ways for new property owners to be exempt from contamination liability.

Part 201 (Environmental Remediation) of NREPA offers: a causation-based liability system for owners and operators, the use of baseline environmental assessments (BEAs) to provide liability protection to new owners and operators from existing contamination, due care provisions to assure contaminated property is used safely, and land use-based cleanup standards (residential, commercial, and industrial). When Part 201 requirements are followed, only the parties who caused contamination are responsible for cleanup.

Michigan legislation has also allowed numerous ways to finance the cleanup and redevelopment of brownfield properties. July 1996 amendments to Part 201 created the Cleanup and Redevelopment Fund to provide a permanent, on-going funding mechanism for the state's environmental cleanup and redevelopment program. The Clean Michigan Initiative (Part 196 of NREPA) authorized a \$675 million general obligation bond, to be used primarily for brownfields, in 1998. The Brownfield Redevelopment Financing Act (PA 381 of 1996) provided a method of financing environmental response activities necessary to redevelop contaminated

property through the use of tax increment financing, including capture of school taxes, by Brownfield Redevelopment Authorities.

The Brownfield Redevelopment Credit Package of 2000 included an expanded definition of properties (including blighted or functionally obsolete properties) and activities in qualified local governmental units (PA 145-QLGU), a Single Business Tax Act (PA 143-SBT), a Michigan Economic Growth Authority Act (PA144-MEGA), and an Obsolete Property Rehabilitation Act (PA 146-OPRA)). SBT credits were allowed as incentives for the development or improvement of a contaminated property or a blighted or functionally obsolete property in a QLGU. MEGA was given authority to determine tax credit eligibility for brownfields. QLGUs were authorized to establish obsolete property rehabilitation districts within which exemptions from ad valorem property taxes are allowed for commercial or commercial housing buildings or improvements.

The Land bank Fast Track Act (PA 258) of 2003 amended the Brownfield Redevelopment Financing Act to expand the definition of a blighted property to include property owned or under the control of a land bank. A Brownfield Redevelopment Authority can now approve brownfield redevelopment plans including, as eligible activities, assistance to a land bank (defined by PA 123 of 1999). Eligible activities include demolition, major cleanup, environmental remediation, infrastructure improvements, title clearance, and other activities allowed under the Financing Act.

MILESTONES IN MICHIGAN BROWNFIELD LAWS		
1994	PA 451	Natural Resources and Environmental Protection Act (NREPA)
1996	PA 381	Brownfield Redevelopment Financing Act Cleanup and Redevelopment Fund (CRF)
1998		Clean Michigan Initiative (CMI)
2000	PA 143	Small Business Tax Act (SBT)
	PA 144	Michigan Economic Growth Authority Act (MEGA)
	PA 145	Qualified Local Governmental Unit (QLGU)
	PA 146	Obsolete Property Rehabilitation Act (OPRA)
2003	PA 258	Land Bank Fast Track Act

While these laws have done much to create a more favorable climate for brownfield development, other efforts have assisted as well. Memorandums of Understanding were signed by the U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality clarifying responsibility for the State's contaminated sites. At the current time, EPA works with MDEQ on Superfund sites and leaves the remainder to MDEQ's authority. The stigma of Superfund status is rarely an issue and developers are assured that the state's cleanup requirements stand alone on most projects. In addition, the state's system of identifying and responding to contamination has addressed concerns about costly clean-up requirements by incorporating land re-use considerations into clean-up requirements.

This study is the first ever inventory and comprehensive analysis of brownfield properties in the five county area serviced by West Michigan Shoreline Regional Development Commission (Lake, Mason, Muskegon, Newaygo, and Oceana) and is quite timely given the current brownfield redevelopment climate. It is also the first regional study in West Michigan to work with local officials to identify high-priority brownfield sites and develop feasibility analyses for those properties. In addition, it provides information on available tools and programs to assist in the implementation of brownfield redevelopment projects. The information and resources contained in this report will help local, state, and federal officials make redevelopment decisions more efficiently.

PLANNING METHODOLOGY

The West Michigan Shoreline Brownfields Inventory and Plan for Implementation is divided into the following sections:

- Comprehensive inventory of brownfield sites, on a local unit of government level, including categorization by type and assignment of a priority rating.
- In-depth assessments of several brownfield sites for redevelopment or development purposes.
- Listing of tools for implementation for use by local officials.

A major share of the document is dedicated to its first section, the inventory, which contains information on 146 brownfield sites as well as maps illustrating the identified sites. The inventory was created, as was each phase of the document, through the use of many local, state, and federal resources.

Local Information Regarding Brownfields and Contaminated Sites

The initial research tool used to create the inventory of brownfield sites consisted of a survey mailed to each local governmental unit, chamber of commerce, and economic development corporation in the region (Lake, Mason, Muskegon, Newaygo, and Oceana Counties). The goal of the survey was to identify and obtain local information on brownfield properties throughout the region. Since “brownfield” is a relatively new concept and knowledge of this type of designation can be limited, the survey also served to increase public knowledge and awareness of brownfields. A sample is included in Appendix A.

Out of the 160 surveys sent out, 36 (about 22%) were completed and returned. Knowledge of at least one brownfield or USTfield within the respondent’s jurisdiction was indicated in 16 of the survey responses while 20 respondents indicated no knowledge of sites. Follow-up interviews were conducted with respondents, where appropriate, to obtain more information about identified sites.

Referrals were also made to documents produced by local communities and Public Advisory Councils (Mona Lake, Muskegon Lake, and White Lake) regarding brownfields and/or contaminated sites. These documents included the City of Muskegon Heights Brownfield Assessment Demonstration, funded by the U.S. Environmental Protection Agency (EPA); the City of Muskegon Master Land Use Plan-April 1997, which contains a chapter dedicated to Brownfields and names sites according to the Site Assessment Fund designation or inclusion on MDEQ databases; and the Mona Lake Watershed Stewardship Assessment.

In addition, previous efforts of the West Michigan Shoreline Regional Development Commission were helpful in the identification of sites. The annual CEDS process provided an excellent opportunity for local input through its

identification of “Economic Development Infrastructure Construction Projects” and “Public Works Construction Projects”. The West Michigan Industrial Parks/Sites Study, created in 2003 and partially funded by the U.S. Department of Commerce - Economic Development Administration, offered yet another way of accessing public knowledge.

State Information Regarding Contaminated Sites

The Michigan Department of Environmental Quality (MDEQ) publishes several databases regarding contaminated properties on the internet. Those utilized in the formation of the inventory included: “201” sites of contamination, “213” sites (Leaking Undergrounds Storage Tanks), and “Brownfield-UST” (Underground Storage Tanks) fields.

Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act (NREPA) regulates sites of environmental contamination (or facilities) in Michigan. The 201 database includes properties which are regulated; including liable party cleanup sites, sites assessed to require no further remediation, and those sites addressed by the state. The identified sites have undergone environmental risk assessments, to rank them according to the risk each poses to human health and the environment, and been scored. Scores can range from 0-48, with 48 posing the greatest risk.

Part 213 of the same act regulates Leaking Underground Storage Tanks (LUSTs) and the inventory includes both those sites where corrective actions have not been completed to meet the appropriate land use criteria (OPEN LUSTs) and those where corrective actions have been completed (CLOSED LUSTs). Usually petroleum products are involved but there are other regulated substances, additionally covered by Part 213, which could be leaking.

The Brownfield-USTfield database contains property information about state funded cleanup and redevelopment sites, from the Part 201 list, as well as LUST sites which have had a Baseline Environmental Assessment (BEA) submitted to MDEQ for redevelopment purposes. The definition of an USTfield is very similar to the definition of brownfield: abandoned or under-used industrial and commercial properties where revitalization is complicated by real or perceived environmental contamination from underground storage tanks.

Federal Information Regarding Contaminated Sites

The U.S. Environmental Protection Agency (EPA) also publishes several data bases identifying contaminated sites on the internet. They are related to the Superfund program, created by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. The goal of CERCLA is to clean up the nation’s uncontrolled hazardous waste sites which

contain abandoned, accidentally spilled, or illegally dumped hazardous waste that pose a current or future threat to human health or the environment.

Sites become superfund sites through an evaluation process, including completion of Hazard Ranking System (HRS) evaluation, screening and public solicitation of comments about the proposed site, and nomination to the National Priorities List (NPL). Should a site be placed on the National Priorities List, it is regarded as posing an immediate or significant public health threat to the local community. It is, therefore, eligible for extensive, long-term cleanup action under the Superfund program.

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is the national database and management system EPA uses to track activities at hazardous waste sites considered for cleanup under CERCLA. CERCLIS provides information on the following categories of sites: Currently on the Final NPL, Site is Part of an NPL Site, Deleted from the Final NPL (no further response is required to protect human health or the environment), Not on the NPL, and Removed from the Proposed NPL. Should a site not qualify for the NPL, it is given No Further Remedial Action Planned (NFRAP) status and archived on CERCLIS.

Information on Additional Criteria Regarding Brownfield Sites

The data bases described above provided a great deal of information regarding contaminated sites within the geographic boundaries of West Michigan Shoreline Regional Development Commission. They provided little or no information, however, regarding the other two criteria of the “brownfields” definition (commercial or industrial; abandoned, idle or under-used). Since not all contaminated sites are brownfields, all identified sites had to be checked to assure that they met the remaining requirements of the state definition of brownfields. The majority did not and, consequently, many contaminated sites were not included as brownfields in this document.

When websites did not indicate residential, commercial, or industrial uses, local knowledge and/or visual inspection was used to make the determination. Since none of the websites offered information on whether a site was being utilized, a wide range of methods was called upon to determine site usage. Resources included telephone books, the Polk Directory, internet research, local knowledge, and visual inspections. Undoubtedly, the most difficult determination was whether or not a facility was being under-utilized. This determination was based solely on local knowledge and media reports.

Several websites were helpful in identifying sites that were for sale and, generally, not being used. The Michigan Site Network; maintained by the Michigan Economic Development Corporation, DTE Energy, and the Michigan Economic Developers Association; provides an online database for commercial

and industrial properties wherein economic developers statewide can share data on properties that are for sale. The websites of Michigan Department of Environmental Quality (Available Brownfield Properties) and the Michigan Economic Development Corporation (Urban Opportunity Sites) also provide a great deal of information.

Limitations of Brownfields Inventory

The inventory must be regarded as a “point in time” listing since the supply of brownfields is constantly changing and since state and federal databases are updated frequently. Also, the information presented in the inventory regarding contamination and remediation is taken largely from the data bases and may or may not be current. Since the source of the information is always stated, a reference to the date the site was placed on the particular data base should be made to place the information in the right time frame.

In addition, it must be understood that the inventory does not include all of the brownfield sites in Lake, Mason, Muskegon, Newaygo, and Oceana Counties. It is impossible to identify all of them for, among others, the following reasons.

- The data bases do not include all of the potentially regulated sites of contamination. For instance, owners are not required to inform the MDEQ about “201” sites and can pursue cleanup independently.
- Site visits and field surveys could not be conducted throughout the entire region. Visually inspecting all streets in the region would be far too expensive of an effort and would still not guarantee inclusion of all sites.

It should also be understood that the inventory focuses more on abandoned and idle sites than on under-utilized sites because of the challenges in determining under-utilization. Finally, it should be recognized that there is no official designation process for the identification of a brownfield. Although several sources were utilized in compiling information regarding potential brownfields, these sources did not officially pronounce brownfield status. They, instead, identified contamination or property characteristics.

Information for Phases II and III

Internet research was also important to the creation of Phases II and III of this document due to the status of brownfield redevelopment as a relatively new and evolving concept. The websites of the Michigan Department of Environmental Quality (MDEQ) (<http://www.michigan.gov/deg>) and the Environmental Protection Agency (EPA) (www.epa.gov) provide current and comprehensive information on various aspects of brownfield redevelopment. Some topics include brownfield legislation, financing resources, funding requirements, and government contact information. Referral to these websites should be an initial step in any brownfield redevelopment project as should contact with local politicians and professionals.

The feasibility analyses contained in this document were done with a great deal of assistance from both sources.

Errors and Omissions

The process of combining information from the various sources and data bases proved to be an intimidating and tedious task due to the enormous amount of available data. In addition, major efforts had to be made to cross-reference data bases and avoid duplication. This process was complicated by the fact that properties frequently change names, as companies are sold and purchased, and sometimes change addresses. In fact, two of the five counties conducted county-wide re-numbering projects approximately fifteen years ago.

Because of this, confusion regarding sites can easily occur. Wherever possible, “alias” names are included in the inventory of contaminated sites to assist in site identification. The “aliases” do not indicate any association with contamination and are listed for community reference only. Properties might be locally known by current or historical ownership name, by address, or by proximity to a well known site.

While every effort was made to assure that all information presented in the document is correct; especially that related to contamination for specific sites, name changes, and address changes; there always exists a possibility for error. The West Michigan Shoreline Regional Development Commission and the state and federal agencies that funded the creation of the document (MDEQ, NOAA, and U.S.DOC-EDA) shall not be held liable for any errors and/or omissions.

INVENTORY OF BROWNFIELD SITES

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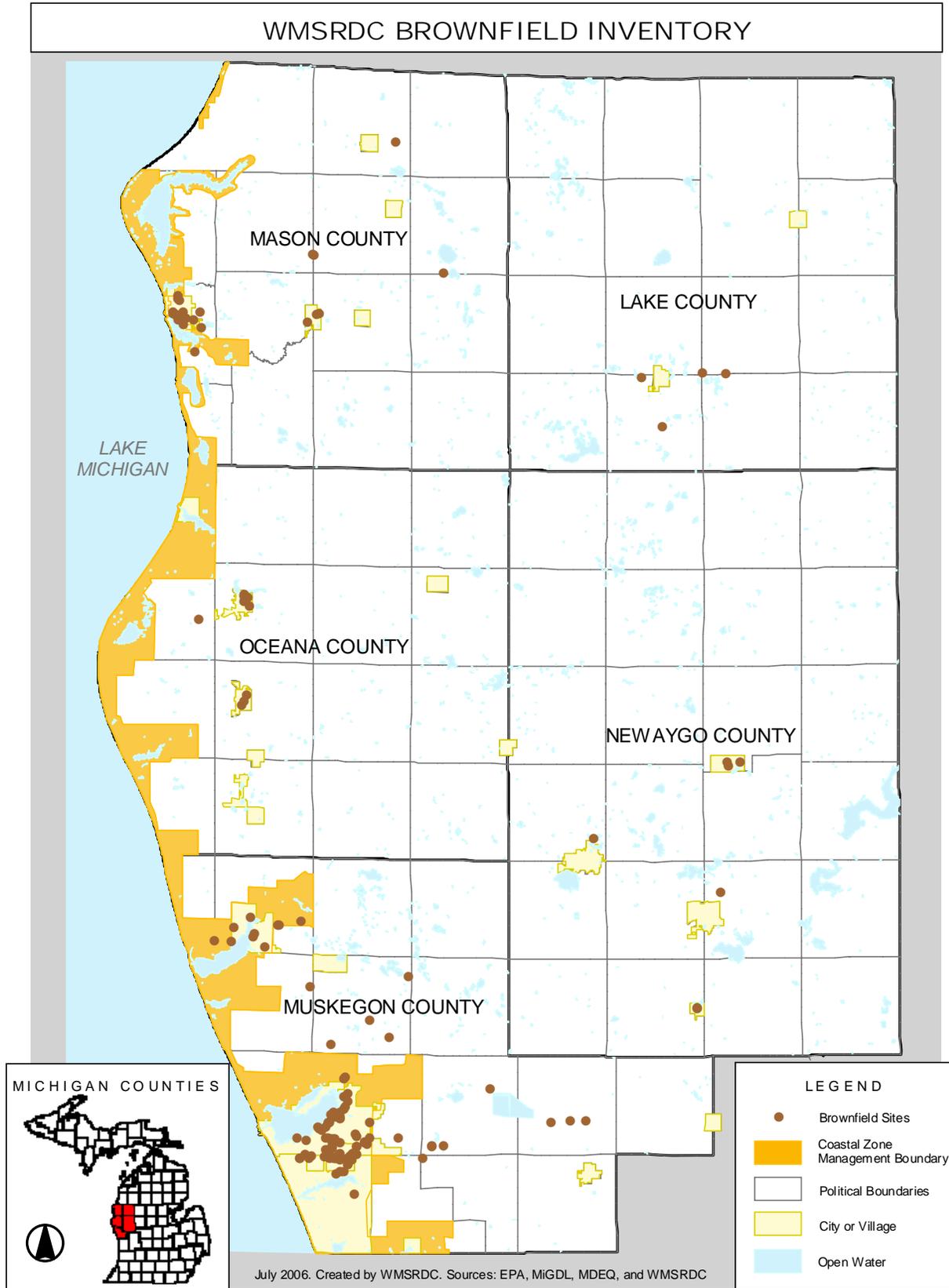
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Map 1



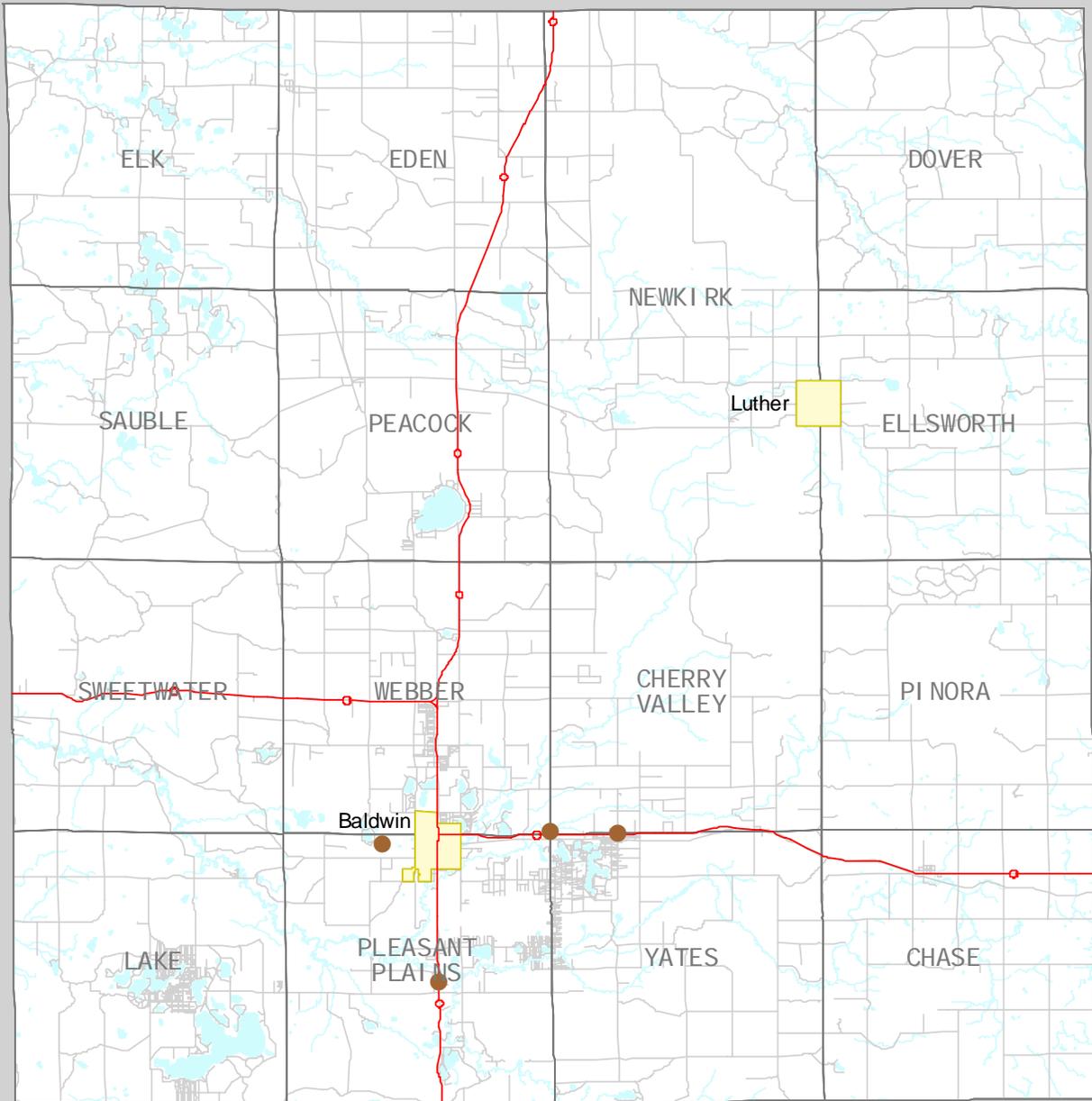
LAKE COUNTY



Groundwater treatment operation at Wash King Laundry site
Pleasant Plains Township, Lake County

Map 2

LAKE COUNTY BROWNFIELD SITES



0 1 2 3 Miles

July 2006
Created by WMSRDC
Sources: EPA, Michigan Geographic Data Library,
MDEQ, and WMSRDC



LEGEND

- Brownfield Sites
- Highways
- Political Boundary
- Village
- Open Water

CSX RAILROAD	
Alias	201: CSX Train derailment, Xmas '99.
Address	West of Baldwin Village near Hamlin and Townsend Lakes (8 th St.)
Municipality	Pleasant Plains Township
County	Lake County
SITE INFORMATION	
Size	
Past Use	Railroad transportation
Current Use	Railroad transportation
Proposed Use	
Contamination	201: 15 of 48 (2/15/05); Diesel Fuel.
Remediation	201: Interim response conducted.
BRA	Lake County Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 201

WASH KING LAUNDRY	
Alias	Pere Marquette Plat
Address	M-37, 3 miles south of Baldwin Village
Municipality	Pleasant Plains Township
County	Lake County
SITE INFORMATION	
Size	
Past Use	201: Laundry dry cleaner.
Current Use	Groundwater treatment operation
Proposed Use	Municipal water system proposed for area
Contamination	201: 29 of 48 (10/1/90); PCE. Superfund: Groundwater, sediment, and soil contamination (dry cleaning solvents and laundry wastes in seepage lagoons); Inorganics, Metals, PAH, Pesticides, VOC.
Remediation	201: Interim response in progress. Superfund: Dismantlement of the old laundromat; Construction of treatment plant (included activated carbon treatment for groundwater and soil vapor volatile compounds); Preliminary closeout report by EPA in 2001; "Construction complete" achieved 3/30/2001; Operation and maintenance of treatment systems by MDEQ; 5-year review process began in 2003. Survey: MDEQ designated contamination; Site came under federal Superfund designation by MDNR, and clean-up has begun under this program; Need for adequate well water supply remains.
BRA	Lake County Brownfield Redevelopment Authority
Comments	
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Part 201, EPA Superfund - Final NPL (9/83)

IDLEWILD GAS STATION	
Alias	Idlewild Real Estate Company
Address	N.W. corner of Forman Rd. and US-10 intersection
Municipality	Webber Township
County	Lake County
SITE INFORMATION	
Size	
Past Use	Gas station; Commercial property
Current Use	Vacant building
Proposed Use	213: No land use restrictions.
Contamination	213: Gasoline release.
Remediation	BF-UST: Building demolition, UST removal, and site remediation.
BRA	Lake County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (9/04)

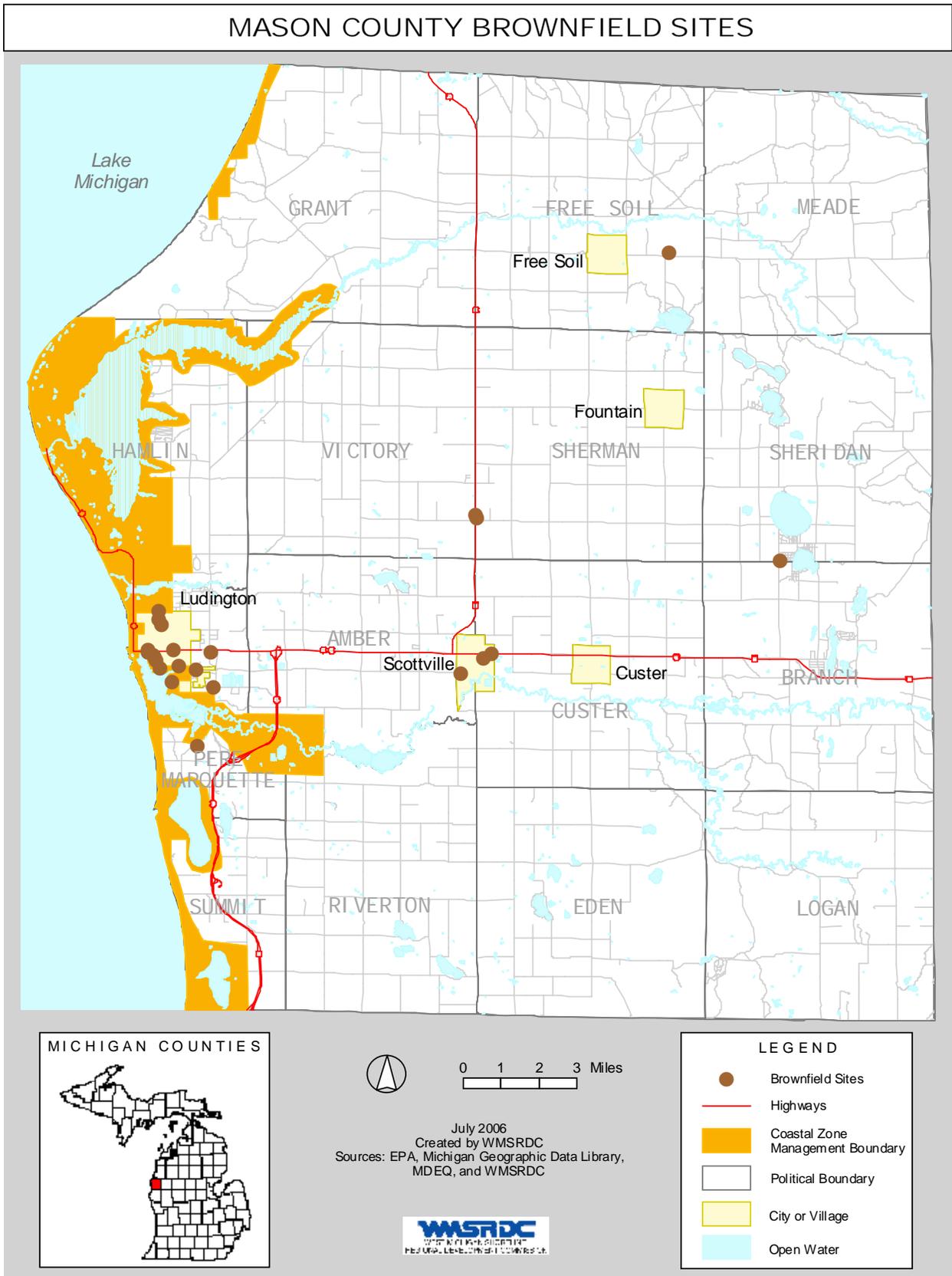
BROADWAY STREET ROW	
Alias	
Address	Broadway St. and US-10
Municipality	Yates Township (Idlewild)
County	Lake County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant
Proposed Use	213: No land use restrictions.
Contamination	BF-UST: Abandoned tanks in ROW. 213: Kerosene and gasoline release.
Remediation	213: Tier I evaluation. UST removal and site assessment.
BRA	Lake County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Closed (8/04)

MASON COUNTY



Harbison-Walker Refractories Company – Ludington Plant
Pere Marquette Township, Mason County

Map 3



AMERISTAR/ LUDINGTON HARBOR TERRACE	
Alias	Atkinson
Address	502 S. James St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Metal processing
Current Use	Building under renovation
Proposed Use	Harbor Town Loft Condominiums (34 units); 5,000 sq. ft. retail space
Contamination	201: 30 of 48 (10/25/2004); As, TCE, Hg.
Remediation	201: Interim response in progress. BF-UST: Closed.
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Brownfields-USTfields, MDEQ Part 201

BRYANT WOODS LLC	
Alias	
Address	6500 Bryant Rd. (at Washington Ave.)
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	37 acres (5 acres landfill)
Past Use	Landfill
Current Use	Vacant Land
Proposed Use	164 multi-family residences, 18 single family homes, and 2 commercial buildings
Contamination	201: 28 of 48 (5/19/05); Al, Fe, Mn
Remediation	201: Interim response in progress
BRA	Mason County Brownfield Redevelopment Authority
Comments	Ludington received a \$100,000 MDEQ Brownfield Redevelopment Grant for environmental remediation and facilitation of redevelopment in 5/06; Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201

C & O RAILROAD YARD/ CSX ROUNDHOUSE	
Alias	
Address	Sherman St. & First St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Railroad line-haul operating
Current Use	Vacant land
Proposed Use	
Contamination	201: 24 of 48 (9/17/04);TCE.
Remediation	201: Remedial action in progress (may include use restrictions, operation and maintenance and/or monitoring).
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – Archives (4/90)

CSX DEPOT	
Alias	Whitehall Industries Project
Address	705 S. Madison St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	45,000 sq. ft. building
Past Use	Railroad depot/service
Current Use	Vacant building
Proposed Use	Expansion of Whitehall Industries; Zoned for warehouse and light industry
Contamination	Soil and groundwater contamination (PAH's, metals)
Remediation	Approved brownfield plan
BRA	Mason County Brownfield Redevelopment Authority
Comments	Owned by CSX, then Whitehall Industries; Located within a Core Community
Source	WMSRDC Survey

FIVECO LLC	
Alias	
Address	409 W. Ludington Ave.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	
Current Use	Under Construction
Proposed Use	Condominiums and office space; 213 : No land use restrictions.
Contamination	213 : Unknown substances released.
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Open (7/03)

FORMER HANDY THINGS MANUFACTURING	
Alias	
Address	808 N. Rowe St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Metal coating and allied service
Current Use	Vacant land
Proposed Use	
Contamination	201 : 37 of 48 (9/8/04); PCE, TCE.
Remediation	201 : Interim response in progress.
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201

INDUSTRIAL PLATING	
Alias	
Address	902 N. Harrison St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Metal coating and allied service
Current Use	Vacant land
Proposed Use	
Contamination	201: 37 of 48 (9/15/04); CN, TCE, VC.
Remediation	201: Interim response in progress.
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – Archives (9/94)

MASON COUNTY SERVICES BUILDING	
Alias	
Address	1110 S. Washington Ave.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Hospital; Municipal offices
Current Use	Vacant building
Proposed Use	Residential; For sale
Contamination	BEA underway
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	Owned by Mason County; Located within a Core Community
Source	WMSRDC Survey

ONE LUDINGTON PLACE	
Alias	
Address	201 S. William St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	City building
Current Use	Building, under construction
Proposed Use	Condominiums and retail. 213: No land use restrictions.
Contamination	213: Unknown substance release
Remediation	213: Tier I evaluation
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Closed (4/96)

PERE POINT VILLAGE	
Alias	
Address	1000 S. Washington Ave.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	11 acres
Past Use	
Current Use	Vacant land; Multiple family zoning
Proposed Use	120 condominiums
Contamination	
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	Waterfront property; Located within a Core Community
Source	WMSRDC Survey, MiSite

SCHOONER'S LANDING	
Alias	
Address	106/202 Laura St.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	6 acres
Past Use	Industrial; Railroad switching station
Current Use	Vacant land
Proposed Use	For sale; 124 condominiums/marina
Contamination	
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	\$2,500,000; 700 ft of waterfront frontage; Municipal water and sewer available; Located within a Core Community
Source	WMSRDC Survey, MiSite

STAR WATCH CASE CO.	
Alias	Harbor Front Plaza
Address	306 S. Rath
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	Metal stamping
Current Use	Marina; Residential condominiums
Proposed Use	Marina; Residential condominiums
Contamination	201: 34 of 48 (10/20/04); Naphthalene, TCE, cis-1,2 DCE.
Remediation	Site reclamation grant for \$855,700 (9/9/93). 201: Remedial action in progress (may include land use restrictions, operation & management, and/or monitoring).
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (9/24/93)

TALISMAN ASSOCIATES LLC	
Alias	Jamesport Landing
Address	409 S. Rath Ave.
Municipality	City of Ludington
County	Mason County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant land
Proposed Use	Jamesport Landing (15 luxury condominiums)
Contamination	
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

DIVERSIFIED NATURAL PRODUCTS	
Alias	Stokely USA, Chiquita
Address	506 E. State St.
Municipality	City of Scottville
County	Mason County
SITE INFORMATION	
Size	6 acres
Past Use	Green bean cannery
Current Use	Mushroom factory and bio-based technology company
Proposed Use	Business expansion. 213: No land use restrictions.
Contamination	
Remediation	213: Type B evaluation.
BRA	Mason County Brownfield Redevelopment Authority
Comments	10-year Agricultural Processing Renaissance Zone beginning in January 2007
Source	WMSRDC Industrial Parks Study, WMSRDC Survey, MDEQ Part 213 Closed (8/93)

JENKIN'S BULK OIL	
Alias	
Address	201 S. Columbia Ave.
Municipality	City of Scottville
County	Mason County
SITE INFORMATION	
Size	
Past Use	Petroleum bulk stations and terminal
Current Use	Vacant land with foundation
Proposed Use	
Contamination	201: 20 of 48 (6/28/04); Xylenes, PNAs.
Remediation	201: Interim response in progress.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201

SCOTTVILLE DUMP	
Alias	
Address	First St.
Municipality	City of Scottville
County	Mason County
SITE INFORMATION	
Size	
Past Use	Refuse systems
Current Use	Vacated landfill
Proposed Use	
Contamination	201: 40 of 48 (6/18/91); As, Cd, CN, Pb, Lindane, Zn.
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201, EPA Superfund – Archives (9/94)

CAMP SAUBLE	
Alias	
Address	4058 Freesoil Rd.
Municipality	Free Soil Township
County	Mason County
SITE INFORMATION	
Size	
Past Use	Prison
Current Use	Abandoned prison
Proposed Use	
Contamination	201: 16 of 48 (4/20/05); Nitrate.
Remediation	201: Interim response in progress.
BRA	Mason County Brownfield Redevelopment Authority
Comments	Owned by the State of Michigan
Source	MDEQ Part 201

BOONSTRA OIL BULK PLANT	
Alias	
Address	52 South Jebavy Rd.
Municipality	Pere Marquette Township
County	Mason County
SITE INFORMATION	
Size	1 acre
Past Use	Petroleum bulk stations and terminal
Current Use	Vacant land, "outlot"
Proposed Use	For sale; Zoned C-2
Contamination	201: 24 of 48 (6/25/04); Benzene.
Remediation	201: Interim response in progress.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201

HARBISON-WALKER REFRACTORIES	
Alias	
Address	921 S. Pere Marquette Hwy.
Municipality	Pere Marquette Township
County	Mason County
SITE INFORMATION	
Size	47 acres
Past Use	Non-clay refractory
Current Use	Facility closed; Some buildings used for storage
Proposed Use	Demolition of most buildings on site; Zoned for industrial
Contamination	
Remediation	
BRA	Mason County Brownfield Redevelopment Authority
Comments	MiSite: Water Intake: Pere Marquette River Water Intake rated over 5.0 million gallons per day capacity, and over 5.0 million gallons per day process water discharge Customer Dedicated Substation with 14,400 volts delta service; Over 10 megawatts electrical capacity.
Source	MiSite

MASON COUNTY LANDFILL	
Alias	
Address	Inman Rd.
Municipality	Pere Marquette Township
County	Mason County
SITE INFORMATION	
Size	18 acres (10 acres landfill)
Past Use	Refuse systems; Primary users: Strait Steel and Wire, Citation Walther, Atkinson Manufacturing
Current Use	Vacant land
Proposed Use	Superfund: Deed restrictions, recreational or other purposes.
Contamination	201: 31 of 48 (10/1/90); Benzene, Fe, Pb. Superfund: Air, groundwater, soil, surface water contamination (metals, VOC's).
Remediation	Superfund: "Construction complete" 9/93; Soil/clay cap covers 18 acres; Continued groundwater monitoring and cap maintenance.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201, EPA Superfund – Deleted from final NPL (9/99)

FIRESIDE GROCERY	
Alias	
Address	2007 N. Benson Rd.
Municipality	Sheridan Township
County	Mason County
SITE INFORMATION	
Size	
Past Use	Convenience Store
Current Use	Vacant 1 st floor, residential second floor
Proposed Use	
Contamination	
Remediation	BF-UST: Adequate BEA.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (11/90)

SUGAR GROVE MARKET	
Alias	
Address	2810 N. US-31 (N.E. corner of Sugar Grove Rd./ N. US-31 intersection)
Municipality	Sherman Township
County	Mason County
SITE INFORMATION	
Size	1 acre
Past Use	Commercial
Current Use	Vacant; Mixed use zoning
Proposed Use	Commercial store, fast food restaurant; For sale (\$70,000)
Contamination	213: Gasoline and unknown substance release.
Remediation	MiSite: Site plan approved by MDEQ. BF-UST: Adequate BEA.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (9/92), MiSite

JILLIAN'S RESTAURANT (FORMER)	
Alias	
Address	2825 N. US-31 (N.W. corner of Sugar Grove Rd./ N. US-31 intersection)
Municipality	Victory Township
County	Mason County
SITE INFORMATION	
Size	
Past Use	Restaurant
Current Use	Vacant building
Proposed Use	
Contamination	213: Unknown substance release.
Remediation	BF-UST: Adequate BEA.
BRA	Mason County Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (12/91)

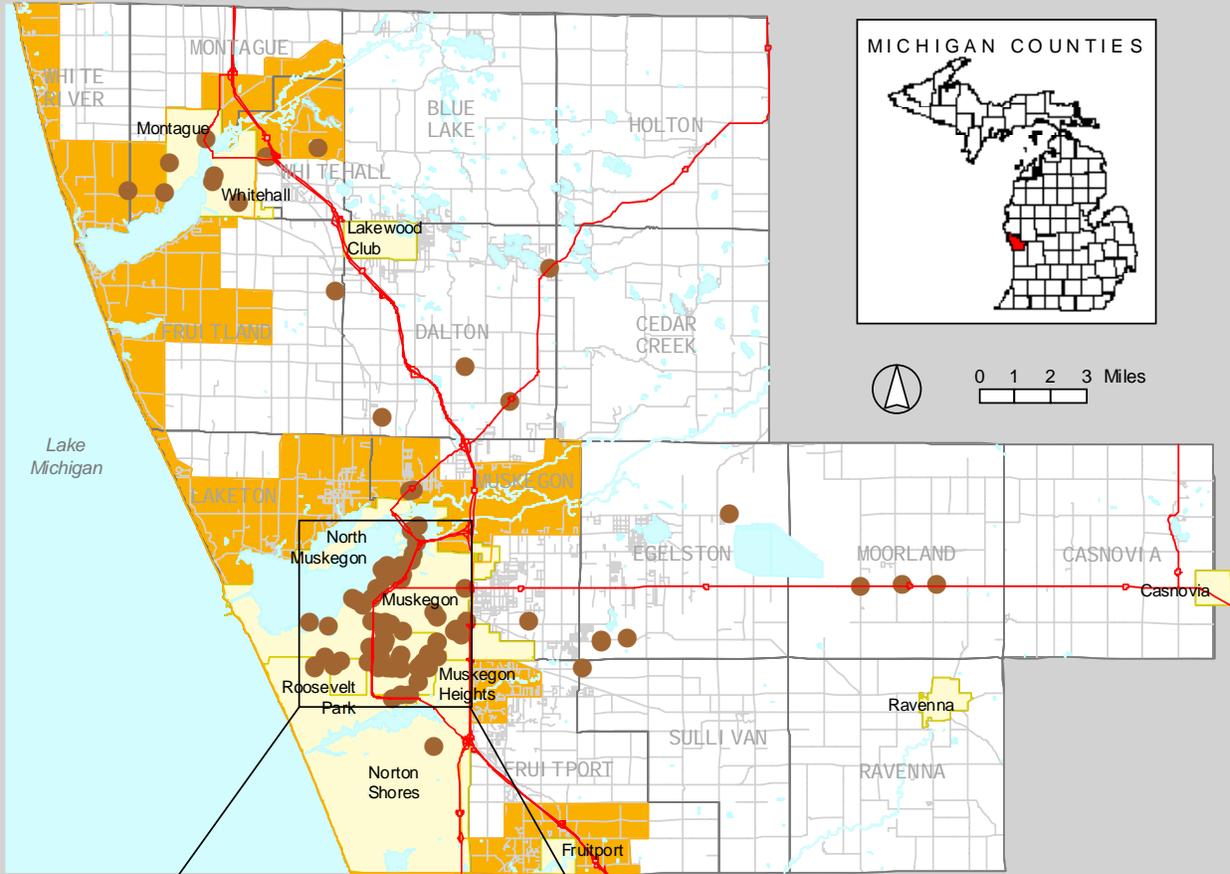
MUSKEGON COUNTY



Mobil Oil Bulk Terminal
City of Roosevelt Park, Muskegon County

Map 4

MUSKEGON COUNTY BROWNFIELD SITES



LEGEND

- Brownfield Sites
- Highways
- Coastal Zone Management Boundary
- Political Boundary
- City or Village
- Open Water

August 2006
 Created by WMSRDC
 Sources: EPA, Michigan Geographic Data Library,
 MDEQ, and WMSRDC



T-CAR	
Alias	
Address	8691 Water St.
Municipality	City of Montague
County	Muskegon County
SITE INFORMATION	
Size	.1 acres
Past Use	Auto repair; Gas station
Current Use	Auto repair
Proposed Use	
Contamination	
Remediation	Survey: Leaking tanks removed in the 80's.
BRA	Montague Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 213 Open (2/90)

TECH CAST/ CMI DEARBORN	
Alias	
Address	8110 Whitbeck Rd.
Municipality	City of Montague
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant building; Surrounded by Hayes-Lemmerz
Proposed Use	213: No land use restrictions.
Contamination	213: Gasoline release.
Remediation	213: Type B evaluation.
BRA	Montague Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 213 Closed (5/93), EPA Superfund – Archives (1/96)

AMAZON	
Alias	
Address	550 W. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Knitting factory, linen factory
Current Use	126 loft apartments; Retail space on street level
Proposed Use	Already developed
Contamination	
Remediation	MDEQ: CMI funds used for infrastructure improvements
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	Muskegon Land Use Plan – Site Assessment Fund (1997), MEDC Urban Opportunity Site

AMOCO OIL TERMINAL	
Alias	Delta Environmental Consult; 213: Amoco Oil - Lakeshore
Address	1640 Lakeshore Dr.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Petroleum bulk stations & terminal
Current Use	Delta Environment Consult
Proposed Use	
Contamination	201: 38 of 48 (7/9/04); Benzene, Ethylbenzene, MTBE, Toluene, Xylenes.
Remediation	201: Interim response in progress.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, MDEQ Part 213 Open (9/89)

ANACONDA	
Alias	Anaconda Copper, Anaconda Industrial Magnet Wire, Coles/Anaconda Industries
Address	1133 W. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial uses
Current Use	Vacant building (burned); Anaconda Flex-Space under construction
Proposed Use	Anaconda Flex-Space (storage, warehouse and very light industry incubator), Anaconda Towers (three 5-story apartment towers with 130 units)
Contamination	201: 36 of 48 (3/8/04); Cresol, Solvents.
Remediation	In progress (demolition of second floor and remodeling for industrial reuse); \$448,000 Site Reclamation Grant
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Not NPL (10/87)

BEACON RECYCLING	
Alias	
Address	1241 E. Keating Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Beacon Recycling
Proposed Use	N/A – Property in use
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

BRUNSWICK CORPORATION	
Alias	
Address	525 W. Laketon Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial uses
Current Use	Manufacturing; Appears underutilized
Proposed Use	
Contamination	201: 23 of 48 (7/9/04); Toluene.
Remediation	201: Interim response in progress.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (3/86)

CARPENTER BROTHERS BUILDING (FORMER)	
Alias	
Address	W. Western Ave. at Shoreline Dr.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	4.08 acres
Past Use	
Current Use	Vacant land; Parking lot
Proposed Use	For sale
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC CEDS, Muskegon Land Use Plan – Site Assessment Fund (1997)

CMS – CONSUMERS SITE	
Alias	B.C. Cobb
Address	151 N. Causeway
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	323 acres (297 in City of Muskegon; 283 undeveloped)
Past Use	Fly ash disposal
Current Use	Vacant land
Proposed Use	213: No land use restrictions.
Contamination	213: Diesel.
Remediation	213: Type A, Type B, Tier I evaluations.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – Site Assessment Fund (1997), MDEQ Part 213 Closed (5/96), EPA Superfund – Archives (9/94)

EDISON LANDING	
Alias	Continental Motors Corp; Continental Teledyne Corp; 213: Teledyne Continental Motors.
Address	Business Route U.S. 31 & Terrace St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	34 acres (16 condominium sites)
Past Use	Motor assembly operation
Current Use	Parmenter O'Toole (law office), Michigan Alternative and Renewable Energy Center (GVSU research), and vacant lots for residential and commercial
Proposed Use	MEDC: Zoned for Planned Unit Development (retail, residential, and office space); Commercial and residential lots for sale; Alternative energy technologies. 213: No land use restrictions.
Contamination	
Remediation	\$1,000,000 CMI Brownfield Redevelopment Grant. MEDC: Remedial action plan and BEA have been completed. 213: Type B evaluation.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Smart Zone; Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Closed (5/91), MEDC Urban Opportunity Site

GOETZE CORPORATION	
Alias	Muskegon Piston Ring; Federal Mogul. 213: A.E. Goetze
Address	201: 1839 6 th St. 213: 331 W. Laketon Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Fabricated metal products
Current Use	Manufacturing; Appears underutilized; Storage (AeroFoil, Intra City Dispatch, Ark Welding)
Proposed Use	
Contamination	201: 39 of 48 (7/8/04); TCE; cis-1,2 DCE. 213: Diesel release.
Remediation	201: Interim response in progress. 213: 11 tanks removed between 1959 and 1988.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, MDEQ Part 213 Open (9/98), EPA Superfund – Archives (1/96)

GRAND TRUCK RAILROAD DOCK	
Alias	Lakeshore Drive Area
Address	2100 Lakeshore Dr.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant land and restoration area; Dock for Milwaukee Clipper
Proposed Use	
Contamination	201: 32 of 48 (7/8/04); Benzene, Ethylbenzene, Naphthalene, Toluene, Xylenes.
Remediation	201: Interim response in progress.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community; Adjacent to a 4.6 acre boat launch ramp and gravel parking lot
Source	MDEQ Part 201, EPA Superfund – Archives (9/87)

GREAT LAKES DIE CAST	
Alias	Dilesco
Address	701 W. Laketon Ave./ 1806 Beidler St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Industrial
Proposed Use	N/A – Property in use
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

IROQUOIS HOODS	
Alias	Gibson Sheet Metal
Address	2100 Burton
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant buildings
Proposed Use	For sale
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	EPA Superfund – Archives (2/90)

J & C CONSTRUCTION COMPANY	
Alias	Havit Supplies West/ Grand Rental
Address	30 E. Clay St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	J & C Construction Company
Current Use	Havit Supplies West/ Grand Rental, Appears under-utilized
Proposed Use	
Contamination	BF-UST: Abandoned UST's. 213: Gasoline and heating oil release.
Remediation	BF-UST: Abandoned UST's removed; Completed.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (7/00)

LORIN INDUSTRIES	
Alias	Lou Anodizers Inc., Coil Anodizers Inc.
Address	1960 Roberts St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Manufacturing; Appears underutilized
Proposed Use	
Contamination	201: 24 of 48 (11/16/05); Al, Ni, Na, Sulfate.
Remediation	201: Interim response in progress.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – Archives (9/94)

MICHCON – LAKEY FOUNDRY	
Alias	
Address	Shoreline Dr. @ 1 st St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Foundry
Current Use	Commercial (hotel, restaurant, vacant office building, marina)
Proposed Use	
Contamination	201: 38 of 48 (11/30/05); Benzene, Pb, Toluene, Xylenes, Zn.
Remediation	201: Interim response in progress.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201

MICHIGAN CONSOLIDATED MUSKEGON	
Alias	
Address	Morris Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Coal gasification
Current Use	Parking lot, vacant land
Proposed Use	
Contamination	Groundwater contamination from coal tar related wastes
Remediation	Partially remediated in the 90's; DTE: Constructing massive underground clay wall and groundwater treatment system.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community; Owned by DTE
Source	EPA Superfund – Archives (8/90)

MICHIGAN FOUNDRY SUPPLY	
Alias	Heritage Landing (1051 7 th St.)
Address	700 W. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Recreation (Heritage Landing)
Proposed Use	Recreation (Heritage Landing-Phase IX), including a water feature
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Site has been redeveloped and renamed Heritage Landing; Located within a Core Community
Source	WMSRDC CEDS, EPA Superfund – Archives (8/89)

MR. LUBE/ MR. AUTO WASH	
Alias	Greene's Super Lube, Keith's Wesco Service, Inc.
Address	1401 E. Apple Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Auto lubrication service and car wash
Current Use	Vacant buildings
Proposed Use	For sale. 213: No land use restrictions.
Contamination	213: Gasoline and unknown substance released.
Remediation	213: Tier I evaluation; Closed (10/99).
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Open (12/99)

MSB II	
Alias	National City Building
Address	715 Terrace St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Bank and vacant office space
Proposed Use	Bank and office space
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Building was constructed and office space became available for lease in early 2006; Located within a Core Community
Source	WMSRDC Survey

MUSKEGON BOILER WORKS	
Alias	
Address	1204 8 th Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	26 rental units – 1,000 sq. ft. each; 3,000 sq. ft. community space
Past Use	Manufacturing plant for boilers; Sawmill machinery repair
Current Use	Art Works of Muskegon (arts incubator with residences, studio facilities, and galleries)
Proposed Use	N/A
Contamination	Groundwater
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Building was refurbished and began renting apartments in early 2006; Renaissance Zone; Federal housing tax credit; Michigan brownfield tax credit; Michigan historic building tax credit; Located within a Core Community
Source	WMSRDC Survey, MEDC Urban Opportunity Site

MUSKEGON MALL	
Alias	City Center
Address	Western Ave. (Downtown Muskegon)
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	23 acres
Past Use	Shopping mall
Current Use	Vacant lots and three vacant buildings
Proposed Use	Retail/Office and residential space
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	SBT Credits, Tax Increment Financing Authority (cleanup reimbursement), Renaissance Zone, BRA tax, Federal Historic Building tax credits, New Market tax credits; Located within a Core Community
Source	WMSRDC CEDS (city, county, and Downtown Development Corporation), WMSRDC Survey, MEDC Urban Opportunity Site

MUSKEGON RAG & METAL	
Alias	
Address	10 E. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Shoreline Drive/vacant land
Proposed Use	
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – Site Assessment Fund (1997)

NORDCO DRUM – GETTY ST	
Alias	
Address	1708 Getty St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	2.5 acres
Past Use	
Current Use	Vacant lot
Proposed Use	Business incubator; Expansion of neighboring industry
Contamination	201: 28 of 48 (5/21/04); Benzene, Ethylbenzene, Toluene, Xylenes.
Remediation	201: Remedial action in progress (may include use restrictions, operation and maintenance and/or monitoring).
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – Archives (10/91)

NORTHERN MACHINE TOOL	
Alias	
Address	761 Alberta Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Industrial
Proposed Use	N/A
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Brownfield grant used for expansion on adjacent sites; Located within a Core Community
Source	WMSRDC Survey

OLD CITY OF MUSKEGON DUMP	
Alias	
Address	East of Causeway Drive
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Landfill
Current Use	Vacant land
Proposed Use	Recreation (soccer fields, pavilion)
Contamination	201: 17 of 48 (8/2/91); Domestic commercial and light industrial.
Remediation	201: Inactive – No actions taken to address contamination.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – Archives (3/90)

OLD MUSKEGON WASTEWATER TREATMENT PLANT	
Alias	
Address	35 Ottawa St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Wastewater treatment plant
Current Use	Abandoned buildings
Proposed Use	
Contamination	201: 28 of 48 (2/14/05); Arsenic.
Remediation	201: Interim response conducted.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201

PRI-PER INVESTMENT COMPANY PROPERTY	
Alias	
Address	4 E. Webster Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant land
Proposed Use	
Contamination	213: Gasoline and heating oil release.
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – LUST (1997), MDEQ Part 213 Open (10/93)

REED TIRE SERVICE	
Alias	9 E. Webster Ave
Address	
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant building
Proposed Use	
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – LUST (1997)

SEALED POWER TAPPET DIVISION	
Alias	W.A. Thomas; Johnson Products; 213: Sealed Power Hy-Lift Division
Address	1185 E. Keating Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Industrial; Appears underutilized
Proposed Use	213: No land use restrictions.
Contamination	213: Diesel, used oil, and unknown substance release.
Remediation	213: Tier I evaluation.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – LUST (1997), MDEQ Part 213 Open (10/96), EPA Superfund – Archives (2/90)

SEALED POWER TECH	
Alias	Sealed Power Co., Dana Corporation-Perfect Circle Division
Address	2001 Sanford St.
Municipality	City of Muskegon and City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Manufacturing; Appears underutilized
Proposed Use	213: No land use restrictions.
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – 201 (1997), MDEQ Part 213 Open (8/90), EPA Superfund – Archives (3/90)

SEALMORE CORPORATION	
Alias	
Address	423 Ottawa St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Plating facility (building condemned)
Current Use	Vacant land
Proposed Use	
Contamination	4,216 gallons of liquid hazardous wastes including caustic liquid, acids, flammable liquid, and chrome contaminated liquids (and solid debris)
Remediation	Removal only site (no site assessment work needed); Cleaned June 2003
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Building couldn't be secured against unauthorized entry; Located within a Core Community
Source	EPA Superfund – Not NPL (7/03)

SMITH PACKING	
Alias	
Address	504-509 Young Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	7.03 acres
Past Use	Slaughterhouse and meat packing plant
Current Use	Vacant land
Proposed Use	For sale; Zoned for industrial
Contamination	
Remediation	MDEQ ABP: UST removed in 2000; Buildings demolished; Environmental concerns addressed. BF-UST: Closed.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Municipal water/sewer available; Railroad access; Renaissance Zone; Located within a Core Community
Source	MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields, MiSite

TERRACE STREET LOTS	
Alias	Teledyne
Address	Terrace St. at Morris Ave. (between Shoreline Dr. and Western Ave.)
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	9.5 acres
Past Use	Industrial
Current Use	Vacant land
Proposed Use	Farmer's market; Fire station
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Land Use Plan – Site Assessment Fund (1997)

THE WATERMARK	
Alias	Shaw-Walker (1404 Division St.); Knoll Group
Address	930 Washington Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	16 acres; 5,000 sq. ft. retail/office space
Past Use	Furniture manufacturing
Current Use	53 Residential condominiums/ vacant industrial building
Proposed Use	Office space and additional residential units. 213: No land use restrictions.
Contamination	213: Unknown substance released.
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority; Renaissance Zone
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Closed (11/91), MEDC Urban Opportunity Site

VERPLANK	
Alias	
Address	205 E. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	
Proposed Use	
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

WEST MICHIGAN STEEL FOUNDRY	
Alias	Westran, Michigan Steel Foundry
Address	1148 W. Western Ave./ 1204 W. Western Ave.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Foundry
Current Use	Foundry
Proposed Use	Relocation of existing foundry to industrial park and commercial development of property
Contamination	
Remediation	
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC CEDS, Muskegon Land Use Plan – Site Assessment Fund (1997)

WEST SHORE PAVILION	
Alias	
Address	716 Nims St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant land
Proposed Use	
Contamination	201: 38 of 48 (8/9/04); Pb, TCE, Metals.
Remediation	201: Interim response conducted – no further activities anticipated. BF-UST: Building demolition; Closed; Completed.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Brownfields-USTfields, MDEQ Part 201

WHITTAKER ELECTRIC	
Alias	
Address	1850 Park St.
Municipality	City of Muskegon
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial Supplier – transformers
Current Use	Incubator with several small industrial companies in the existing building
Proposed Use	
Contamination	201: 21 of 48 (8/25/04); Phenanthrene, PCB's.
Remediation	201: Interim response conducted – no further activities anticipated.
BRA	City of Muskegon Brownfield Redevelopment Authority
Comments	Site is located within the 55 acre Whittaker Electric Renaissance Subzone; Located within a Core Community
Source	MDEQ Part 201

ALL PHASE ELECTRIC	
Alias	
Address	580 W. Sherman Blvd. (at Glade St. intersection)
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant building
Proposed Use	
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, EPA Superfund – Archives (9/87)

ANCOR CORPORATION	
Alias	
Address	339 W. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Light industrial facility
Current Use	Vacant building
Proposed Use	For sale
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

ASHENDORF	
Alias	
Address	2812 & 2814 Peck St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Commercial (motel)
Current Use	Vacant land
Proposed Use	
Contamination	
Remediation	Buildings demolished. BF-UST: Closed; All state actions are complete; Awaiting contract closeout and site restoration activities.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Tax reverted to the state in 2001; Deeded to the city in 2003, Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields

BENNETT PUMP	
Alias	
Address	2740 Wood St. (both east & west of Wood St.)
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	10 acres
Past Use	Industrial
Current Use	Vacant land
Proposed Use	Part for Department of Public Works and part for sale
Contamination	213: Numerous unknown substances released; Hydrocarbon and chlorinated solvent compounds
Remediation	\$1 million CMI funded cleanup in 2004; 22 UST's and 3 vaults removed. BR-UST: In progress.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Renaissance Zone; City owned; Located within a Core Community
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields, MDEQ Part 213 Open (8/90)

CENTRAL CARTAGE/ INDUSTRIAL WELDERS	
Alias	
Address	2305 Park St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant land with a small shed
Proposed Use	
Contamination	
Remediation	Phase I ESA completed
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

CITY/ PROCOM	
Alias	
Address	2205 Getty St./ 755 E. Hackley Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Muskegon Family Care (medical facility)
Proposed Use	N/A
Contamination	Contamination indicated through Phase I and II ESA conducted at Wagner Transportation site
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Site has been combined with Wagner Transportation site and redeveloped into a medical care facility; Located within a Core Community
Source	WMSRDC Survey

CWC PLANT #1	
Alias	Textron Inc.; CWC Castings Division
Address	Broadway Ave. & Sanford St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	
Proposed Use	
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, EPA Superfund – Archives (12/89)

DEPARTMENT OF PUBLIC WORKS	
Alias	
Address	3124 Wood St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Municipal
Current Use	Municipal
Proposed Use	Residential; Zoned D-2 Industrial. 213: No land use restrictions. CEDs: Relocation of Department of Public Works.
Contamination	213: Gasoline released.
Remediation	213: Type B evaluation.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	WMSRDC CEDs, WMSRDC Survey, MDEQ Part 213 Open (12/90)

DON NAP SERVICE CENTER	
Alias	
Address	431 E. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant building
Proposed Use	
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

ELECTRIC EQUIPMENT AND SUPPLY COMPANY	
Alias	
Address	2711 McIlwraith St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Light industrial and commercial
Current Use	Vacant land
Proposed Use	
Contamination	
Remediation	Survey: Phase I ESA.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Access to railroad; Located within a Core Community
Source	WMSRDC Survey

FRONTIER OF AMERICA	
Alias	
Address	2226 Temple St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Redi-Rental storage lot
Proposed Use	N/A – in use
Contamination	BADPR: Site identified as an RCRA small quantity generator of hazardous waste
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, Muskegon Heights Brownfield Assessment Demonstration

HOLIDAY INN AREA	
Alias	Days Inn, Holly's Bistro
Address	3450 Hoyt St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	2.43 acres
Past Use	Conference Center
Current Use	Vacant building attached to Days Inn
Proposed Use	For sale; Zoned C-3 Highway Commercial
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	Muskegon Heights Brownfield Assessment Demonstration, EPA Superfund – Archives (9/87)

JAMES CARADINE	
Alias	
Address	2528 Superior St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant and dilapidated building
Proposed Use	
Contamination	
Remediation	BF-UST: UST removal and site assessment.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Brownfields-USTfields

JESSE TURNER	
Alias	
Address	2545 Dyson St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	.14 acres
Past Use	
Current Use	Vacant lot and building
Proposed Use	For sale; Zoned for residential
Contamination	
Remediation	BF-UST: Cancelled.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Brownfields-USTfields, MiSite

LABORATORY FURNITURE	
Alias	Downtown Development Authority; Alaska Refrigerator Company; Borg-Warner
Address	150 W. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Appliance manufacturing facility
Current Use	Vacant lot
Proposed Use	Centennial Retail Plaza; Zoned C-2 Central Business
Contamination	201: 29 of 48 (6/29/04); Al, Cd, Pb, Mn, Methylphenols, TCE, Zn.
Remediation	\$37,000 CMI Site Assessment Grant. 201: Inactive – no actions taken to address contamination.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Part 201

MARATHON OIL STATION	
Alias	201: Commercial Wells Getty St.
Address	2585 Getty St.; 201: 2525-2601 Getty St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant building
Proposed Use	For sale
Contamination	201: 28 of 48 (9/23/90); Cu, PCE, Zn; Plating and polishing.
Remediation	Phase I ESA. 201: Interim response in progress. BF-UST: Cancelled.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	BADPR: Likely contamination from neighbor (Peerless Plating) and other surrounding businesses; Located within a Core Community
Source	WMSRDC Survey, Muskegon Heights Brownfield Assessment Demonstration, MDEQ Part 201

PECK STREET LANDFILL	
Alias	
Address	N.E. corner of Peck St. & Seaway Dr. intersection
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	
Proposed Use	
Contamination	201: 36 of 48 (7/18/05), PCB's
Remediation	201: Evaluation in progress
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Part 201, EPA Superfund – Archives (4/90)

PORT CITY MACHINE AND TOOL	
Alias	
Address	560 E. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Vacant building
Proposed Use	For sale
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, Muskegon Heights Brownfield Assessment Demonstration

RELIABLE AUTO BODY	
Alias	
Address	480 W. Sherman Blvd.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Auto repair business with vacant land to the west
Proposed Use	
Contamination	
Remediation	Survey: Due diligence
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

RITA DUCA	
Alias	
Address	183 W. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Restaurant; Service station; L & S Auto Cycle Repair and Supply
Current Use	Abandoned, vacant building
Proposed Use	213: No land use restrictions.
Contamination	BF-UST: Abandoned tanks. 213: Unknown substance released.
Remediation	213: Tier I evaluation. BF-UST: In progress.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Brownfields-USTfields, MDEQ Part 213 Closed (1/05)

ROSE BAKER	
Alias	The Meat Store
Address	251 W. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Service station; The Meat Store
Current Use	Vacant building
Proposed Use	
Contamination	BF-UST: Abandoned UST's.
Remediation	BF-UST: Building demolition. MDEQ CMI: \$100,000 for demolition and UST removal.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, MDEQ Brownfields-USTfields

SEAWAY LANDFILL	
Alias	
Address	S.E. corner of Peck St. & Seaway Drive intersection
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	12.9 acres
Past Use	
Current Use	
Proposed Use	
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	Muskegon Heights Brownfield Assessment Demonstration, EPA Superfund – Archives (9/87)

SECURITY STEEL CRAFT CORPORATION	
Alias	
Address	2636 Sanford St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Aluminum and brass foundry and metal working facility
Current Use	
Proposed Use	
Contamination	
Remediation	Survey: Phase I ESA
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

SHORELINE STORAGE/ NORTHWEST PIPE CLEANERS/ CWC	
Alias	CWC Plant #4
Address	500 W. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Foundry; Other small businesses
Current Use	
Proposed Use	
Contamination	BADPR: Building is functionally obsolete; Site identified as a Resource Conservation and Recovery Act Treatment, Storage and Disposal (RCRA TSD) facility for activities conducted by Northwest Pipe Cleaners.
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration, EPA Superfund – Archives (12/87)

SYSTECH LIQUID TREATMENT CORPORATION	
Alias	Systech, Inc., Tricil, Laidlaw, Safety-Kleen
Address	3030 Wood St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	20 acres
Past Use	Muskegon Heights wastewater treatment facility (1917-1974); Systech metal finishing waste treatment (1975-1983); Tricil acquired site in 1983; Laidlaw aquired site in 1990's; Safety-Kleen purchased site in early 1990's
Current Use	Abandoned
Proposed Use	Medium-income residential development; New Urbanist residential development by Mona Terrace, LLC.; Zoned D-2 Industrial
Contamination	Former RCRA site; Documented environmental releases (two groundwater pressure relief valve leaks) and permit violations under Systech ownership.
Remediation	Laidlaw performed closure (environmental clean-up) activities such as decontamination of tanks, removal of contaminated soil, and pursual of voluntary corrective action. Site assessment conducted in the 1990's
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	EPA RCRA Brownfield Prevention Pilot (2001); Owned by the City of Muskegon Heights; Located within a Core Community; Renaissance Zone
Source	WMSRDC Survey, EPA Superfund – Archives (1/84)

UNIVERSAL CAMSHAFT/ GILBERT ASHENDORF	
Alias	Intra City Dispatch
Address	350 E. Broadway Ave.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Industrial
Current Use	Vacant building
Proposed Use	MiSite: For sale; \$60,000.
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community; Renaissance Zone
Source	MiSite, Muskegon Heights Brownfield Assessment Demonstration

WAGNER TRANSPORTATION	
Alias	
Address	755 E. Hackley Ave./ 2205 Getty St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	.57 acres
Past Use	Truck-washing, maintenance garage, and gas station
Current Use	Medical facility (Muskegon Family Care, 2201 Getty St.)
Proposed Use	N/A – already developed
Contamination	BADPR: Former RCRA hazardous waste transporter
Remediation	\$500,000 CMI funded cleanup in 2003. BF-UST: Closed.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Site has been combined with ProCom site and redeveloped into a medical care facility at 2201 Getty St.; Located within a Core Community
Source	WMSRDC Survey, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields, MiSite, Muskegon Heights Brownfield Assessment Demonstration

WILLIAM TURNBULL	
Alias	
Address	2232 Waalkes St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Redi-Rental storage lot
Proposed Use	Redi-Roll-off (containers)
Contamination	
Remediation	
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	Muskegon Heights Brownfield Assessment Demonstration

2504 DYSON ST.	
Alias	
Address	2504 Dyson St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Residential
Current Use	Vacant lot
Proposed Use	Zoned for commercial
Contamination	
Remediation	Buildings demolished. BF-UST: Cancelled.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	Tax reverted; Located within a Core Community
Source	MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields

2508 PECK ST.	
Alias	
Address	2508 Peck St.
Municipality	City of Muskegon Heights
County	Muskegon County
SITE INFORMATION	
Size	.14 acres
Past Use	Commercial building (abandoned store)
Current Use	Vacant lot
Proposed Use	For sale; Zoned for mixed use
Contamination	
Remediation	Building demolished; Property readied for development. BF-UST: Closed.
BRA	Muskegon Heights Brownfield Redevelopment Authority
Comments	City owned; Available municipal water/sewer service; Located within a Core Community
Source	WMSRDC CEDS (Peck St. Redevelopment), Muskegon Heights Brownfield Assessment Demonstration, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields, MiSite

CHEVRON FACILITY	
Alias	Chevron Terminal
Address	1781 W. Sherman Blvd.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Abandoned
Proposed Use	
Contamination	201: 39 of 48 (2/14/05); Benzene, Ethylbenzene, Pb, Toluene, Xylenes.
Remediation	201: From database implementation.
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Available municipal water/sewer service; Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201

CWC TEXTRON PLANT #3	
Alias	Campbell, Wyant & Cannon Co.
Address	2672 Henry St.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	201: Primary metal industries.
Current Use	Vacant lot
Proposed Use	213: No land use restrictions.
Contamination	201: 37 of 48 (3/8/05); F, Fe, Mn, Na.
Remediation	201: From database implementation. 213: Type A evaluation.
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, MDEQ Part 213 Closed (9/92), EPA Superfund – Archives (12/87)

EBW PETROLEUM EQUIPMENT	
Alias	
Address	2814 McCracken St.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	3.45 acres; 74,985 sq ft manufacturing plant
Past Use	Electronic equipment and components production
Current Use	
Proposed Use	For sale (\$500,000)
Contamination	201: 31 of 48 (7/8/04).
Remediation	201: Interim response in progress.
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Available municipal water and sewer service; Located within a Core Community
Source	MDEQ Part 201, Mi Site

HILE SCHOOL	
Alias	
Address	891 E. Hile Rd.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	13 acres
Past Use	Elementary School
Current Use	Vacant land with several homes under construction
Proposed Use	Torrie Estates (36 lots - single family residential)
Contamination	
Remediation	
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

KAYDON	
Alias	
Address	2860 McCracken St.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	Manufacturing; Appears underutilized
Proposed Use	
Contamination	201: 28 of 48 (12/11/90); CN.
Remediation	201: Interim response in progress.
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	MDEQ Part 201, EPA Superfund – NPL (2/21/90)

ROGER'S SAWMILL	
Alias	
Address	Wickham Dr. @ W. Sherman Blvd.
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	
Current Use	
Proposed Use	
Contamination	
Remediation	
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey

THOMPSON INC. LANDFILL	
Alias	Hills Department Store, Irwin's Furniture
Address	Seminole Rd. @ Seaway Drive
Municipality	City of Norton Shores
County	Muskegon County
SITE INFORMATION	
Size	MEDC: 17 acres. Survey: Hills/Irwin's site – 7 acres.
Past Use	Landfill; Commercial retail
Current Use	Vacant building (former Hills department store) and new construction
Proposed Use	Eastowne of Norton Shores (residential and commercial), Watercrest Condominiums (56 units)
Contamination	Foundry sand, fly ash and related material. 201: 33 of 48 (10/24/05); As, Cd, Pb.
Remediation	201: Evaluation in progress.
BRA	Norton Shores Brownfield Redevelopment Authority
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (3/90)

MOBIL	
Alias	Mobil Oil Bulk Terminal #21012; Mobil Oil Company Socony
Address	2725 Glenside Blvd.
Municipality	City of Roosevelt Park
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Petroleum bulk stations & terminal
Current Use	Vacant land
Proposed Use	
Contamination	201: 26 of 48 (7/1/04); Benzene, Ethylbenzene, Xylenes.
Remediation	201: Interim response in progress.
BRA	Roosevelt Park Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (11/87)

FIVE-A-OIL	
Alias	5A Oil
Address	908 Lakeview St.
Municipality	City of Whitehall
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	BF-UST: Bulk facility.
Current Use	Vacant lot with a shed
Proposed Use	213: No land use restrictions.
Contamination	213: Gasoline and diesel release.
Remediation	BF-UST: In progress; Abandoned USTs; Piping removed; Free product (loose contamination) removal. MDEQ CMI: \$100,000 for demolition and UST removal.
BRA	City of Whitehall Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Brownfields-USTfields, MDEQ Part 213 Open (2/02)

MUSKEGON CHEMICAL COMPANY	
Alias	Koch Chemical Company
Address	1725 Warner St.
Municipality	City of Whitehall
County	Muskegon County
SITE INFORMATION	
Size	19.6 acres
Past Use	Industrial organic chemicals production (1975-1991)
Current Use	2 storage buildings; Air sparge system
Proposed Use	Property will likely be back on the market within a few years following environmental remediation (as of 2006). Superfund: Surrounding area is zoned for commercial use.
Contamination	201: 37 of 48 (9/15/90); 1,2 DCA, Chlorobenzene, PCE. Superfund: Groundwater contamination (volatile organic compounds) resulting from a drainage system leak within the manufacturing facility.
Remediation	Former chemical plant demolished and replaced with a foot of sand fill, a protective liner, and a foot of soil. 201: Interim response in progress. Superfund: Groundwater treatment via an air-sparging system; Soil treatment by soil vapor extraction; "Construction complete" (6/26/97); Last 5-year review in 2003 deemed remedy to be "protective".
BRA	City of Whitehall Brownfield Redevelopment Authority
Comments	Property managed by Flint Hills
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Final NPL (2/90)

WHITEHALL LEATHER COMPANY	
Alias	Genesco
Address	900 Lake St.
Municipality	City of Whitehall
County	Muskegon County
SITE INFORMATION	
Size	33 acres
Past Use	Leather tanning & finishing
Current Use	
Proposed Use	200 Residential condominiums, marina – 150 slips, Southshore Redevelopment
Contamination	Water and soil contamination. 201: 41 of 48 (10/14/05); Sb, Benzo(a)pyrene, Hg.
Remediation	Industrial cleanup; \$1,250,000 CMI Grant (\$850,000 Brownfield Redevelopment Grant and \$400,000 Waterfront Redevelopment Grant); \$748,000 CMI Brownfield Redevelopment Loan. 201: Interim response in progress. Superfund: Expanded site inspection (8/95).
BRA	City of Whitehall Brownfield Redevelopment Authority
Comments	City awarded \$1.25 million grant and a \$748,000 loan to revitalize this site
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Not NPL (8/95)

DUELL & GARDNER LANDFILL	
Alias	
Address	1285 E. Bard Rd.
Municipality	Dalton Township
County	Muskegon County
SITE INFORMATION	
Size	Superfund: 40 acres
Past Use	Municipal landfill (1940's-1975). 201: Refuse systems.
Current Use	Vacant land
Proposed Use	
Contamination	201: 33 of 48 (9/24/90); 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Benzo(a)anthracene, Benzo(k)fluoranthene, Carbon Tet, Chrysene, Indeno(1,2,3-cd)pyrene, DMA, PCP, PBB's, PCB's, PCE, BEHP, Phthalates. Superfund: Debris, groundwater, soil, solid waste contamination; Base neutral acids, organics, PAH, PCBs, Pesticides, VOC.
Remediation	201: Interim response in progress. Superfund: EPA/MDEQ remedial action completed in 2001; 7 cubic acres of solid-based media have been treated, stabilized, or removed; Last 5-year review in 2005 deemed remedy to be "protective in the short term".
BRA	Dalton Township Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201, EPA Superfund – Final NPL (9/83)

MARATHON OIL PRODUCTS TERMINAL	
Alias	Marathon Petroleum – Holton
Address	3005 Holton Rd.
Municipality	Dalton Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	201: Petroleum bulk stations and terminal.
Current Use	
Proposed Use	
Contamination	201: 37 of 48 (6/30/04); fuel oil, heating oil.
Remediation	201: Interim response in progress.
BRA	Dalton Township Brownfield Redevelopment Authority
Comments	
Source	MDEQ Part 201, MDEQ Part 213 Open (10/90), EPA Superfund – Archives (10/85)

OTT/ STORY/ CORDOVA CHEMICAL	
Alias	Cordova Site; Cordova Chemical Company of Michigan; Ott Story & Corn Products Chemical Company
Address	500 Agard Rd.
Municipality	Dalton Township
County	Muskegon County
SITE INFORMATION	
Size	211 acres, 20 of which is composed of the former production area
Past Use	Organic chemical production facility (1957-1986). 201: Chemicals and allied products.
Current Use	Unoccupied with water filtration facility and 11 extraction wells
Proposed Use	Muskegon County Business Park North; Zoned for industrial; Land use restricted to commercial/industrial uses with no habitable structures below grade.
Contamination	Soil and groundwater contamination. 201: 43 of 48 (10/17/01); 1,2 DCA, Benzene, PCB's, Toluene, VC.
Remediation	201: Interim response in progress. Superfund: Groundwater treatment by extraction wells and a groundwater treatment facility. Soil and sediment treatment by “low temperature thermal desorption” and excavation and offsite disposal.
BRA	Dalton Township Brownfield Redevelopment Authority
Comments	Potential for a TIFA; Renaissance Zone; Single Business Tax abated through 2014; Municipal water scheduled to be connected; Sewer available
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Part 201, MEDC Urban Opportunity Site, EPA Superfund – Final NPL (9/83)

TWIN LAKE MOBIL KWIK STOP (former)	
Alias	
Address	5982 Holton Rd.
Municipality	Dalton Township (Twin Lake)
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Commercial retail; Service station
Current Use	Vacant building
Proposed Use	
Contamination	213: Gasoline and kerosene release.
Remediation	BF-UST: Adequate BEA. 213: Notice of corrective action.
BRA	Dalton Township Brownfield Redevelopment Authority
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (9/94)

BOFORS NOBEL/ LOMAC	
Alias	Lakeway, Bofors Lakeway Chem Inc.
Address	5025/5205 Evanston Ave.
Municipality	Egelston Township
County	Muskegon County
SITE INFORMATION	
Size	Superfund: 85 acres
Past Use	Chemical preparations; Industrial organic chemicals
Current Use	Surrounded by Sun Chemical. Superfund: Site includes a currently operating specialty chemical production facility (Lomac, Inc.), 10 abandoned sludge lagoons, and 12 extraction wells.
Proposed Use	
Contamination	201: Bofors Nobel - 45 of 48 (9/14/90); Lomac - 39 of 48 (3/7/05); MEK, 3,3'-Dichlorobenzidine, Acenaphthene, Acenaphthylene, Acetone, Aniline, Anthracene, Azobenzene, Benzene, Benzidine, Benzo(a)anthracene, Benzo(a)pyrene, Benzyl alcohol, BDCM, Bromoform, Bromomethane, Carbon disulfide, Carbon Tet, Chl, p-Toluidine. Superfund: Groundwater, sludge, soil, surface water contamination; Base neutral acids, pesticides, VOC.
Remediation	201: Interim response in progress. Superfund: "Construction underway"; 900,000 cubic yards of soil or other solid-based media have been treated, stabilized, or removed; 450 gallons per minute of water or other liquid-based media are being treated; Next 5-year review in 2008.
BRA	None
Comments	
Source	MDEQ Part 201 Closed, EPA Superfund – Final NPL (3/89)

MUSKEGON COUNTY WASTEWATER TREATMENT PLANT	
Alias	
Address	8301 White Rd. (Egelston) and 9300 E. Apple Ave. (Moorland)
Municipality	Egelston Township and Moorland Township
County	Muskegon County
SITE INFORMATION	
Size	2,000 acres
Past Use	
Current Use	
Proposed Use	Muskegon County Business Park East. 213: No land use restrictions.
Contamination	213: Gasoline and diesel release.
Remediation	213: Type B evaluation.
BRA	None
Comments	213: Notice of corrective action.
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Part 213 Closed (1/95), EPA Superfund – Archives (12/87)

THERMO-CHEM, INC.	
Alias	
Address	4311 Evanston Rd.
Municipality	Egelston Township
County	Muskegon County
SITE INFORMATION	
Size	8 acres (9.5 acres including Thomas Solvent site)
Past Use	201: Chemicals and allied products. Superfund: Solvent and chemical waste reprocessing, refining, and incineration facility.
Current Use	Property is fenced in
Proposed Use	
Contamination	201: 34 of 48 (9/21/90); 1,1,1 TCA, 1,1,2,2 TCA, 1,1,2 TCA, 1,1 DCA, 1,1 DCE, 1,2 DCB, 1,2 DCA, MEK, 2-Methylnaphthalene, Acetone, Al, As, Benzene, Carbon Tet, TCM, CN, Ethylbenzene, Fe, Naphthalene, PCP, Styrene, PCE, Toluene, TCE, VC, Xylenes, Zn, BEH. Superfund: Debris, groundwater, sludge, soil, solid waste contamination; High concentrations of volatile, semivolatile and inorganic chemicals; Base neutral acids, inorganics, metals, PAH, PCBs, pesticides, VOC.
Remediation	201: Interim response in progress. Superfund: 1 cubic yard of soil or other solid-based media have been treated, stabilized, or removed; 19,000,000 gallons of water or other liquid-based media have been treated, stabilized, or removed; "Construction complete" achieved 9/17/02; Last 5-year review in 2005 deemed remedy to be "protective in the short term".
BRA	None
Comments	Thermo-Chem and Thomas Solvent sites are adjacent and owned by the Thomas Solvent Company
Source	MDEQ Part 201, EPA Superfund – Final NPL (6/86)

THOMAS SOLVENT CO.	
Alias	
Address	4321 Evanston Ave.
Municipality	Egelston Township
County	Muskegon County
SITE INFORMATION	
Size	1.5 (9.5 acres including Thermo-Chem site)
Past Use	Industrial waste hauler and reseller of reprocessed solvents; Drum storage
Current Use	No restrictive barriers around property except Thermo-Chem fence (12/20/93)
Proposed Use	
Contamination	
Remediation	
BRA	None
Comments	Site is part of NPL site – Thermo Chem; EPA responsible party search (9/29/95)
Source	EPA Superfund – Final NPL (listed as part of Thermo-Chem site, 6/86)

THE MOTOR COMPANY	
Alias	Speedway Sub
Address	5706 Whitehall Rd.
Municipality	Fruitland Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gasoline service station
Current Use	Vacant building
Proposed Use	
Contamination	201: 17 of 48 (8/19/04); Caustics, waste oil.
Remediation	201: Inactive – no actions taken to address contamination.
BRA	None
Comments	
Source	MDEQ Part 201

HOOKER – MONTAGUE PLANT	
Alias	Hooker Chemical and Plastics Corporation; Occidental Chemical Company; Occidental Petroleum Corporation
Address	Old Channel Trail & Whitbeck Rd. (NW corner)
Municipality	Montague Township
County	Muskegon County
SITE INFORMATION	
Size	900 acres
Past Use	Chemical manufacturing
Current Use	Treatment, storage, and disposal facility
Proposed Use	
Contamination	Superfund: Groundwater and surface water
Remediation	
BRA	None
Comments	
Source	EPA Superfund – Removed from proposed NPL (10/89), White Lake PAC

CLINTON REED	
Alias	
Address	11295 Apple Ave.
Municipality	Moorland Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant building
Proposed Use	
Contamination	BF-UST: Abandoned UST's.
Remediation	BF-UST: Completed.
BRA	None
Comments	
Source	MDEQ Brownfields-USTfields

KELLY'S CORNERS	
Alias	
Address	12013 Apple Ave.
Municipality	Moorland Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Gas station; Grocery store
Current Use	Vacant land
Proposed Use	
Contamination	BF-UST: Free product encountered in basement sump. 213: Gasoline and unknown substances released.
Remediation	BF-UST: Completed.
BRA	None
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (6/92)

MUSKEGON COUNTY WASTEWATER TREATMENT PLANT	
Address	9300 E. Apple Ave. (Moorland Township) and 8301 White Rd. (Egelston Township)
Municipality	Moorland Township and Egelston Township
County	Muskegon
See Egelston Township For Site Information	

500 GUNS (FORMER)	
Alias	TNT Bait-Tackle-Groceries
Address	10383 Apple Ave.
Municipality	Moorland Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Commercial property
Current Use	Vacant land
Proposed Use	213: No land use restrictions.
Contamination	213: Gasoline released.
Remediation	BF-UST: Completed; Abandoned tanks removed and building demolished. 213: Tier I evaluation.
BRA	None
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Closed (12/03)

MARATHON OIL PRODUCTS	
Alias	
Address	2920 E. Laketon Ave.
Municipality	Muskegon Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	Petroleum refining
Current Use	Vacant land
Proposed Use	
Contamination	201: 43 of 48 (7/9/04); Asbestos, Benzene, Ethylbenzene, Pb, Toluene, Xylenes.
Remediation	201: Interim response in progress.
BRA	Muskegon Township Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (9/94)

NAPH-SOL/ ZEPHYR INC.	
Alias	Zephyr Refinery Site; Naph-Sol Refining
Address	1222 Holton Rd.
Municipality	Muskegon Township
County	Muskegon County
SITE INFORMATION	
Size	70 acres; 33 acres used for refinery
Past Use	Refinery; Petroleum stations and bulk terminal
Current Use	Vacant land
Proposed Use	
Contamination	201: 42 of 48 (6/23/04); 1,2,4 TMB, 1,3,5 TMB, 2-Methylnaphthalene, As, Ba, Benzene, Cd, Cl, Cr+6, Dibenzofuran, Diethyl ether, Ethylbenzene, Fluorene, Pb, MTBE, Naphthalene, Phenanthrene, Se, PCE, Toluene, TCE, VC, Xylenes, BEHP, cis-1,2 DCE, n-Butylbenz. 213: Unknown substance released.
Remediation	BF-UST: In progress. 201: Interim response in progress.
BRA	Muskegon Township Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 201, MDEQ Part 213 Open (1/99), MDEQ Brownfields-USTfields, EPA Superfund – Not NPL (8/02)

NORTHSHORE HOSPITAL	
Alias	
Address	1092 Holton Rd.
Municipality	Muskegon Township and North Muskegon City
County	Muskegon County
SITE INFORMATION	
Size	14 acres
Past Use	Tuberculosis sanitarium and state hospital
Current Use	Vacant land
Proposed Use	Muskegon Township: Industrial/Business PUD North Muskegon: High Density Residential
Contamination	
Remediation	MDEQ ABP: Over \$230,278 in CMI funds used for building demolition, removal and disposal of demolition debris, abandon several underground vaults on the property, and ready the property for redevelopment. BF-UST: Closed.
BRA	Muskegon Township Brownfield Redevelopment Authority
Comments	Municipal water/sewer available; Site sold by city and township to Ridgemont Development
Source	WMSRDC Survey, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields

VIKING FOODS	
Alias	Midland Grocery; Muskegon Wholesale Company; Roundy's Distribution Center
Address	1764 Creston St.
Municipality	Muskegon Township
County	Muskegon County
SITE INFORMATION	
Size	12.55 acres; 236,102 sq. ft. building; 35,000 sq. ft. refrigerated
Past Use	Grocery distribution warehouse
Current Use	Vacant building
Proposed Use	Zoned for industrial; For Sale (\$5,000,000). 213: No land use restrictions.
Contamination	
Remediation	213: Type A evaluation.
BRA	Muskegon Township Brownfield Redevelopment Authority
Comments	
Source	WMSRDC Survey, MDEQ Part 213 Closed (5/93), Muskegon Area First

SCA INDEPENDENT LANDFILL	
Alias	Independent Landfill; Waste Management
Address	4010 E. Broadway Ave.
Municipality	Sullivan Township
County	Muskegon County
SITE INFORMATION	
Size	100 acres, of which one-third is landfill
Past Use	Landfill which stopped accepting refuse in 1986 and closed in 1987
Current Use	
Proposed Use	213: No land use restrictions. Superfund: Deed restrictions for nearby residents regarding wells.
Contamination	201: 29 of 48 (11/16/90); Ammonia, Mn, Volatile HC's. 213: Used oil released. Superfund: Groundwater, surface water, and wetlands are primarily contaminated with ammonia, manganese, and other organic and inorganic contaminants.
Remediation	201: Interim response conducted – no further activities anticipated. 213: Type B evaluation. Superfund: Improvement of the waste cover and surface water drainage; leachate management system modification (larger leachate collection tank and improved piping); excavation of surface soil from various locations; long term groundwater and surface water monitoring (began 2001); “Construction complete” achieved 9/26/01; Last 5-year review conducted in 2005.
BRA	None
Comments	
Source	WMSRDC Survey, MDEQ Part 201, MDEQ Part 213 Closed (9/94), EPA Superfund – Final NPL (9/83)

E.I. DUPONT – MONTAGUE PLANT	
Alias	E.I. DuPont De Nemours & Co., Inc.
Address	Lamos Rd. & Wilks Rd. (NW corner)
Municipality	White River Township
County	Muskegon County
SITE INFORMATION	
Size	1,325 acres
Past Use	Petrochemical manufacturing
Current Use	Vacant land with 2 drum storage areas
Proposed Use	
Contamination	Groundwater contamination. Superfund: Hazard ranking system score - 25.23.
Remediation	
BRA	None
Comments	
Source	EPA Superfund – Removed from Proposed NPL (3/89)

MUSKEGON COUNTY WASTEWATER – WHITEHALL	
Alias	Muskegon Co. WWTP Whitehall
Address	2000 W. Holton-Whitehall Rd.
Municipality	Whitehall Township
County	Muskegon County
SITE INFORMATION	
Size	650-700 acres
Past Use	Wastewater treatment plant; Abandoned in 2003
Current Use	Transfer station
Proposed Use	Commercial/Industrial (west side); Residential (east side)
Contamination	Water and soil contamination; Sludge. 201 : 22 of 48 (11/2/90); Chloroethane.
Remediation	201 : Interim response in progress.
BRA	None
Comments	Potential for a Tax Increment Financing Authority
Source	WMSRDC CEDS, WMSRDC Survey, MDEQ Part 201, EPA Superfund – Archives (9/93)

SHELLCAST	
Alias	
Address	3282 Colby Rd.
Municipality	Whitehall Township
County	Muskegon County
SITE INFORMATION	
Size	
Past Use	201 : Primary metal industries.
Current Use	
Proposed Use	
Contamination	201 : 38 of 48 (6/29/04); 1,1,1 TCA, 1,1 DCE, PCE, TCE.
Remediation	201 : From database implementation.
BRA	None
Comments	
Source	MDEQ Part 201, EPA Superfund – Archives (9/03)

WHITE LAKE LANDFILL	
Alias	Waste Management Landfill
Address	3278 Colby Rd.
Municipality	Whitehall Township
County	Muskegon County
SITE INFORMATION	
Size	94 acres
Past Use	
Current Use	
Proposed Use	213: No land use restrictions.
Contamination	213: Diesel released.
Remediation	213: Tier I evaluation.
BRA	None
Comments	
Source	WMSRDC Survey, MDEQ Part 213 Closed (6/98), EPA Superfund – Archives (9/94)

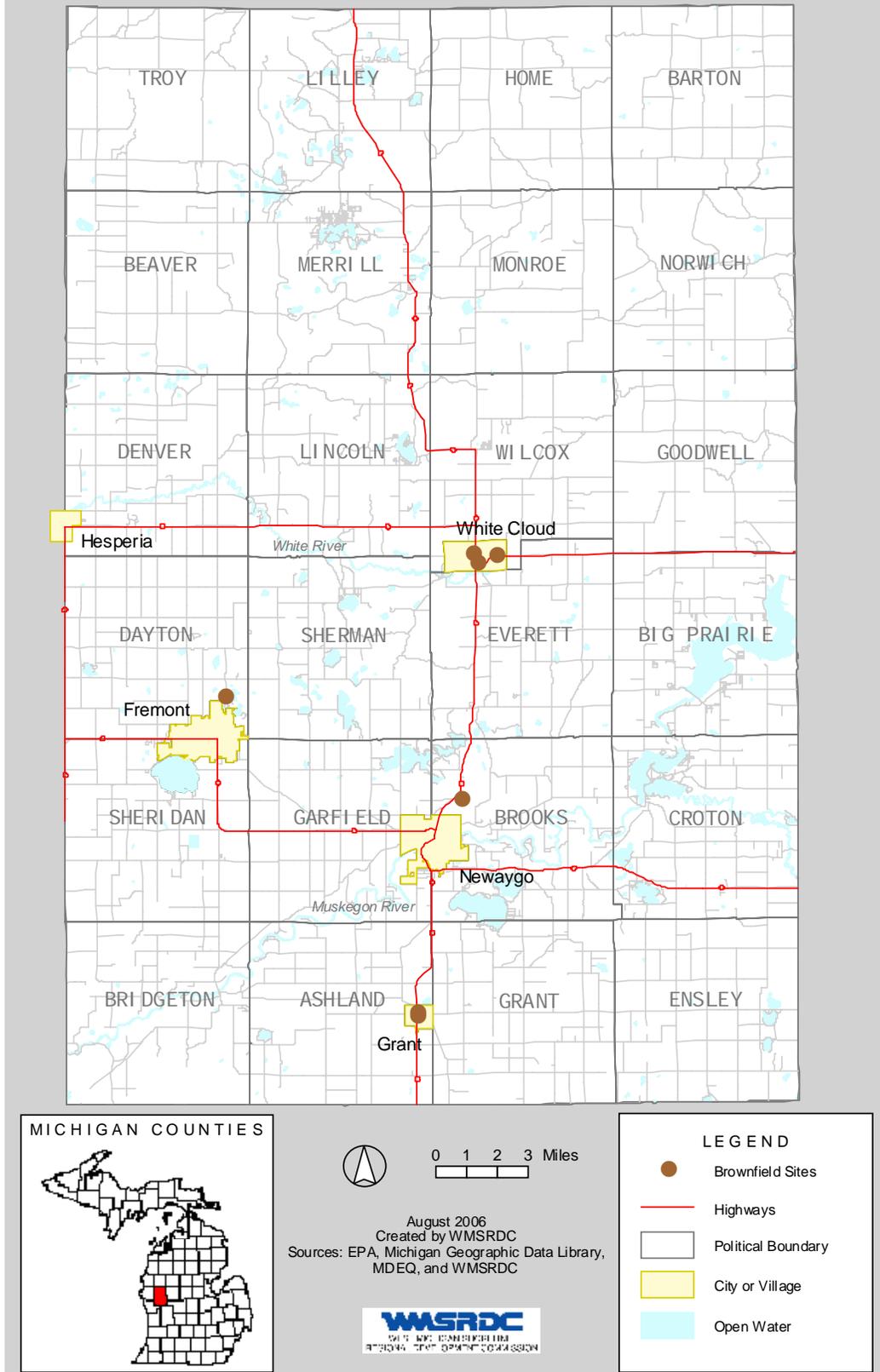
NEWAYGO COUNTY



Grant Mini-Mart
City of Grant, Newaygo County

Map 5

NEWAYGO COUNTY BROWNFIELD SITES



GRANT MINI-MART	
Alias	
Address	92 S. Maple St.
Municipality	City of Grant
County	Newaygo County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant building
Proposed Use	
Contamination	BF-UST: 2" of free products encountered in a 4" monitoring well along M-37. 213: Gasoline release.
Remediation	BF-UST: Pending.
BRA	None
Comments	
Source	MDEQ Brownfields-USTfields, MDEQ 213 Open (3/95)

RITE AID (proposed)/ UNITED 6309 (former)	
Alias	United Station #6309, Speedway
Address	9 S. Maple St. (SW corner of Maple (M-37) and State (120 th))
Municipality	City of Grant
County	Newaygo County
SITE INFORMATION	
Size	.5 acres
Past Use	United Station
Current Use	Vacant lot adjacent to Rite Aid
Proposed Use	213: No land use restrictions.
Contamination	213: Unknown substances released.
Remediation	BF-UST: Adequate BEA. 213: Tier I evaluation.
BRA	None
Comments	
Source	WMSRDC Survey, MDEQ Brownfields-USTfields, MDEQ Part 213 Open (8/90)

OLD CITY DUMP	
Alias	
Address	E. Pine Hill St. at Webster St. (on White River)
Municipality	City of White Cloud
County	Newaygo County
SITE INFORMATION	
Size	19.4 acres
Past Use	Former city dumping ground (not a licensed landfill)
Current Use	Industrial
Proposed Use	Mixed use; Zoned for residential; For Sale.
Contamination	Landfill (household type items, fuel tanks, concrete and asphalt)
Remediation	Phase I ESA; MDEQ conducted preliminary clean-up under CMI in 2001 and in 2002 recommended site is ready for development. BF-UST: Closed.
BRA	None
Comments	Municipal water/sewer available; Renaissance Zone denied; City owned; City is a County Seat
Source	WMSRDC Survey, MDEQ Brownfields-USTfields, MiSite

WEAVER OIL PROPERTY	
Alias	Weaver Oil White Cloud Warehouse
Address	87 N. Benson St.
Municipality	City of White Cloud
County	Newaygo County
SITE INFORMATION	
Size	
Past Use	
Current Use	Vacant building
Proposed Use	213: No land use restrictions.
Contamination	213: Diesel release.
Remediation	213: Tier I evaluation.
BRA	None
Comments	Near airport; City is a County Seat
Source	WMSRDC Survey, MDEQ 213 Closed (9/96)

WHITE CLOUD RETAIL CENTER	
Alias	
Address	148 S. Charles St. (N.E. corner of Charles St. and Wilcox Ave.)
Municipality	White Cloud City
County	Newaygo County
SITE INFORMATION	
Size	1.1 acres
Past Use	
Current Use	Vacant Land
Proposed Use	MiSite: For sale; \$495,000; Zoned for retail.
Contamination	
Remediation	
BRA	None
Comments	City of White Cloud owns southwest corner of the property where it has placed a small gazebo with a welcome center and seats (remainder of property owned privately); City is a County Seat
Source	MiSite

NEWAYGO SANITARY DISPOSAL	
Alias	Newaygo County Landfill
Address	64 th St. (West of M-37)
Municipality	Brooks Township
County	Newaygo County
SITE INFORMATION	
Size	40 acres
Past Use	Municipal/community landfill
Current Use	Vacant land
Proposed Use	Community park for organized sports; Hunting club
Contamination	MDNR: Chemical degradation of nearby stream caused by leachate from the Newaygo County Landfill
Remediation	Site closed in 1975, then filled in and capped with three to four feet of soil. 201: 29 of 48 (08/29/05); Inactive – no actions taken to address contamination.
BRA	None
Comments	Site is owned by the City of Newaygo
Source	MDEQ Part 201, MDNR Biological Survey (1984)

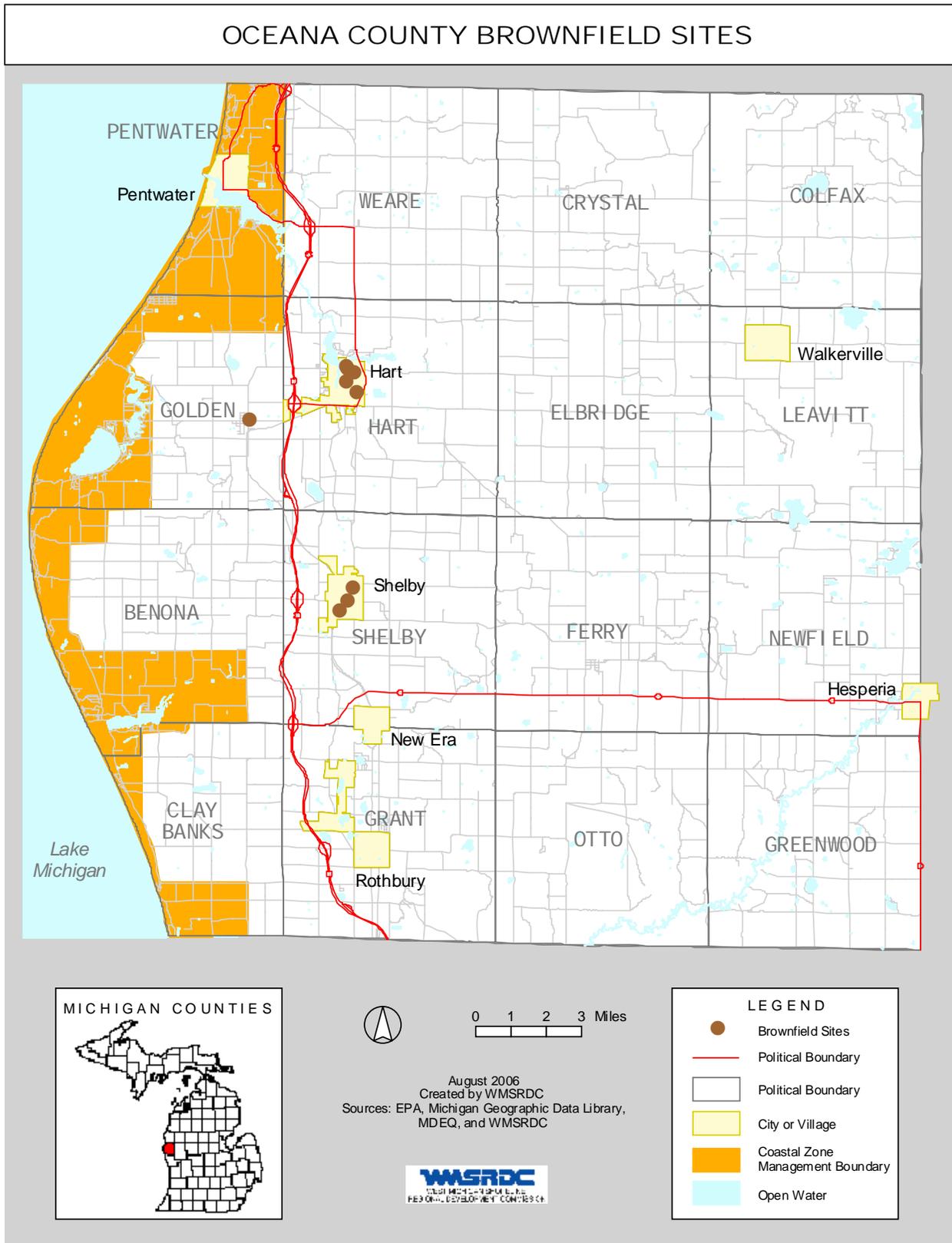
KUNNENS LANDFILL	
Alias	
Address	3897 Ramshorn Dr.
Municipality	Dayton Township
County	Newaygo County
SITE INFORMATION	
Size	40 acres
Past Use	Landfill
Current Use	Vacant land
Proposed Use	Recreational
Contamination	201: 25 of 48 (12/16/05); As, B, Diethyl ether, Fe, Pb, Mn, Ag, Zn.
Remediation	Part of the former landfill has been capped; 201: Interim response in progress.
BRA	None
Comments	
Source	MDEQ Part 201

OCEANA COUNTY



Silver Mill Frozen Foods, Inc.
City of Hart, Oceana County

Map 6



FARMER'S PETROLEUM	
Alias	Farmers Petroleum Cooperative
Address	504 S. State St.
Municipality	City of Hart
County	Oceana County
SITE INFORMATION	
Size	
Past Use	BF-UST: Gas station.
Current Use	Vacant building
Proposed Use	
Contamination	
Remediation	
BRA	None
Comments	Located within a Core Community
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (6/88)

HART EZ MART	
Alias	Blarney Castle; 213: Superior Oil Company – Hart.
Address	3 State St.
Municipality	City of Hart
County	Oceana County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant lot
Proposed Use	City park, retail/professional office, or restaurant
Contamination	
Remediation	BF-UST: Adequate BEA. MDEQ CMI: \$250,000 for building demolition, UST removal, and site assessment.
BRA	None
Comments	Owned by city; Located within a Core Community
Source	MDEQ Brownfields-USTfields, MDEQ Part 213 Open (1/87)

MERSKIN & MERSKIN	
Alias	REA (Rural Electric Authority), Progressions
Address	24-26 N. State St.
Municipality	City of Hart
County	Oceana County
SITE INFORMATION	
Size	.4 acres
Past Use	Utility
Current Use	Commercial
Proposed Use	Demolition of existing structure and construction of Multiple Residential (senior housing)
Contamination	213: Diesel and gasoline
Remediation	Initial Phase I and Phase II Environmental Site Assessments completed
BRA	None
Comments	Located within a Core Community
Source	WMSRDC Survey, MDEQ Part 213 Open (11-92)

SILVER MILL FROZEN FOODS, INC.	
Alias	
Address	801-809 Griswold St.
Municipality	City of Hart
County	Oceana County
SITE INFORMATION	
Size	3 acres
Past Use	Food processing plant
Current Use	Vacant building
Proposed Use	
Contamination	
Remediation	
BRA	None
Comments	Located within a Core Community and an Agricultural Processing Renaissance Zone
Source	WMSRDC Survey

TEMPOTECH	
Alias	
Address	500 Lincoln St. (at Union St.)
Municipality	City of Hart
County	Oceana County
SITE INFORMATION	
Size	
Past Use	Fish processing plant
Current Use	Vacant building
Proposed Use	Historical purposes
Contamination	
Remediation	
BRA	None
Comments	Building owned by city and leased to Hart Historic District; Located within a Core Community
Source	WMSRDC Survey

FOWLER PROPERTY	
Alias	213: Fowlers Mobil Service
Address	Survey: 1 st St. and State St.; W. of Chapita Hills, behind Carquest. 213: 20 N. State St.
Municipality	Village of Shelby
County	Oceana County
SITE INFORMATION	
Size	3 Acres (approx.)
Past Use	Unofficial junk yard
Current Use	Vacant land behind Florez Auto and Carquest
Proposed Use	Park, offices, or residential.
Contamination	213: Gasoline release.
Remediation	213: Tier I evaluation.
BRA	None
Comments	Abandoned in 2005. 213: Deed restrictions.
Source	WMSRDC Survey, MDEQ Part 213 Closed (1/97)

MDNR PROPERTY	
Alias	MDNR – Real Estate Division
Address	260 S. Oceana Dr. (a.k.a. 260 S. State St.)
Municipality	Village of Shelby
County	Oceana County
SITE INFORMATION	
Size	
Past Use	Gas station
Current Use	Vacant lot
Proposed Use	ABP: For Sale. 213: No land use restrictions.
Contamination	213: Unknown substance releases.
Remediation	BF-UST: Completed; UST's removed and building demolished. 213: Tier I evaluation.
BRA	None
Comments	Tax reverted property
Source	WMSRDC Survey, MDEQ Available Brownfield Properties, MDEQ Brownfields-USTfields, MDEQ Part 213 Closed (12/03)

WELLS PROPERTY	
Alias	Wells Oil Company
Address	281 N. State St.
Municipality	Village of Shelby
County	Oceana County
SITE INFORMATION	
Size	
Past Use	BF-UST: Garage.
Current Use	Vacant building
Proposed Use	For sale
Contamination	BF-UST: Open LUST site.
Remediation	
BRA	None
Comments	
Source	WMSRDC Survey, MDEQ Brownfields-USTfields, MDEQ Part 213 Open (9/89)

MEARS AUTO SERVICE	
Alias	Village of Mears GW Contamination
Address	5610 W. Fox Rd.
Municipality	Golden Township
County	Oceana County
SITE INFORMATION	
Size	
Past Use	201: Gasoline service station.
Current Use	Vacant land and storage shed
Proposed Use	For sale
Contamination	201: 31 of 48 (3/18/04); Benzene, Ethylbenzene, Pb, Toluene, Xylenes. 213: Gasoline release.
Remediation	Cleaned up. 213: Tanks removed (7/05). 201: Interim response in progress.
BRA	None
Comments	
Source	WMSRDC Survey, MDEQ Part 201, MDEQ Part 213 Open (12/94)

SELECTION OF SITES FOR FEASIBILITY ANALYSES

The previous section of this document identified a large number of potential brownfield sites (146) in the geographic territory covered by West Michigan Shoreline Regional Development Commission. It also gave a great deal of information regarding the sites, which ranged from small gas stations and dry cleaning establishments to large manufacturing buildings and lots, as well as information regarding contamination at the majority of the sites. While all of these sites have development or redevelopment potential, only a few were selected for consideration of that potential in this document.

Selection of sites needed to be made on an informed basis, considering a number of factors and using the most appropriate components of existing site selection systems. Four systems; one each from the federal government, the state government, a university, and a local government; were reviewed. It was apparent that several criteria were included in all four systems and could be considered “universal”. In addition, it was apparent that the selection system would need to include information on local activities affecting brownfield redevelopment.

The factors reviewed, adopted, and utilized in selecting sites for feasibility analyses in this document are described below. Since the criteria required consideration of relevant brownfield activities by local units of government within the geographic boundaries of the study area, these activities are also presented. Site specific information is contained in the inventory of brownfield sites.

Criteria for Selection

The preparation of this document was funded, in part, by the Coastal Management Program of the Michigan Department of Environmental Quality with funds from the National Oceanic and Atmospheric Administration and by the United States Department of Commerce, Economic Development Administration. Coastal Management is interested in land use planning and development within Michigan’s Coastal Zone Management (CZM) boundaries while EDA is interested in the creation of jobs.

The regional map presented at the beginning of the previous chapter illustrates the fact that the majority of brownfields are clustered within CZM boundaries. This is, undoubtedly, due to the fact that access to water has historically attracted both commercial and industrial development. In addition, it is apparent that brownfield redevelopment can create jobs which contribute to the health of the local economy. The types of redevelopment that do so should be given a priority in the selection of sites for feasibility analyses.

While these primary considerations are essential, additional considerations are numerous and also quite important. From a regional perspective, it is important to have representation from both rural and urban areas. From a planning perspective, it is important to have a variety of sites and different development potentials and plans. From an implementation perspective, it is important to have access to the site, parties interested in its redevelopment and ready to take action, and available tools and programs to use. From a health perspective, it is imperative to clean up any contamination or blighted buildings that could endanger residents.

From an economic perspective, consideration should be given to the extent of contamination and the resultant cost of cleanup. In addition, thought should be given to the visibility, attractiveness, and zoning of the site. Surrounding land uses should be compatible with the plans for redevelopment. Finally, the concerns of developers regarding the availability of utilities and transportation routes must be acknowledged.

With all of these concerns in mind, the following questions were asked in the process of selecting sites for feasibility analyses.

- Is the site located within CZM boundaries?
- Will development of the site create jobs or increase the tax base?
- Will selection of the site result in a geographic spread of sites being analyzed?
- Will selection of the site result in the analysis of different types of sites and different types of redevelopment?
- Is the site publicly owned? If not, is it abandoned and can ownership be obtained?
- How ready is the site for redevelopment? What types of assessments have been done? Have engineering plans been prepared? Is the activity included in documents such as the CEDS?
- **Is there access to funding for redevelopment purposes, such as that available through brownfield redevelopment authorities and core communities?**
- Will redevelopment of the site eliminate a health hazard or a stigma to the community?
- Will redevelopment of the site spur additional development?
- Is the site visible?
- Is the neighborhood compatible with the redevelopment?
- Are cleanup and redevelopment of the property affordable?
- Will available utilities be sufficient for the needs of new development?

The question “is there access to funding for redevelopment purposes, such as that available through brownfield redevelopment authorities and core communities?” warrants careful consideration because of its importance. In order to answer it for individual sites, it is necessary to look at the activities of the local governments that contain them. Certain local designations are especially important in brownfield redevelopment because they indicate eligibility or priority for financing mechanisms and tools as described in the chapter on “Tools for Implementation”.

Brownfield Redevelopment Authorities

In 1996, Michigan Legislature passed the Brownfield Redevelopment Financing Act (Public Act 381). This act established a method to finance environmental response activities at contaminated properties. It allows municipalities to develop and implement brownfield redevelopment financing plans to capture local and school property taxes from a contaminated property to cover the costs associated with conducting environmental response activities on that property. Amendments to Act 381; passed in June 2000, December 2002, and January 2004; essentially provided additional tools for brownfield redevelopment, extended municipal work plan application deadlines, and expanded the definition of “eligible properties”.

Act 381, as amended, paved the way for the organization of Brownfield Redevelopment Authorities (BRAs) in Michigan, which have become the primary tool for securing funds for brownfield cleanup and redevelopment. The act allows the following provisions regarding BRAs:

- **A municipality may establish one or more BRAs** to implement brownfield plans.
- **A county may operate a BRA on behalf of a municipality** located within the county only if the municipality concurs with the provisions of the brownfield plan for the eligible property located within the municipality.
- **A BRA may develop a brownfield plan** that identifies which properties the authority will conduct eligible activities on and from which properties it will capture taxes.
- **A BRA may issue revenue and tax increment financing (TIF) bonds and notes** in order to finance the eligible activities and then capture taxes from the eligible property to pay off the obligations.
- **A BRA may establish a local site remediation revolving fund** and place excess captured taxes from properties at which eligible activities are conducted into the local fund. The authority can use the local fund to conduct eligible activities at other eligible properties.
- **The state or BRA may take appropriate legal action** to recover the costs of eligible activities funded through tax capture from person(s) who are liable for the contamination.
- **The property owner may apply for a Single Business Tax (SBT)** brownfield redevelopment credit for eligible investments made at an eligible property if included in a brownfield plan adopted under Act 381.

There are currently eight established BRAs in Muskegon County, a county-wide BRA in Lake County, and a county-wide BRA in Mason County. The earliest, the

City of Muskegon's, was created in 1996 while the latest, Lake County's, was created in 2005. Neither Newaygo nor Oceana Counties have BRAs.

BROWNFIELD REDEVELOPMENT AUTHORITIES		
County	Municipality	Date Filed
Lake County	Lake County	10-06-2005
Mason County	Mason County/City of Ludington	11-17-2000
Muskegon County	Dalton Township	10-20-1998
	City of Montague	12-22-1997
	City of Muskegon	8-04-1997
	Charter Township of Muskegon	4-23-1998
	City of Muskegon Heights	7-16-1999
	City of Norton Shores	12-16-1997
	City of Roosevelt Park	10-14-1997
	City of Whitehall	9-30-1998

Source: Michigan Department of Environmental Quality

Several projects included in the previous chapter's inventory of brownfield sites have been or are in the process of being conducted by several of these BRAs. They are listed below and should be visited by anyone interested in brownfield redevelopment as they provide excellent examples of what can be accomplished.

BROWNFIELD PROJECTS		
Mason County	City of Ludington	Ameristar/Ludington Harbor Terrace
		Bryant Woods LLC
		Fiveco LLC
		One Ludington Place
		Pere Point Village
		Talisman Associates LLC
	City of Scottville	Diversified Natural Products
Muskegon County	City of Muskegon	Beacon Recycling
		Edison Landing
		Great Lakes Die Cast
		MSB II
		Muskegon Boiler Works
		Muskegon Mall
		Northern Machine Tool
		Terrace Street Lots
	The Watermark	
	City of Muskegon Heights	Bennett Pump
		City/ProCom
		Wagner Transportation
	City of Norton Shores	Hile School
		Thompson Inc. Landfill
Dalton Township	Ott/Story/Cordova	

Several vacant industrial buildings along Ludington's waterfront have been converted to or replaced with residential condominiums. The City of Muskegon has utilized vacant industrial land and buildings along Muskegon Lake's shoreline

for commercial, housing and business purposes. The City has also obtained Smart Zone status at Edison Landing and helped develop an alternative and renewable energy center in conjunction with Grand Valley State University. Muskegon Heights assisted in the development of a medical care facility on two adjacent brownfield lots. Norton Shores now has an urban village where a landfill once existed.

Lake County’s establishment of a Brownfield Redevelopment Authority is quite new and the county has not yet embarked on any brownfield redevelopment projects. The County was awarded two \$200,000 brownfield assessment grants from the U.S. Environmental Protection Agency in 2005, one for hazardous substances and one for petroleum grant funds. The funds will be used to inventory approximately 50 brownfield sites, conduct Phase I and Phase II site assessments, and implement outreach activities in communities throughout the county. Mason County was awarded a \$200,000 hazardous substance grant in 2004 through the same program and expects to generate an inventory of approximately 50 properties, primarily along the waterfront, in the City of Ludington.

More detailed Information regarding state and federal awards for site-specific redevelopment projects can be accessed by site in the site inventory or by program in “Tools for Implementation”. For more information on the Brownfield Redevelopment Financing Act, refer to www.michigan.gov/brownfieldauthority.

Core Communities (Qualified Local Governmental Units)

In June of 2000, the State of Michigan initiated an effort to spur private development in its urban core communities and traditional centers of commerce. It passed a Brownfield Redevelopment Credit Package, which addressed critical needs of older communities. The State awarded Core Community, or Qualified Local Governmental Unit, status to the following communities.

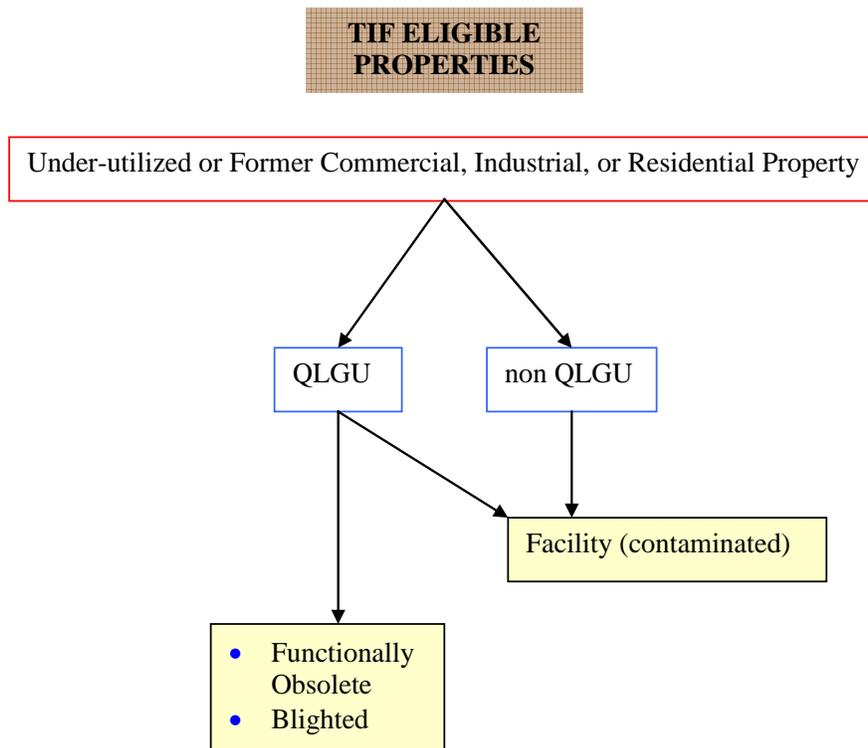
CORE COMMUNITIES	
Lake County	Village of Baldwin
Mason County	City of Ludington
Muskegon County	City of Muskegon
	City of Muskegon Heights
	City of Norton Shores
Oceana County	City of Hart

These communities have available three economic development tools. They are: brownfield redevelopment incentives, including expanded definitions of eligible properties and TIF-eligible activities as well as larger Single Business Tax credits for developers; Obsolete Property Rehabilitation Exemptions for commercial and commercial housing projects; and Neighborhood Enterprise Zones providing tax incentives for new home construction and home rehabilitation. The latter is rarely

used, having lost its appeal when Proposal A was passed in 1994, and is not included in the “Tools for Implementation” section for that reason. The other incentives for brownfield redevelopment are very attractive.

In Core Communities, functionally obsolete or blighted properties can be included in the financing activities of the Brownfield Redevelopment Authority as well as contaminated sites. In addition, the list of TIF eligible activities expands to include public infrastructure, lead and asbestos abatement, and site preparation in addition to environmental assessments, due care plans and activities, and demolition as a response activity. Finally, brownfield redevelopment projects are eligible to apply for a Single Business Tax Credit in excess of the normal \$1 million maximum limit. Priority is give to projects that are located in designated Core Communities as well.

The flow chart below provides an example of how a Brownfield Redevelopment Authority can utilize Tax Increment Financing (TIF) on various sites, both with Qualified Local Governmental Unit (QLGU) status and without it. Qualified Local Governmental Unit status is the same as Core Community status.



Renaissance Zones/Agricultural Processing Renaissance Zones

Michigan became the first state in the nation to offer Renaissance Zones to local units of government meeting certain criteria of economic distress after it passed Public Act 376 in 1996. Eligible communities competed for zone designations, in either an urban or a rural category, by the Michigan Economic Development Corporation because of the limited number available. In 2000, to help Michigan’s struggling agriculture industry, Agricultural Renaissance Processing Zones were created through Public Act 259.

All businesses and residents currently located in, or moving into, a designated zone are exempt from most state and local taxes. These taxes include Single Business Tax (SBT), state personal income tax, six-mill state education tax, local personal property tax, local real property tax, local income tax, and utility user’s tax. Tax relief in Renaissance Zones runs for a 15-year time frame and is phased out in 25% increments over the last three years of the program.

RENAISSANCE ZONES		
Lake County	Village of Baldwin (41 acres)	
	Chase Township (24.2 acres)	
	Eden Township (369.7 acres)	
	Yates Township (21.75 acres)	
Muskegon County	City of Muskegon	Boiler Works/Amazon
		Muskegon Mall
		Shaw Walker/Watermark
		Whittaker Electric/Seaway Industrial Park
		Muskegon County Business/Industrial Park – North
	City of Muskegon Heights	Hoyt Street
		Mona View
		Sanford Village
		Seaway Drive

AGRICULTURAL PROCESSING RENAISSANCE ZONES		
Mason County	City of Scottville	Diversified Natural Products (59 acres)
Oceana County	City of Hart	Gray and Company
	Village of New Era	New Era Canning
	Colfax Township	Chase Farms
	Hart Township	Peterson Farms

It should be noted that the Renaissance Zone program, while offering some very attractive incentives, is not without controversy. Often non-renaissance neighborhoods and communities regard renaissance status as an unfair advantage in the competition for businesses. In addition, some economists and analysts regard them as ineffective in attracting business. More importantly, care must be taken with brownfield redevelopment projects in Renaissance Zones since there are fewer or no taxes to capture.

Miscellaneous

Careful consideration should also be given to districts covered by Tax Increment Financing Authorities (TIFA), Downtown Development Authorities (DDA), and Local Development Finance Authorities (LDFA). They also utilize tax increment financing and can compete with Brownfield Redevelopment Authorities for it. According to the MDEQ, “if the BRA project is located in an existing TIF authority’s district, like a DDA, the BRA can only capture those tax revenues not captured by the other authority”. The following local communities have DDAs and/or TIFAs.

LOCAL DDA/TIFA			
COUNTY	MUNICIPALITY	DDA	TIFA
Lake County	Village of Baldwin	•	
Mason County	City of Ludington	•	
	City of Scottville	•	
Muskegon County	City of Montague	•	
	City of Muskegon	•	•
	City of Muskegon Heights	•	•
	City of Norton Shores		•
	City of Whitehall		•
Newaygo County	City of Fremont	•	
	City of Newaygo		•
	City of White Cloud	•	
Oceana County	City of Hart		•
	Village of Pentwater	•	
	Township Hart	•	

Conversely, special consideration is given in state reviews for Single Business Tax credits if the involved projects are listed in Core Communities, in or near downtowns, or in Cool Cities as designated by the Governor.

The focus of the Cool Cities Initiative is to build vibrant, energetic cities that attract jobs, people, and opportunity by strengthening neighborhoods. Cool Cities have available the following grants and planning programs: Neighborhoods in Progress, Michigan Main Street, Blueprints for Michigan’s Downtowns, and Blueprints for Michigan’s Neighborhoods. Under each of these competitive programs, successful neighborhoods enjoy additional marketing opportunities. Neighborhoods in Progress designees have priority access to resources. The following communities have obtained Cool Cities designations.

COOL CITIES	
Mason County	City of Ludington
Muskegon County	City of Muskegon
	City of Whitehall
Newaygo County	City of Fremont
	City of Newaygo
	City of White Cloud

FEASIBILITY ANALYSES

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OTT/STORY/CORDOVA CHEMICAL Site Feasibility Analysis



Groundwater treatment facility (foreground) and former chemical production area (background) at the Ott/Story/Cordova Chemical Co. Superfund site

Picture from the MDEQ website: michigan.gov/deq

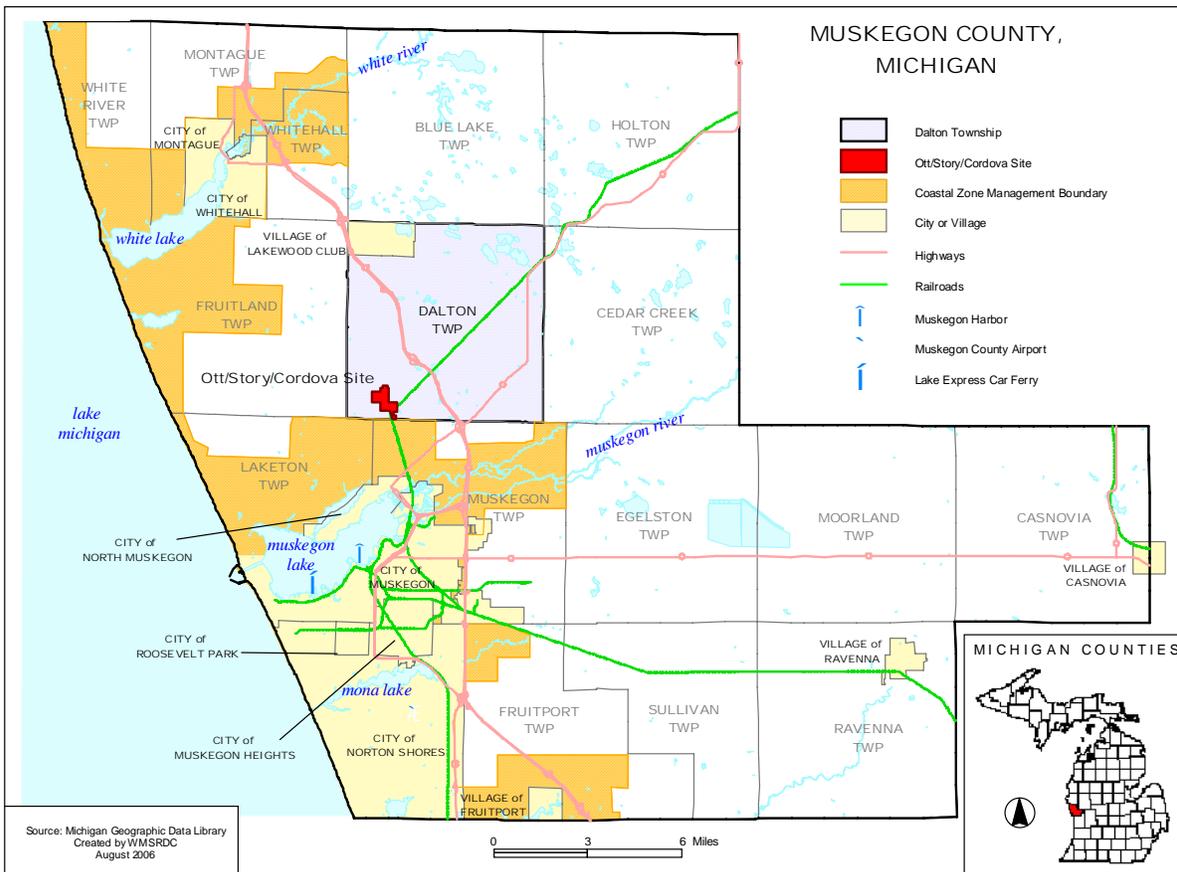
Ott/Story/Cordova Chemical Dalton Township, Muskegon County

1. OVERVIEW

Community Description

The Ott/Story/Cordova Chemical Site (hereafter referred to as Cordova site) is located at 500 Agard Rd. in Dalton Township. The township was established in 1859 and is located in the northern tier of Muskegon County. Neighboring municipalities include Blue Lake Township to the north, Muskegon Township to the south, Cedar Creek Township to the east, and Fruitland Township to the west. According to the 2000 U.S. Census, the total population is 8,047, which includes the incorporated Village of Lakewood Club and the unincorporated community of Twin Lake. Important public facilities in the township include the Dalton Township Fire Department, Dalton Maintenance (public works yard), two community shelters, the township hall, the township library, and a Muskegon County Road Commission facility. The township has exceptional transportation connections, with two major roadways, US-31 and M-120, and a Michigan Shore railroad line that runs through the township. Additionally, Dalton is located within close proximity to the Muskegon Harbor and the Muskegon County Airport.

Map 7

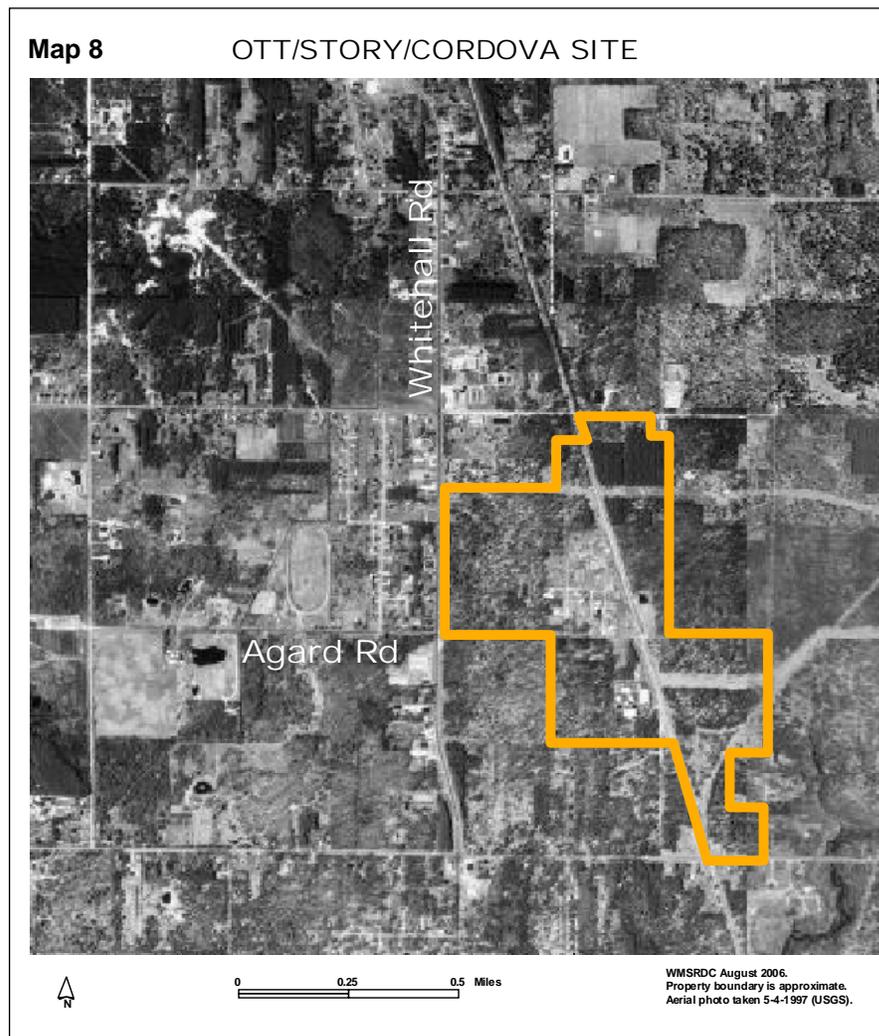


Site Description

The Cordova Site is a former organic chemical production facility that operated under at least three owners from 1957 until 1985. There are four buildings located on the site; the former Cordova Chemical Company administration building, a security building, and two garage/warehouse structures; as well as a groundwater treatment facility. The buildings are in extremely poor condition and are slated for demolition. The former production area is approximately 20 acres in size; however the entire site covers approximately 210 acres.

The property is owned by Muskegon County, located in Dalton Township, and technically a part of the City of Muskegon. This arrangement has been made possible through extensive cooperation between the three units of government.

As seen in the aerial photo below, the property is surrounded by wooded, undeveloped land and a semi-rural residential area. There are about 300 to 500



residents living within a one-mile radius of the site. The parcel is entirely bisected by an abandoned railroad owned by the State of Michigan, and has an active Michigan Shore railroad line which traverses the southeast corner of the property. Whitehall Road, an important artery between the Muskegon and Whitehall areas, lies adjacent to the property, while the Russell Road interchange at US-31 can be found about one

mile to the east. The parcel's irregular shape is due to the fact that it has been interspersed with privately owned properties.

2. DETAILED DESCRIPTION of SITE

Past Use

From 1957 through 1986, the Cordova Site was used as a chemical production facility. Ott Chemical Company owned the site from 1957 to 1965, when the company was purchased by Corn Products Company (also known as CPC International, later known as Best Foods, and since purchased by Unilever Inc.). CPC continued manufacturing operations under the Ott name until 1972 when the site was sold to the Story Chemical Company. In 1977, Story went bankrupt and the State of Michigan encouraged Aerojet General Corporation (Aerojet) and Aerojet's subsidiary, Cordova Chemical Company, to resume operation of the plant. A deal was reached in which Cordova purchased the property and agreed to accept responsibility for a limited environmental cleanup at the plant, while the State agreed to take groundwater treatment actions and to indemnify Aerojet against any further cleanup that might be required at the site. Cordova then proceeded to operate the plant from 1977 to 1986, when chemical production ceased.

PROPERTY OWNERSHIP		
YEAR	PARENT COMPANY OR OWNER	COMPANY NAME
1957 – 1965	Arnold Ott	Ott Chemical Company
1965 – 1972	CPC International	Ott Chemical Company
1972 – 1977	Story Chemical Company	Story Chemical Company
1977 – 1986	Aerojet Corporation	Cordova Chemical Company
1986 – N/A	Aerojet Corporation	N/A
N/A – 2002	State of Michigan	N/A
2002 – present	Muskegon County	Muskegon County Business and Industrial Park – North (2008)

Contamination

On September 8, 1983, the Cordova site was added to the EPA's NPL and officially designated as a federal Superfund site for environmental contamination. Prior to remediation, it was considered to be one of the nation's ten worst pollution sites. As many as five unlined seepage lagoons were used to dispose of industrial wastewaters and production vessel residues. Approximately 10,000 drums of waste material, some of which contained phosgene gas, were stockpiled onsite. These practices resulted in contamination of groundwater, soils, and nearby Little Bear Creek and its unnamed tributary.

Types of contaminants, sources of contamination, and some of the most dangerous contaminants identified at the site are listed in the tables on the following page.

TYPES OF CONTAMINATION
<ul style="list-style-type: none"> - Base Neutral Acids - Dioxins/Dibenxofurans - Inorganics - Metals - Polycyclic aromatic hydrocarbon (PAH) - Polychlorinated biphenyls (PCBs) - Pesticides - Volatile Organic Chemicals (VOC)

SOURCES
<ul style="list-style-type: none"> - Discharge of sewer/surface water - Inadvertent spill - Incineration residuals handling - Lagoon disposal - Manufacturing process - Storage – drums/containers of waste - Storage – finished product - Storage – raw material

DANGEROUS CONTAMINANTS	
Groundwater	vinyl chloride; 1,1-dichloroethene; and 1,2-dichloroethane
Soils	benzoic acid; 1,2-dichlorobenzene; 4-chloroaniline; 1,1,1-trichloroethane; xylene; toluene; 1,4-dichlorobenzene; hexachlorobenzene; 4,4'-DDT; and dioxin
Little Bear Creek	1,1-dichloroethane

Environmental Remediation – History

A partial removal was conducted between 1977 and 1979 by the State of Michigan and former site owner Cordova Chemical Co. These activities included removal of stockpiled drums and thousands of cubic yards of contaminated soils and sludge. By that time however, a contaminant plume containing at least 40 organic chemicals had already migrated approximately one mile to the southeast, contaminating Little Bear Creek and several private water wells. Nearby residents were supplied with bottled water until connections to the municipal water system were installed in 1982. In the same year, the site was proposed for placement on the National Priorities List (NPL).

The table below highlights some remediation milestones that took place between 1977 and 2002. During this time, the State and EPA conducted environmental remediation activities and cleaned the property to industrial clean-up standards.

DATE	EVENT
1977-1979	Partial removal conducted by State of Michigan and Cordova Chemical Co
December 1982	Site is proposed for NPL status
September 1983	Site is awarded NPL status
September 29, 1989	EPA completed a Remedial Investigation/Feasibility Study and signed a Record of Decision (ROD) for groundwater containment by five extraction wells
September 29, 1990	A second ROD signed by EPA requires aquifer restoration by using additional extraction wells and treatment by a Groundwater Treatment Facility (GWTF)
September 27, 1993	A third ROD is signed selecting “Low Temperature Thermal Desorption” as the remedy for approximately 10,000 cubic yards of soil and sediment
February 26, 1998	EPA amends the third ROD to allow for creek monitoring and excavation and offsite disposal of approximately 4,000 cubic yards of soil
September 29, 1992	Groundwater treatment facility (GWTF) design completed
February 24, 1996	GWTF started treating contaminated groundwater
September 14, 2000	System operational and functional status was achieved for GWTF; Long-Term Response Action (LTRA), started on that date
March 21, 2002	The soil remediation under the authority of the State certified complete.

Environmental Remediation – Current Activities

Although physical cleanup actions at the Cordova site are complete and it is ready to be prepared for commercial and/or industrial development, the EPA's work is not finished. It is currently engaged in the Post-Construction stage, which is intended to ensure that the cleanup provides for long-term protection of human health and the environment. One of the activities during this stage is a five-year review of the remedies undertaken at the site. Under federal superfund legislation, five-year reviews may no longer be needed when no hazardous substances, pollutants, or contaminants remain on site above levels that allow for unlimited use and unrestricted exposure. The next review for the Cordova site is scheduled for 2007, and additional reviews will be conducted every five years, as necessary.

In addition to the EPA, the State of Michigan is also continuously involved with long-term activities at the Cordova site. It has responsibility for the operation and maintenance of a continuously operating groundwater treatment facility on the southern half of the site. The groundwater treatment facility is slated to continue functioning until 2030. According to the EPA, the groundwater treatment facility has removed approximately 7,200 pounds of contaminants from approximately 3,364,000,000 gallons of groundwater. It is estimated that by September 30, 2030, approximately 31,000 pounds of contaminant will have been removed from approximately 14,500,000,000 gallons of groundwater.

Except for soil remedies, which were completed under the authority of the State of Michigan, all cleanup activity has been done under federal and state cost share agreements. According to a Preliminary Close Out Report issued by the EPA on May 6, 2002, the total cost expended for this project is \$53,371,000. However, considering operation and maintenance of the groundwater treatment facility until 2030, along with the Post-Construction activities, the potential total net worth for this project might range between \$85 and \$100 million.

Past or Pending Legal Issues

Shortly after the Cordova site received the Superfund designation in 1983, the United States Environmental Protection Agency (EPA) engaged in an extensive campaign to clean up contaminated soil, surface water and groundwater at the site. In 1989, EPA and the State of Michigan sued the remaining liable parties; Aerojet, CPC and their subsidiaries; for all response costs.

The ensuing legal battle required numerous trials in various courts, including a trip to the United States Supreme Court in 1998. Stating that both the court of appeals and district court in Michigan had made incorrect rulings regarding parent corporation liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Supreme Court made its own decisions and then asked the lower courts to use the newly established precedents to hear the case again. Following this ruling, EPA, the State and Aerojet entered an agreement releasing Aerojet from further liability beyond

requirements set forth in the contractual agreement with the State in 1977. EPA and the State then continued litigation with CPC in the district court. Under the precedents set by the Supreme Court's decision, the district court ruled that CPC could not be held directly liable as an operator of the Cordova Site.

3. PLANNING ANALYSIS

Land Use and Zoning

The Cordova site is currently awaiting commercial and/or industrial development. These are the only permitted uses of the property according to the level of remediation achieved by cleanup activities. This development is consistent with Dalton Township's 2003 Future Land Use Map, and the Township's current zoning ordinance, which is available on the internet at <http://www.dalton.mi-twp.org/Zoning.htm>. It is also compatible with the Smart Growth scenario proposed in the Muskegon Area-wide Plan, published by WMSRDC in 2005. Groundwater treatment is the sole activity at the property.

Comprehensive Economic Development Strategy (CEDS)

The CEDS is an annually updated document that helps the Regional Commission and other local interests to better evaluate economic development goals, objectives, projects, and general economic conditions within the Economic Development District comprised of Lake, Mason, Muskegon, Newaygo, and Oceana Counties. The CEDS is required by federal enabling legislation to maintain the region's eligibility for federal development assistance. It is the document that forms the planning and implementation framework for the region's economic development. The CEDS also lists and prioritizes major development projects proposed by local governments in the region.

Redevelopment of the Cordova site is listed in the 2005 CEDS Annual Report as an Economic Development Infrastructure Construction Project. The project was submitted for a number of years by Muskegon County and is consistent with many long term goals and short term objectives that have been laid out in the district's CEDS Annual Report. For example, the project will develop much needed industrial park land with adequate infrastructure around the area and help to diversity the industrial base in Muskegon County.

This project was also listed as the number one priority for the five county Economic Development District according to the West Michigan Industrial Parks/Sites Study, published in 2003 by WMSRDC.

Community Input

There has been overwhelming support and cooperation throughout the community in Muskegon County to remediate and reuse the Cordova site. The County of Muskegon, Dalton Township, the City of Muskegon, Muskegon Area First, the Muskegon Area Chamber of Commerce, the MEDC, and the WMSRDC have all come together for the development of this project. In January 2005, the

Muskegon County Board of Commissioners unanimously passed a resolution supporting the project and moving forward in pursuit of federal grant money.

4. Recommendations

Future Land Use

Since the Cordova site was remediated to industrial clean-up standards by EPA and MDEQ activities, future development will generally be restricted to commercial and/or industrial uses. This prohibits the development of habitable structures below grade and limits construction to slab on grade development. Additionally, well water use will be limited or even prohibited due to lingering contamination.

Future Project Development

Development of the Cordova site, called the Muskegon County Business and Industrial Park – North, will be divided into a number of phases. With the help of a recently awarded EDA grant, the first phase will develop 117 acres to the north of Agard Road. The project, which is scheduled to be completed by the end of 2007, consists of two major components. The first component is the development of roads and site utilities on the site and the second component is the extension of public water from the current terminus to the site. The water extension includes the nearby construction of a water booster pump station and an elevated water storage tank, which are both necessary for the extension of water to the Cordova site. Additionally, the project will include demolition and removal of buildings currently existing on the site, abandonment of existing wells and water lines, placement of street lighting, and landscaping.

The land should be ready for occupancy by 2008. A variety of lot sizes, ranging from 1.2 acres to 19.9 acres, will be available to attract various types of business and industry. Appropriate restrictive covenants for development and reasonable uniform standards will be established in order to ensure quality development. Muskegon County has intentions of developing the remaining property in future phases; however there are no set plans as of yet.

5. Implementation

Financial Arrangements

Financial coordination has been critical to the remediation and preparation of the Cordova site for development. For example, the EPA and MDEQ worked together to remediate the land under cost-share agreements, while cooperation between Dalton Township, the City of Muskegon and Muskegon County was critical in securing federal grant money, and in securing the designation of the property as a Renaissance Zone. Listed below are some of the arrangements that have enabled the redevelopment of this Superfund site.

- In 2002, Dalton Township and the City of Muskegon entered into a P.A. 425 agreement, which made the Cordova site technically a part of the City for 50 years. As a result, the site became eligible to receive a 15-year Renaissance Zone designation. This eliminates most state and local taxes through 2014, including real and personal property taxes and the State's Single Business Tax.
- In 2002, Dalton Township and Muskegon County agreed to a tax-base sharing agreement whereas future income tax revenues will be split between the City (60%) and the Township (40%), and the County will get half of the township's share to use for the development of the site. The County will be responsible for development costs as the owner of the property.

Funding Sources and Incentives

During the course of this study, Muskegon County was awarded a \$2.56 million EDA Public Works and Development Facilities grant for construction of the first phase of the Muskegon County Business/Industrial Park – North. This grant was secured by the County of Muskegon, with the support and cooperation of Dalton Township and the City of Muskegon. Funds and incentives utilized to finance the development include the following.

- U.S. EDA Public Works and Economic Development Facilities Grant
- Muskegon County Bonds (50% local match for EDA grant)
- Renaissance Zone (through 2014)

These agencies will continue to work with each other to ensure the successful development of the new business and industry at the property. The completion of phase one, scheduled for the end of 2007, will make the land available for occupancy by the start of 2008. Additional phases of development are to be carried out in the future, as conditions allow.

Long-term environmental response activities will continue as long as they are deemed necessary. The EPA will continue to conduct 5-year reviews, while the State of Michigan will also continue the operation and maintenance of the groundwater treatment facility.

Implementation Agencies

Muskegon County, City of Muskegon, Dalton Township, EDA, MDEQ, WMSRDC

NAPH-SOL REFINERY/ZEPHYR INC. Site Feasibility Analysis



Former Zephyr Entrance on N. Wood Road

Picture taken by WMSRDC

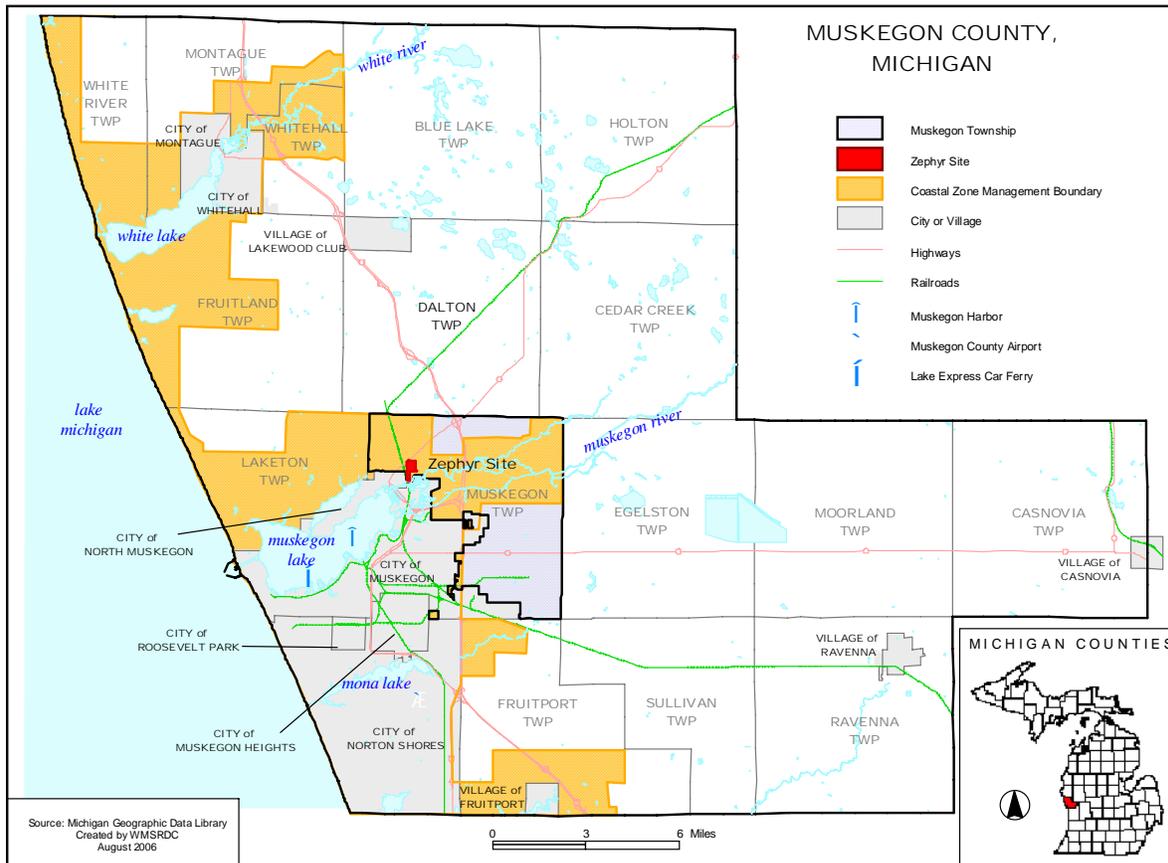
Naph-Sol Refinery/Zephyr Inc. Muskegon Charter Township, Muskegon County

1. OVERVIEW

Community Description

The Zephyr Inc./Naph-Sol Refinery Site, generally known as the Zephyr site, is located at 1222 Holton Road in Muskegon Charter Township. The township was organized in 1837 and is located near the center of Muskegon County. Neighboring municipalities include Dalton and Cedar Creek Townships to the north, the Cities of Muskegon and North Muskegon to the west, Fruitport Township to the south, and Egelston Township to the east. According to the 2000 U.S. Census, the township's total population was 17,737. Muskegon Township has one police precinct, two fire stations, and one public works yard. It also has eight community shelters, a community medical facility, and a township hall. The township is exceptionally well connected to various modes of transportation. It contains three major roadways (US-31, M-46, and M-120) and a Michigan Shore railroad line. Additionally, Muskegon Township is located within close proximity to the Muskegon Harbor and the Muskegon County Airport.

Map 9



Site Description

The Zephyr site is currently composed of 70 acres located on the south side of M-120 and the west side of N. Wood Road. The property is irregularly shaped, partially due to a split in ownership, with wooded areas remaining at its peripheries. The land is flat, except for the back side which has a steep drop to the Muskegon River flats. Most of the property drains to the North Branch of the Muskegon River but there is some drainage to Bear Creek. The southern-most section of the property is wetlands.

The property is surrounded by industrial, commercial, and residential uses. It is well serviced with the following utilities available: natural gas, municipal sewer, municipal water, storm sewer, above ground electrical, above ground telephone, and cable television. Railroad tracks run next to the southern tip of the property. The site contains several operating businesses along M-120, while a couple small buildings occupy the rear portion of the property.



2. DETAILED DESCRIPTION of SITE

Past Use

The earliest known use of the site was that of an oil refinery which produced gasoline and naphtha. Historical records indicate that Zephyr sold the property to Naph-Sol Refinery Company in 1932. Naph-Sol was already in the naphtha business and entered the gasoline market as a result of the purchase. It retained the Zephyr name and associated Zephyr stations, primarily located in Michigan and Wisconsin.

Naph-Sol dismantled the refinery, which utilized approximately 33 of the 70 acres, in the late 1970's but left bulk storage tanks as well as an extensive piping system for fuel, water, and utility lines buried on the site. U.S. Environmental Protection Agency (EPA) records show that the site was converted to a bulk storage facility for petroleum products and liquid fertilizer in 1985.

In the early 1990's, Naph-Sol/Zephyr filed for bankruptcy and the Zephyr property reverted to the State of Michigan through non-payment of property taxes. Muskegon Township acquired the property in 1996/1997 and then sold it to Ridgemont Development Corporation in 1997.

On May 17, 1999, a proposed prospective purchaser agreement (PPA) for the western part of the Zephyr Refinery Site was executed by Ridgemont Development LLC and Brink Terminal Services, Inc. Brink now uses this portion of the land for liquid fertilizer storage.

The remaining Zephyr property was sold by Ridgemont on a land contract to a partnership, which included Kevin Stevens and a silent partner, in 2003/2004. A building on the property is partially used to house Northwinds Fitness at the current time and has also been used in the past to house Riverview Ventures (football clubs) and Superior Environmental.

The property is currently listed for sale by Grubb & Ellis for \$750,000 through signs on the property as well as on its website.

PROPERTY OWNERSHIP		
YEAR	PARENT COMPANY OR OWNER	COMPANY NAME
1931 and earlier	Zephyr	
1932 – early 1990s	Naph-Sol Refining	Zephyr
Early 90's-1996/1997	State of MI/Muskegon Township	
1997 - 2003	Ridgemont Development Corporation	
1999	Property Split – Western Portion	Brink Terminal Services
2003 - Present	Partnership – Remaining Portion	Land Contract
Present	Listed for sale by Grubb & Ellis	

Contamination

EPA discovered the Zephyr site and conducted a preliminary assessment of groundwater contamination in July of 1984. In February of 2000, the following history of contamination was rendered by EPA. “Sloppy practices and spills during the 65+ years of operation of the refinery resulted in extensive contamination of the groundwater by petroleum products. The edge of the contaminated groundwater plume was discharging into wetlands and the Muskegon River adjacent to the site. In addition, there were tanks and drums containing CERCLA waste present, and large pits of OPA tarry material buried on the site.”

A discharge into the Muskegon River is of particular concern since the river runs directly into Muskegon Lake, which is an “Area of Concern” (AOC) according to EPA. Muskegon Lake was originally identified as an AOC because, prior to 1973, it received direct discharges of industrial wastewater, municipal wastewater treatment plan effluent, combined sewer overflows and urban runoff. The discharges degraded water and habitat quality in Muskegon Lake and its tributaries.

After a lengthy process of analysis and remediation for the Zephyr site (refer to the next section) and a “Non-National Priorities List Potentially Responsible Party Search” from 1996-2001, EPA decided that the site was “Not on the NPL (National Priorities List)” and “Referred to Removal” on August 19, 2002 with “No Further Remedial Action Planned” (NFRAP). The following table provides a snapshot of EPA actions.

EPA REMEDIATION ACTIONS	
Discovery	07/01/84
Preliminary Assessment	07/01/84
Notice Letters Issued	09/10/96
Issue Request Letters	11/13/96
Removal Complete (started 9/30/96)	02/16/98
Administrative Order on Consent	04/08/99
Non-NPL Potentially Responsible Party Search Complete (started 4/30/96)	01/02/01
Referred to Removal-NFRAP	08/19/02

Following completion of the EPA process, in June of 2004, MDEQ gave the site a score of 42 out of 48 (with 48 being the most contaminated), through its “201” process. The source of contamination was attributed to “petroleum bulk stations & term” and the following contaminants were listed.

TYPES OF CONTAMINATION
1,2,4 TMB; 1,3,4 TMB; 2-Methylnaphtalene; As; Ba; Benzene; Cd; ;Cl; Cr+6, Dibensofuran; Diethyl ether; Ethylbenzene; Fluroene; Pb; MTBE; Naphthalene; Phenanthrene; Se; PCE; Toluene; TCE; VC; Xylenes; BEHP, cis-1,2 DCE; n-Butylbenz

Although EPA and MDEQ looked at groundwater contamination, surface contamination was not identified or addressed completely. Consequently, the township used \$5,000 of a \$10,000 loan to its Brownfield Redevelopment Authority to pay for a cross-sectional surface soils analysis of the site. This study identified soil contamination at certain locations on the property, especially where tanks were placed, but not throughout the entire property.

Environmental Remediation - History

The first recorded attempt to remediate groundwater contamination at the site occurred in 1985. According to historical information presented by EPA, the following occurred. “In 1985, after a series of oil discharges into the Muskegon River that appeared to originate from the site, MDEQ ordered Zephyr to construct a groundwater treatment system.” Zephyr declared bankruptcy in the early 1990’s and the State involuntarily acquired the site through property tax reversion. In 1996, the State requested assistance from EPA in addressing groundwater contamination at the site.

EPA conducted its first removal action from September 1996 to March 1997 under Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) authority. A second removal action under the authority of the Oil Production Act of 1990 (OPA), in conjunction with the United States Coast Guard, was conducted from March 1997 to February 1998. On February 19, 1998, Region 5 of EPA announced that the \$4.4 million cleanup of the Zephyr Refinery site was complete. EPA provided \$1.3 million of the cleanup funds through its Superfund program. The United States Coast Guard provided \$3.1 million through the Oil Spill Liability Trust Fund.

MATERIALS REMOVED FROM THE SITE
- 15 above-ground storage tanks
- 80,000 gallons of hazardous or flammable liquids
- 43,000 tons of contaminated soil from 13 disposal lagoons
- 2,330 tons of piping equipment and scrap metal

A few tanks remained at the site, some of which were used for the groundwater treatment system and some of which were used by the fertilizer storage facility. These tanks were later relocated to an area next to the railroad tracks and converted into vessels for liquid fertilizer for farmers. In January of 1999, MDEQ discovered a release of an unknown substance at the site and reviewed five storage tanks. According to the state’s “213” list, these tanks ranged in size from 2,000 to 10,000 gallons and in installation age from 1961 to 1985.

Although EPA stated that no further response activities were anticipated following its removal actions, it indicated that it intended to “work with the State of Michigan and local government agencies to investigate the potential for redevelopment of the site”. It also announced that the Michigan state legislature had appropriated \$5,000,000 to design, build, and operate the groundwater treatment system to deal with the underground oil plume and remove remaining

underground pipes at the site. Since that time, the State of Michigan has completed construction of the extensive groundwater collection and treatment/free petroleum product recovery system and removal of underground piping from the site.

Environmental Remediation – Current Activities

The State of Michigan is operating and maintaining the groundwater treatment-free petroleum product recovery system through a contract with Superior Environmental Corporation of Marne. The treatment system draws water at the bottom of the site and takes it to distribution tiles at the top of the hill. The water is constantly being reclaimed and circulated, which is referred to as “sparging”.

Records from the Building Committee State Administrative Board from August 2001 show a revision to the construction contract with Superior for “Design, Installation and Operation of a Groundwater and Free Product Collection System”. The revision increased the contract amount by \$146,514. Records from September 2005 show an authorization of \$108,872 for “Installation and Operation of Groundwater and Free Product Collection System”.

While average annual operation costs are not known, cumulative state expenditures as of September 30, 2005 are \$7,419,386 for the treatment system and on-going operation and maintenance. Additional expenditures will be necessary to remediate soil contamination.

Past or Pending Legal Issues

The U.S. Coast Guard Fund Center determined that the State of Michigan was the “responsible party” as landowner at the time of its removal (3/97-2/98) and presented two bills, totaling approximately \$2,700,000, for the OPA portion of the cleanup. The State Attorney General sent a letter to the Fund Center stating reasons the State did not consider itself the responsible party, including the fact that it acquired the property involuntarily. Instead of replying, the Fund Center referred the cost recovery package to the Department of Justice for further action. The outcome of this referral, nearly a decade ago, is not known.

On May 17, 1999, EPA was given notice that a proposed prospective purchaser agreement (PPA) for the western part of the Zephyr Refinery Site was executed by Ridgemont Development LLC and Brink Terminal Services, Inc. The proposed PPA was submitted to the Attorney General for approval and would resolve certain potential claims of the U.S. under CERCLA, the Clean Water Act, and the Oil Pollution Act, against Ridgemont and Brink. The proposed PPA required Ridgemont and Brink to pay \$20,000 towards outstanding response costs incurred by the United States in conducting removal activities at the site.

3. PLANNING ANALYSIS

Land Use and Zoning

The property is currently vacant and was recently zoned “M-1”, which allows for industrial/business Planned Unit Development (PUD). It had previously been zoned for industrial uses. There are covenants on part of the land related to previous contamination. There are also easements. The township has control of any development on the site while the State has final review on future use.

Comprehensive Economic Development Strategy (CEDS)

The CEDS is an annually updated document that helps the Regional Commission and other local interests to better evaluate economic development goals, objectives, projects, and general economic conditions within the Economic Development District. The CEDS is required by federal enabling legislation to maintain the region's eligibility for federal development assistance. It is the document that forms the planning and implementation framework for the region's economic development. The CEDS also lists and prioritizes major development projects proposed by local governments in the region.

Although redevelopment of the Zephyr site was not submitted as a proposal for consideration in the 2004/2005 Comprehensive Economic Development Strategy (CEDS) process, township officials have repeatedly contacted both the West Michigan Shoreline Regional Development Commission and the U.S. Department of Commerce-Economic Development Administration regarding development assistance. Redevelopment of the property has a strong potential for adding jobs to the economy.

Community Input

The Muskegon Lake Public Advisory Council (PAC) is a coalition of community interests dedicated to working cooperatively for the improvement of the Muskegon Lake ecosystem through the Remedial Action Planning (RAP) process. Members come from all sectors of the local community; including business and labor, environmental and conservation groups, government and other organizations, educational entities, as well as the general public. The RAP process has triggered the creation of documents pertinent to the Zephyr site; in particular, the 1999/2000 Muskegon River Mouth Wetland Buffer Zone Study and the 1999 Lake Michigan Tributary Monitoring Project in the Muskegon Lake AOC. The Buffer Zone Study prioritized the remediation of the Muskegon River mouth wetland buffer zone, including the Zephyr site.

There have been several ideas from the community for redevelopment of the land, particularly its periphery. Land along N. Wood Street is adjacent to a residential neighborhood and has not experienced contamination. It has been proposed for residential development. Land along M-120 could easily be developed and would be suitable for commercial usage. These portions of the property are both very attractive and would be easy to sell and develop.

However, the township is concerned that the entire parcel be sold as one property and that there be a plan for redeveloping all of it. Without this requirement, it could easily happen that only the most attractive portions would be developed and that the contaminated portion of the property would remain vacant. It is less likely that a developer would buy only the contaminated portion of the land.

4. RECOMMENDATIONS

Future Land Use

Grubb & Ellis, which has listed the Zephyr site for sale at \$750,000, presents the following information regarding future land use on its web site. “This redevelopment opportunity has good access to US-31 via M-120. Surrounded by industrial, commercial, and residential; a multi-use development is the most likely re-use scenario for the property.”

Due to the size of the property, it is most likely that redevelopment will include multiple uses. An additional idea for property development has included a sports facility or sports complex. It has been suggested that any industrial uses be kept to “light” industrial. State funding for a multi-family development has also been mentioned.

Future Project Development

Care must be taken with development plans because there are covenants on parts of the site due to contamination. Completion of groundwater treatment or discharge of treated waters into the sanitary sewer system as well as removal of covenants from the land would hasten the process of development. Consideration should be given to the cost-effectiveness of continual groundwater treatment on site versus at the Muskegon County Waste Water system.

There have been two applications filed with the Michigan Department of Environmental Quality (MDEQ) for assistance in project development. In 2004, Kevin Stevens and his silent partner filed a Brownfield Application for a basketball stadium and (flag) football field/arena. It was determined that Brownfield dollars could not be used for a stadium or sporting complex. In 2005, MDEQ invited an application for an eligible activity but it was not submitted by the property owners. It is likely that the State would welcome a third application. Successful redevelopment of the property would, undoubtedly, be attractive to the State since it has invested heavily in cleanup and continues to spend money on operating and maintaining the groundwater treatment system.

In addition, EPA recommended in its Lake Michigan Lakewide Management Plan (LaMP-2002) “remediation of brownfields and sediments as Clean Michigan Initiative funds become available” for the Muskegon Lake AOC.

5. IMPLEMENTATION

Financial Arrangements

Muskegon Charter Township has a township-wide Brownfield Redevelopment Authority (BRA), allowing it to capture the increase in property taxes resulting from development of brownfield properties and developers to receive Small Business Tax credits for development. An eligible property must have a BRA-approved Brownfield Redevelopment Plan. The tax increment financing tool could be used to repay State loans for cleanup and redevelopment. Another potential source for repayment includes income from the sale of township-owned properties, such as P. Don Aley Industrial Park lots.

Muskegon Charter Township was not awarded “core community” status by the State of Michigan and has not been able to obtain the status through rule revisions, although meeting the requirements. Consequently, brownfield financing can only be used by the township to identify the level of required cleanup according to proposed uses, conduct additional cleanup, etc. If the township could obtain “core community” status, it could use brownfield financing for streets, roads, water, and sewer. The township could perhaps execute an Act 425 Agreement with a “core community”; such as Muskegon, Muskegon Heights or Norton Shores for the Zephyr site.

Funding Sources and Incentives

- U.S. EDA Public Works and Economic Development Facilities Grant, if jobs are created at the site
- U.S. Department of Housing and Urban Development BEDI, if an Act 425 Agreement is signed with the City of Muskegon, Muskegon Heights, or Norton Shores
- Michigan Department of Environmental Quality Grants and Loans, if additional remediation efforts are conducted or if an Act 425 Agreement is signed with the City of Muskegon, Muskegon Heights, or Norton Shores
- Michigan State Housing Development Authority, if eligible housing is created
- Michigan Economic Growth Authority, if the Muskegon Township Brownfield Redevelopment Authority has a Brownfield Redevelopment Plan for the property that includes the use of Tax Increment Financing
- Michigan Economic Growth Authority, if the Muskegon Township Brownfield Redevelopment Authority has a Brownfield Redevelopment Plan for the property that includes the use of Small Business Tax Credit by the developer

Additional information about these funding sources and incentives is presented in the section of this document entitled “Tools for Implementation”.

Implementation Agencies

Muskegon Township Brownfield Redevelopment Authority; Michigan Department of Environmental Quality; Michigan State Housing Development Authority; Michigan Economic Growth Authority; U.S. Department of Commerce-Economic

Development Administration; U.S. Department of Housing and Urban Development; and, possibly, an Entitlement City.

NORTHSHORE HOSPITAL Site Feasibility Analysis



Former Northshore Hospital entrance on M-120 (Holton Rd)

Picture taken by WMSRDC

Northshore Hospital North Muskegon and Muskegon Charter Township Muskegon County

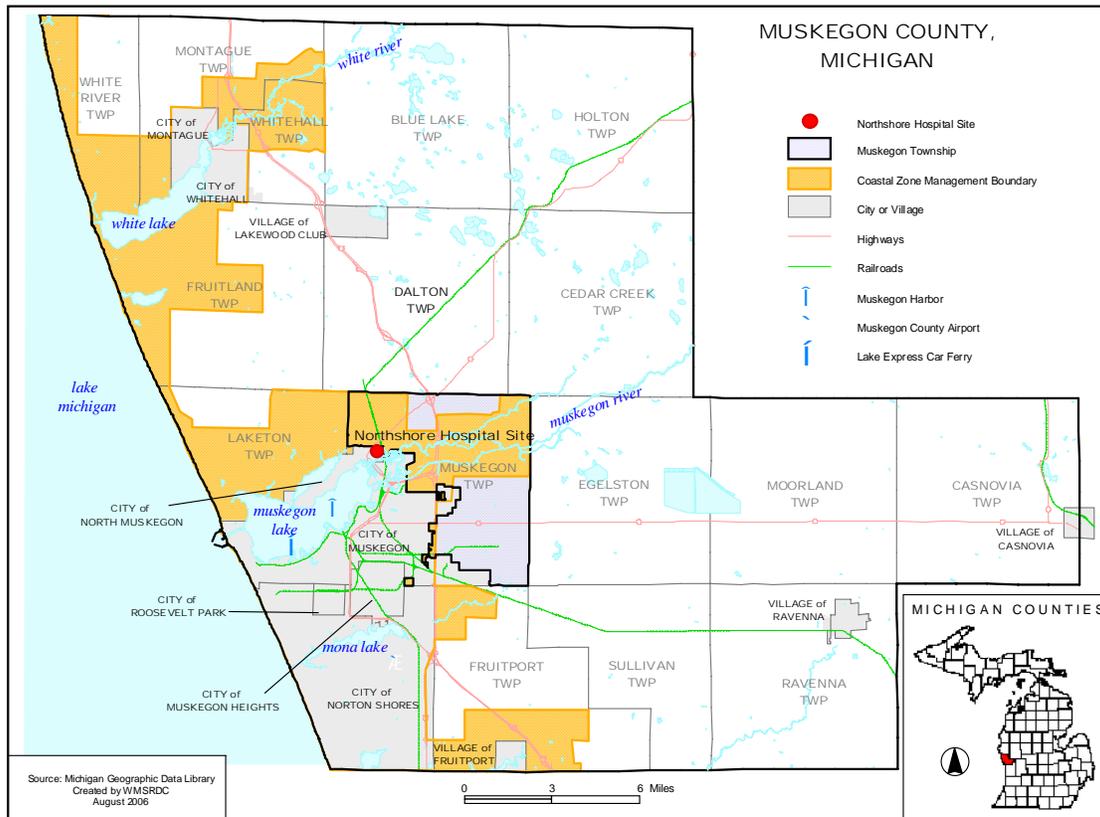
1. OVERVIEW

Community Description

The Northshore Hospital site is located at 1092 Holton Road and straddles the dividing line between the City of North Muskegon and Muskegon Charter Township in Muskegon County, Michigan. A description of Muskegon Charter Township is included in the Feasibility Analysis for the Naph-Sol/Zephyr property.

North Muskegon is located just inland from Lake Michigan, to the north of Muskegon City and Muskegon Lake and to the south of Bear Lake. It lies in the southwestern portion of Muskegon County. Like most of the cities and villages in the area, the lumber boom was responsible for the formation of the city. It was originally named Reedsville after the first settler, Archibald Reed, but was later re-named North Muskegon in 1881 when it was officially deemed a village. City stature came in 1891. The 2000 census population was 4,031. North Muskegon has a police precinct, a fire station, a public works yard, and a city hall. Infrastructure in the City includes Michigan Highway M-120, CSX Railroad, and a Consumers Energy power line. Major geographic features consist of Muskegon Lake, Bear Lake, Muskegon River, and dense residential and light commercial areas.

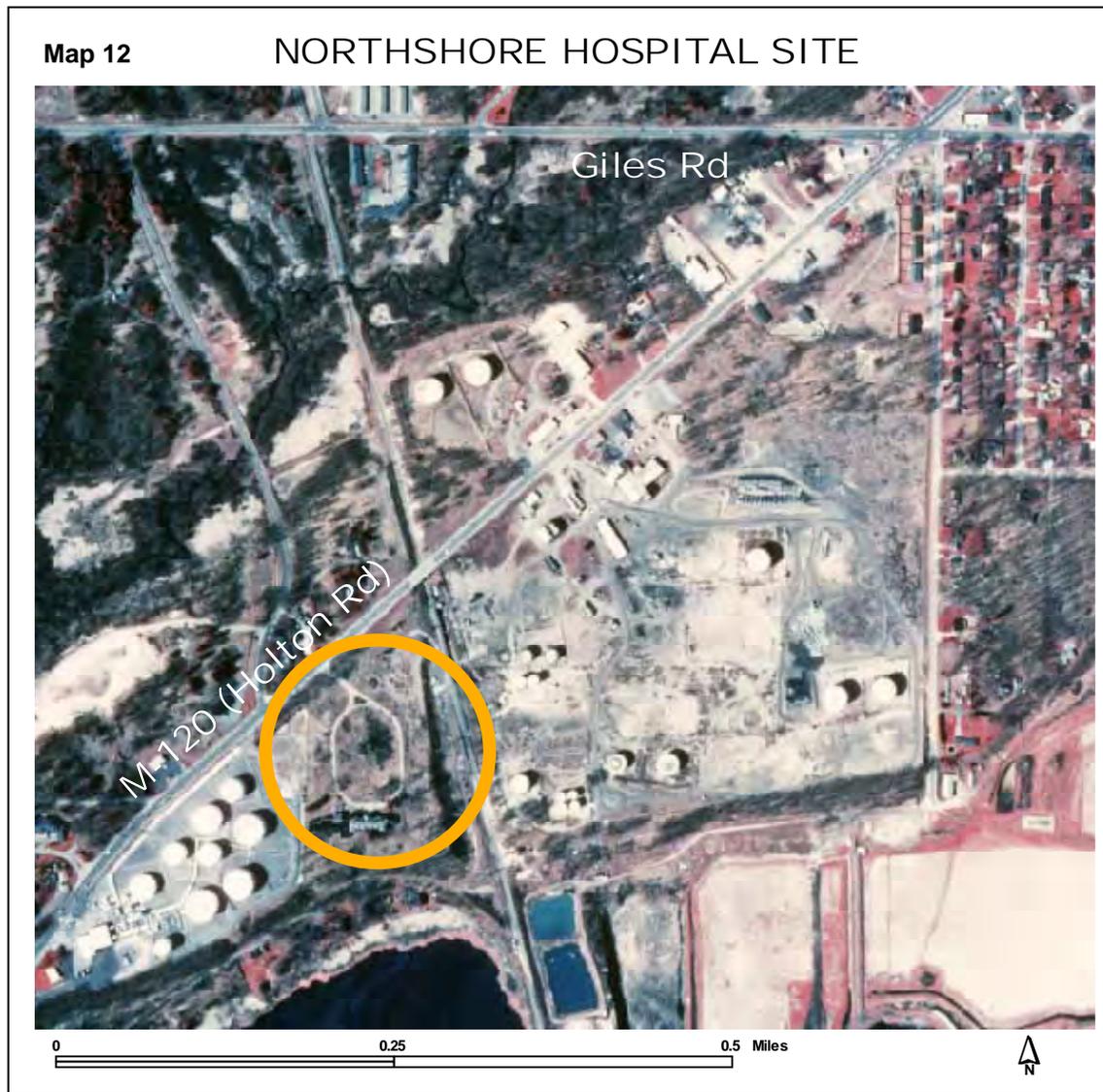
Map 11



Site Description

The Northshore Hospital site is composed of 14 acres of vacant land, nine of which are located in Muskegon Charter Township. The remaining five acres, which contained the hospital, are located in the City of North Muskegon. The land is located on M-120 and lies to the west of the Zephyr property, separated by C&O railroad tracks and a liquid fertilizer business. Power lines run along the east property line, adjacent to the functional train tracks. Marathon Oil borders the property on the west side.

The site is generally flat but the south side has a steep elevation, draining to the Muskegon River. Wooded areas are limited to the front and back sides. Remnants of the circular driveway to the hospital still exist. Although the entrance gates are left open, a “Private Property-No Trespassing” sign was posted long ago by Zephyr.



2. DETAILED DESCRIPTION of SITE

Past Use

The site was originally the home of a 75-bed County Tuberculosis Sanitarium, constructed in the 1920's as a result of the efforts of the Muskegon County Tuberculosis Association. According to historical records, area physicians were spending a great deal of time treating tuberculosis and collectively formed the Association. The Association then campaigned for passage of an ordinance to build a sanitarium and sold Christmas Seals to finance the effort. Thanks to two thousand posters distributed throughout the county stating, "Save Lives, Vote Yes, County Tuberculosis Sanitarium, April 8th", the ordinance passed and the hospital was built. It was also supported by the County with State aid in the form of \$1.00 per day for indigent patients, including children.

The building later became a mental health center, run by the State of Michigan and owned by the County of Muskegon, until it was abandoned in 1977. It sat vacant after that but was subject to late-night unauthorized entry by local youth, who subscribed to such thoughts as those presented in "The Shadowlands". "The eerie dwelling was a huge brick building looming on the outskirts of the quaint town of North Muskegon. Inside you could feel the evil among the dank walls which were covered in graffiti with readings such as "the house of the dead", "I can see you", and many odd pictures of creatures and eyes. The basement of the old dwelling was the most energetic place in the entire hospital. Cold drafts and unexplained noises filled the empty hallways. It was the most terrifying, strange place to experience."

The property was purchased from the County by a developer, acquired by the State when property taxes were not paid, and then sold to neighboring Zephyr Refinery for "isolation" purposes. Following Zephyr's bankruptcy in the early 1990's (see Zephyr Feasibility Analysis), the Northshore site tax-reverted to the State and was eventually acquired by the City of North Muskegon and Muskegon Township. Each municipality sold its portion to Ridgemont Development LLC of Holland nearly six years ago.

The property is currently listed on MDEQ's website as an Available Brownfield Property. The website also contains a picture of the old hospital and direction to contact either the City or the Township for more information.

Contamination

Although contamination at the Northshore site is not detailed in MDEQ's "201" or "213" lists, the site is regulated by Part 201 of NREPA. In addition, it has been reported that the MDEQ discovered soil and groundwater contamination. There is reportedly contamination near the railroad tracks and concern that neighboring groundwater contamination could migrate to the Northshore site.

Contamination could be of additional concern should it migrate to the Muskegon River. The Muskegon River runs directly into Muskegon Lake, which is an “Area of Concern” (AOC) according to the US Environmental Protection Agency (EPA). Refer to the Zephyr Feasibility Analysis for additional information on this subject.

Environmental Remediation

The hospital, previously located in the City of North Muskegon, was demolished and the property was cleaned up with \$241,162 of Clean Michigan Initiative funds in 2001. In addition, funds were used to remove and dispose of demolition debris and abandon several underground vaults on the property. The intent of the grant award was to pave the way for redevelopment.

Past or Pending Legal Issues

Both Muskegon Township and the City of North Muskegon sold the property to Ridgemont with the condition that it be developed. According to a local media report in late 2005, “Muskegon Township decided early this year to reclaim the acreage within its boundaries after Ridgemont Development LLC failed to submit an acceptable site plan to reuse the property. The partnership was given four years in which to do so. Ridgemont sued the Township in March, maintaining it legitimately delayed progress on the property because MDEQ hadn’t decided what pollution control methods it would use to cope with groundwater contamination in that area.” In response, MDEQ claimed that it needed a development proposal before methods could be specified.

According to a local media report in September 2006, Muskegon Township officials “unanimously approved a court settlement which gives purchasers...another year to redevelop the property”, “a year to begin construction on a project for which it must first get site plan approval from the township planning commission”, and “a one-year extension if the request is made before expiration of the first 12 months”.

3. PLANNING ANALYSIS

Land Use and Zoning

The property is currently zoned “M-1”, which allows Industrial/Business Planned Unit Development (PUD), by Muskegon Township. North Muskegon’s share of the property was zoned High Density Residential three years ago. It had been zoned industrial. Although the land is vacant, there are easements and restrictive covenants on it. There has been some discussion with the State of Michigan regarding the relocation of utilities.

Comprehensive Economic Development Strategy (CEDS)

The CEDS is an annually updated document that helps the Regional Commission and other local interests to better evaluate economic development goals, objectives, projects, and general economic conditions within the Economic Development District. The CEDS is required by federal enabling legislation to

maintain the region's eligibility for federal development assistance. It is the document that forms the planning and implementation framework for the region's economic development. The CEDS also lists and prioritizes major development projects proposed by local governments in the region.

Although redevelopment of the Northshore Hospital site was not submitted as a proposal for consideration in the 2004/2005 Comprehensive Economic Development Strategy (CEDS) process, both City and Township officials have contacted the West Michigan Shoreline Regional Development Commission regarding development assistance for the Northshore site. A potential source of assistance would be the U.S. Economic Development Administration.

Community Input

The community was very concerned about potential crime and fires at the vacant hospital building while it was still standing because of illegal entries. Community concerns were largely alleviated with the demolition of the building.

4. RECOMMENDATIONS

Future Land Use

Possible uses of the property could include expansion of adjacent businesses as well as industrial, commercial, or residential development. Both the City of North Muskegon and Muskegon Township would need to coordinate land use designations. There are easements and restrictive covenants on North Muskegon's share of the property where the hospital once stood. The property has railroad service available.

Future Project Development

The City of North Muskegon and Muskegon Township would need to coordinate on any project developed on the site, since the site is located in both municipalities. In addition, the township has historically required a plan for development of the entire site.

There have been several and diverse suggestions regarding development of the property. One suggestion has included use of the property for soccer fields while another has mentioned the possibility of "bio-diesel" manufacturing. Another has suggested the construction of condominiums while yet another included construction of a self-storage facility. In addition, eventual expansion of Marathon Oil has been considered.

5. IMPLEMENTATION

Financial Arrangements

Muskegon Charter Township does have a township-wide Brownfield Redevelopment Authority (BRA), allowing it to capture increases in property taxes resulting from development of brownfield properties and developers to receive

Small Business Tax credits for development. An eligible property must have a BRA-approved Brownfield Redevelopment Plan. The tax increment financing tool could be used to repay State loans for cleanup and redevelopment. Another potential source for repayment includes income from the sale of township-owned properties, such as Don Aley Industrial Park lots.

Neither Muskegon Township nor the City of North Muskegon were awarded “core community” status by the State of Michigan. In addition, Muskegon Township has not been able to obtain the status through rule revisions although it meets the necessary requirements. If the Township and/or the City could obtain “core community” status, brownfield financing could be used for streets, roads, water, and sewer in association with redevelopment of the Northshore site. This could perhaps be obtainable through an Act 425 Agreement with a “core community”, such as Muskegon, Muskegon Heights, or Norton Shores.

Without this arrangement, brownfield financing can still be used to finance further assessment or cleanup according to proposed use. The site is eligible for this brownfield financing either through its own status as a “201” facility or because it is adjacent to the Zephyr site, which is itself a facility.

Funding Sources and Incentives

- U.S. EDA Public Works and Economic Development Facilities Grant, if jobs are created at the site
- U.S. Department of Housing and Urban Development BEDI, if an Act 425 Agreement is signed with the City of Muskegon, Muskegon Heights, or Norton Shores
- Michigan Department of Environmental Quality Grants and Loans, if additional remediation efforts are conducted or if an Act 425 Agreement is signed with the City of Muskegon, Muskegon Heights, or Norton Shores
- Michigan Economic Growth Authority, if the Muskegon Township Brownfield Redevelopment Authority has a Brownfield Redevelopment Plan for the property that includes the use of Tax Increment Financing
- Michigan Economic Growth Authority, if the Muskegon Township Brownfield Redevelopment Authority has a Brownfield Redevelopment Plan for the property that includes the use of Small Business Tax Credit by the developer

Additional information about these funding sources and incentives is presented in the section of this document entitled “Tools for Implementation”.

Implementation Agencies

Muskegon Township Brownfield Redevelopment Authority; Muskegon Charter Township; City of North Muskegon; Michigan Department of Environmental Quality; Michigan State Housing Development Authority; Michigan Economic Growth Authority; U.S. Department of Commerce-Economic Development Administration; U.S. Department of Housing and Urban Development; and, possibly, an Entitlement City.

NEWAYGO SANITARY DISPOSAL Site Feasibility Analysis



Newaygo Sanitary Disposal Site

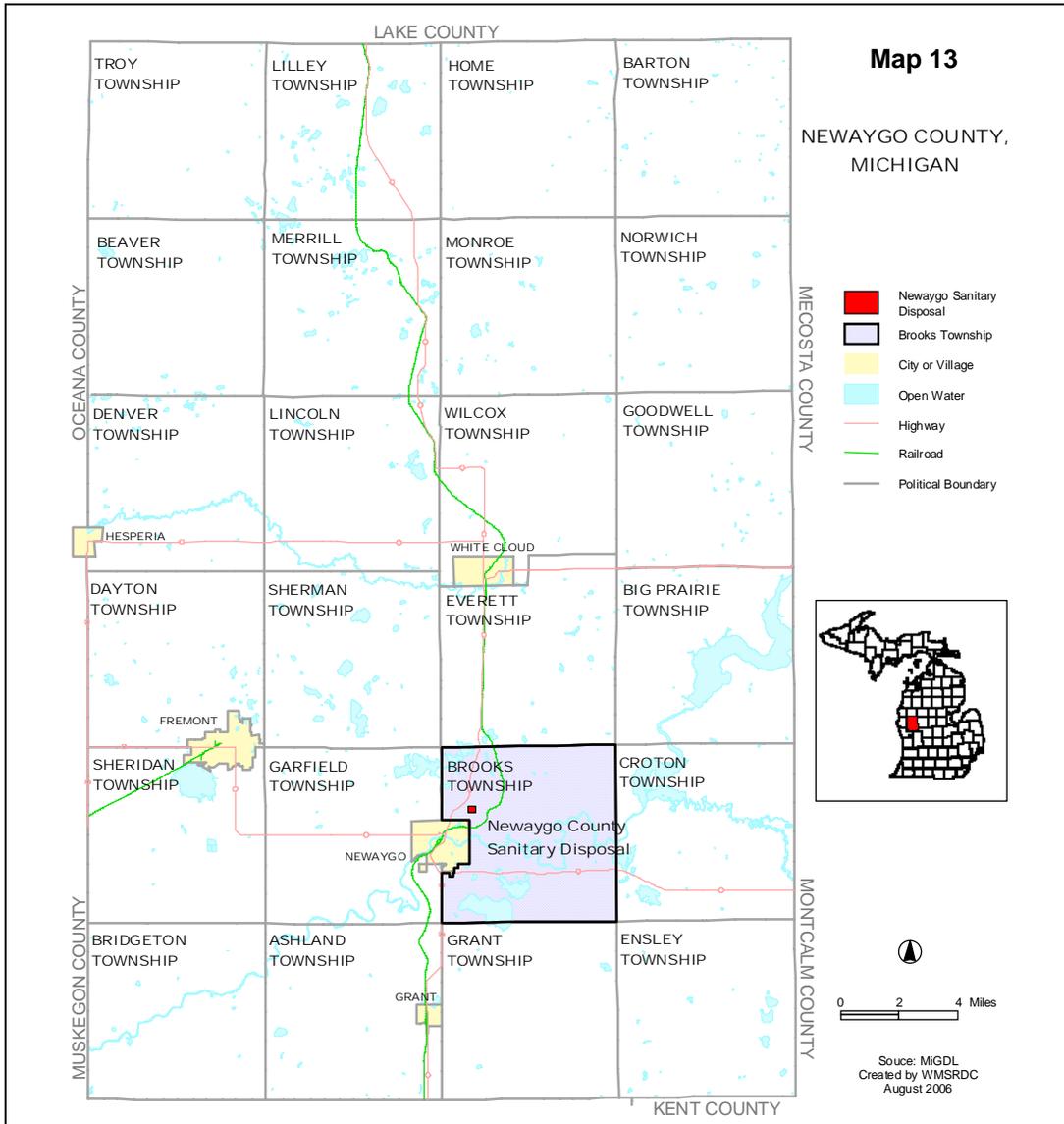
Picture taken by WMSRDC

Newaygo Sanitary Disposal Brooks Township, Newaygo County

1. OVERVIEW

Community Description

The Newaygo Sanitary Disposal site is located near M-37, one mile north of the City of Newaygo in Brooks Township, Newaygo County. Neighboring communities include Everett Township to the north, Garfield Township and the City of Newaygo to the west, Grant Township to the south, and Croton Township to the east. Natural features in the township; such as the Muskegon River, Brooks Lake, Hess Lake, and the Manistee National Forest; offer year-round recreational opportunities, while a variety of goods and services are located nearby in the City of Newaygo. This combination of goods and services with abundant natural resources makes Brooks Township a desirable location in which to reside.

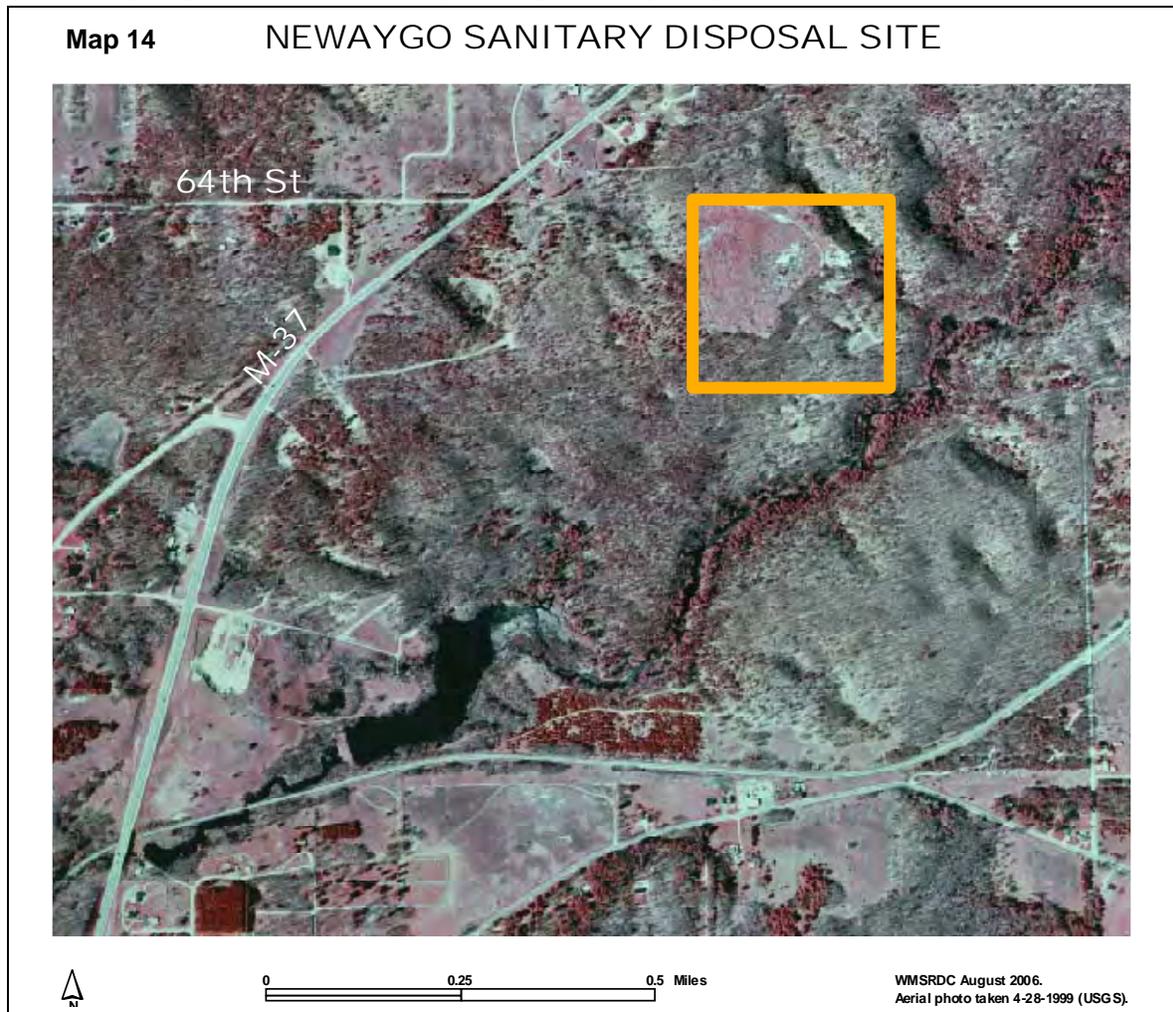


According to the 2000 U.S. Census, Brooks Township is the second most populated municipality in the county with 3,671 residents. The City of Fremont, located six miles to the west, is Newaygo County's most populated municipality, with 4,224 residents. The City of Newaygo has a population of 1,670.

There are two state highways that traverse the township: M-37 (north-south) and M-82 (east-west). Additionally, a CSX railroad line runs through the township north to Baldwin and south to Grand Rapid.

Site Description

The Newaygo Sanitary Disposal site is a 40-acre parcel owned by the City of Newaygo. It is located in the northwest quarter of the northwest quarter of Section 17, Township 12 North, Range 12 West. The property drains into Penoyer Creek, which flows near the southeast corner of the parcel into the Muskegon River about 1.5 miles away. The Muskegon River, which is the second longest river in Michigan, discharges into Muskegon Lake and ultimately Lake Michigan. Former landfill access roads are currently blocked; however two-tracks and paths still exist within the property. Much of the former dump area is prairie-like with scattered trees and vegetation. The south and east portions of the property are forested, hilly, and generally slope down towards the creek.



Many publicly owned forests surround the site as well. It is bordered to the east by a State-owned parcel, while pieces of the federally owned Manistee National Forest abut the southwest, southeast, and northeast corners. A few acres of national forest also border the site to the north, while private parcels of land border the site directly south and directly west.

2. DETAILED DESCRIPTION of SITE

Past Use

The Newaygo Sanitary Disposal site was used as a municipal landfill by the City of Newaygo and surrounding communities for many years until it was closed in 1975. According to local reports, the City did not charge dumping or tipping fees at any time.

Contamination

Environmental contamination has been identified in the vicinity of the landfill site through a number of biological surveys of Penoyer Creek. Chemical documentation of contaminated seepage occurred in 1976, 1980, 1981 and 1984. A 1984 biological survey of Penoyer Creek by the Michigan Department of Natural Resources (MDNR) concluded that it “was chemically degraded for one-half to three-fourths of a mile downstream of leachate input from the Newaygo County Landfill”. The study also added that “dilution from non-contaminated groundwaters apparently prevents severe chemical degradation of Penoyer Creek”.

Due to the presence of environmental contamination, the site has been included on the MDEQ Part 201 Site List. This attribute makes the site a “facility” under the Michigan Natural Resources and Environmental Protection Act of 1994, as amended (NREPA). The list may be viewed on the MDEQ website at <http://www.deq.state.mi.us/part201ss/>. According to the website, the location received a score of 29 out of 48 points in August of 2005.

A visual inspection of the site on July 20, 2006 revealed small piles of household waste, the apparent results of illegal dumping, exposed above the ground in random locations. This illicit dumping has occurred despite the City’s efforts to block off access roads to the property. All two-tracks leading into the property have been blocked with piles of soil and/or concrete.

Possible sources of contamination include:

- Municipal solid wastes
- Abandoned cars
- Liquids dumped at a corner of the site
- Yard refuse
- Illicit dumping of household wastes

Environmental Remediation

After the landfill was closed in 1975, the dump was filled in and then capped with three to four feet of soil. It is likely that these actions were locally funded. According to local officials, some waste objects were not completely covered and can be seen during the springtime before they are hidden by growing vegetation. No further clean-up activities are known to have been funded or carried out at the property.

Past or Pending Legal Issues

Although no legal issues currently exist regarding the property, the fact that it is owned by the City of Newaygo but not located there deserves consideration. Also, given the presence of environmental contamination, determination of liability and responsibility for cleanup activities may be an issue in the future.

3. PLANNING ANALYSIS

Land Use and Zoning

The former municipal landfill is owned by the City of Newaygo and located in Brooks Township. According to Brooks Township's zoning maps, the site is currently zoned for "Medium Density Single-Family Residential" (R-2) and also partially lies within the "River and Tributary Overlay" (RTO). The R-2 zone has a minimum lot area requirement of two acres, while the RTO zone carries a minimum of five acres. The Township's Future Land Use Map, included in the Brooks Township Master Plan (2001), depicts a slightly different outlook for the property. It designates the future land use of the landfill property as "Public" rather than the current residential zoning; while land to the immediate west is changed from "High Density Single-Family Residential" to "Low Density Residential".

Comprehensive Economic Development Strategy (CEDS)

The CEDS is an annually updated document that helps the Regional Commission and other local interests to better evaluate economic development goals, objectives, projects, and general economic conditions within the Economic Development District comprised of Lake, Mason, Muskegon, Newaygo, and Oceana Counties. The CEDS is required by federal enabling legislation to maintain the region's eligibility for federal development assistance. It is the document that forms the planning and implementation framework for the region's economic development. The CEDS also lists and prioritizes major development projects proposed by local governments in the region.

Although development of the Newaygo Sanitary Disposal Site has not been submitted for consideration in the CEDS process, the Newaygo County Parks and Recreation Commission did include "Recreational Improvements" as a Public Works project in the 2005 CEDS Annual Report. The project was intended for "repair (of) ballfields and construction of tennis courts" at Henning County Park in

the City of Newaygo. This demonstrates a need for improvements and additions to recreational facilities in Newaygo County.

The economy of Newaygo County is largely dependant on outdoor recreational activities, which are made possible by the abundance of natural areas such as lakes, rivers, streams, forests, and prairies. These activities include, but aren't limited to: hunting, fishing, hiking, watersports, snowmobiling, and camping.

Community Input

There has been strong interest and support from the public and elected officials for construction of new and maintenance of existing recreational facilities in Newaygo County. The Newaygo County Comprehensive Recreation Plan – 2001 lists “repair and reconstruct ballfields and tennis courts at Henning County Park” as one of the county’s main goals and objectives for recreation. Another recreation plan, the Newaygo Community Recreation and Natural Resources Conservation Plan (RNRCP), discusses a public survey which revealed a high level of public interest for more “organized sports facilities”. The survey also found that “lack of variety” was the most dissatisfying trait of the Newaygo community according to survey participants. This plan was approved by the Newaygo Community Recreation Authority (NCRA) in 2006 and includes the following recommended action for the goal “Establish New Community Park for Organized Sports”.

“The *Recreational Authority* should investigate the potential use of the old municipal landfill site as one possible site. Additionally, the Authority should explore an agreement with the county to develop the sports complex within the Henning Park property. If there is sufficient space and a workable agreement, the Henning Park area is preferred since it has a history of similar use, is closer to the population center, and presents fewer environmental concerns. If an agreement cannot be reached with the County, the authority should work to establish a suitable site for the sports complex near a central location of the Newaygo Community such as the old municipal landfill site.”

The RNRCP and the Recreation Authority are products of cooperation between the communities of the City of Newaygo, Brooks Township, Everett Township, and Garfield Township. In 2004, the communities committed to the cooperative development of a joint recreation and natural resources conservation plan to enhance community-wide recreation opportunities as well as preserve valuable natural resources. The group legally established the NCRA under the Recreation Authority Act 321 of 2000 to supervise and fund park updates, improvements, development, negotiations, and programming. The Authority became effective on May 3, 2006 and possesses all powers specified in Act 321, subject to the limitations of authority as provided by law or limitations as specified in the Articles of Incorporation. The Articles and a draft of the RNRCP may be viewed online at: www.newaygocommunitynrplan.org.

4. RECOMMENDATIONS

Future Land Use

According to local demand, recreational facilities in the Newaygo City area and throughout Newaygo County are lacking in variety and quantity. Reuse of the former Newaygo landfill site for recreation would not only help to fulfill the community's recreation needs, but also bring a contaminated parcel back into productive use. The parcel offers easy accessibility off of highway M-37, and a central position between the Cities of Fremont, Grant, Newaygo, and White Cloud. These attributes make the site a prime location for public use of the land.

One viable recreation option is a new organized sports complex that could include a variety of facilities for activities such as baseball, softball, soccer, basketball, tennis, and volleyball. This would likely have a number of positive effects on recreation in Newaygo County including the following:

- ☑ Take pressure off of existing facilities, improving their overall condition;
- ☑ Allow a greater number of organized activities to take place concurrently, such as baseball and soccer;
- ☑ Improve the community's quality of life;
- ☑ Satisfy public demand for more and better recreational facilities; and
- ☑ Encourage increased community participation in organized sports.

Another considerable recreation option is to establish a hunting club where residents and visitors may participate in activities such as archery, skeet shooting, and casting. This development could produce positive effects for the Newaygo community including:

- ☑ Wider variety of recreation activities within the community;
- ☑ Increased tourism by attracting visitors from outside the area;
- ☑ Creation of a new year-round recreation opportunity; and
- ☑ Creation of a number of year-round job opportunities.

In addition to any recreational land use considerations, the property may also be linked to existing or future trail systems. This could make future uses even more accessible and beneficial to the community.

Future Project Development

The characteristics of a landfill are critical to its future reuse. Many attributes of the waste must be considered in order to determine development feasibilities. Therefore, a detailed site assessment is necessary to determine the environmental conditions at the site prior to the consideration of future land uses. The table at the end of this section includes many of the variables that should generally be taken into consideration before redeveloping a former landfill.

The status of waste beneath the surface at the former dump will need to be assessed before any developments are made. This may play a significant role in determining the options the City of Newaygo or a private developer will have in determining the best reuse of the land. Project development at this site will depend on how quickly a complete assessment of the property and the remaining wastes can be executed. Any future projects may need to include a plan for monitoring and/or management of remaining wastes at the site.

LANDFILL CONSIDERATIONS	
VARIABLE	EXAMPLES
Waste Characteristics	Thickness and composition of waste types (municipal, industrial, construction/ demolition debris, etc.); Native soil types; Surface topography
Potential Methane Concerns	Potential explosive environments; Methane migration; Internal landfill fires; Future management; Methane partition into groundwater
Leachate	Does current cap prevent infiltration of precipitation?; Flow patterns within landfill; Leachate composition; Outbreaks; Future management
Impacted Groundwater	Contamination and mitigation; Methane contamination and partitioning; Groundwater characterization and waste management; Hydrologic characteristics
Exposure Pathways and Abatement	Cap and exposed waste; Impacted soils and groundwater; Ambient air; Drinking water
Geotechnical	Site grading; Prohibited landscaping (deep-rooted vegetation, structural features extending into waste); Compaction and settling; Upkeep and maintenance
Waste Removal and/or Relocation	Removal can alter the dynamics of gas and liquids flow; Removal to currently licensed landfill is generally supported

5. IMPLEMENTATION

Financial Arrangements

There are currently no financial arrangements or obligations associated with the Newaygo Sanitary Disposal site. Worthy of mention, however, is the fact that it is publicly owned rather than privately owned.

The Newaygo Community Recreation and Natural Resources Conservation Plan, adopted in 2006, estimates the cost of developing a Community Sports Park at \$1,152,709. These costs include two softball fields, a baseball field, bleachers, two basketball courts, two tennis courts, a swimming pool, four soccer fields, a playground area, a parking area and entrance, and gravel walks.

Funding Sources

With regards to funding possibilities for assessment, cleanup, and redevelopment; the Newaygo Sanitary Disposal site has one potential obstacle to overcome. Since the City of Newaygo owned and operated the landfill for many years, it may be considered liable for causing contamination at the site. If so, it could be held financially responsible for remediation activities, and as a potentially responsible party (PRP), the City would be unlikely to receive financial assistance from the State. With regards to federal and State funding, “a liable

party may not profit from the expenditure of State funds nor be relieved of responsibility for environmental response activities”.

This potential complication may be resolved by the fact that the City did not charge tipping fees for use of the facility. Contact with the State of Michigan should be made as early as possible to assure that the appropriate actions are taken to remediate the property and to be directed to currently available funding and any corresponding requirements. Making this contact early in the redevelopment process will help expedite redevelopment efforts by avoiding any unnecessary work and backtracking.

A Brownfield Redevelopment Authority (BRA) may be established to take advantage of brownfield redevelopment tools afforded to BRAs by the Brownfield Redevelopment Financing Act, PA 381 of 1996 as amended. This would be recommended if the property was to be privately owned and developed. Tax revenues from the developed property could be captured by the BRA and used to reimburse the costs of environmental assessment and remediation. The developer could also benefit from Small Business Tax credits. These incentives would only be available if the activities were included in a Brownfield Redevelopment Plan approved by a BRA. For more information regarding BRAs, see the Tax Increment Financing section of the Tools for Implementation chapter of this document.

Listed below are potential funding options that may be utilized for the redevelopment of the former landfill. See the “Tools for Implementation” chapter of this document for complete descriptions and contact information for the following financing tools.

- ☑ Targeted Brownfield Assessment
- ☑ CMI Brownfield Redevelopment Grant and Site Reclamation Grant
- ☑ CMI Brownfield Redevelopment Loan and Revitalizing Revolving Loan
- ☑ Tax Increment Financing (TIF) if development results in property taxes (BRA required)
- ☑ Single Business Tax (SBT) credit for a hunting club or other business (BRA required)

If reuse of the property is decided to be a public facility for recreation, the Newaygo Community Recreation Authority will likely play a significant role in its development. There is a variety of funding options from which the Authority can choose to pursue. The RNRCP lists the following funding sources for consideration:

- ☑ General Fund (of the Newaygo Community Recreation Authority)
- ☑ Donations
- ☑ Millage
- ☑ Lease and Fee-For-Service Arrangements

- ☑ Bonds
- ☑ Private and Community Foundations
- ☑ Michigan Department of Natural Resources Grants
- ☑ Michigan Trail-way Fund
- ☑ Transportation Enhancement Act

Implementation Agencies

The following is a list of primary entities that are likely to play a role in the development of the Newaygo Sanitary Disposal site.

- City of Newaygo
- Brooks Township
- Newaygo Community Recreation Authority
- Michigan Department of Environmental Quality

If the Newaygo Sanitary Disposal site is privately acquired and developed, the next two entities might be involved with implementation in addition to those listed above.

- Brownfield Redevelopment Authority (to be established; either county-wide or local)
- Michigan Economic Development Corporation

MERSKIN & MERSKIN Site Feasibility Analysis



Merskin & Merskin Building
Picture taken by the City of Hart

Merskin & Merskin

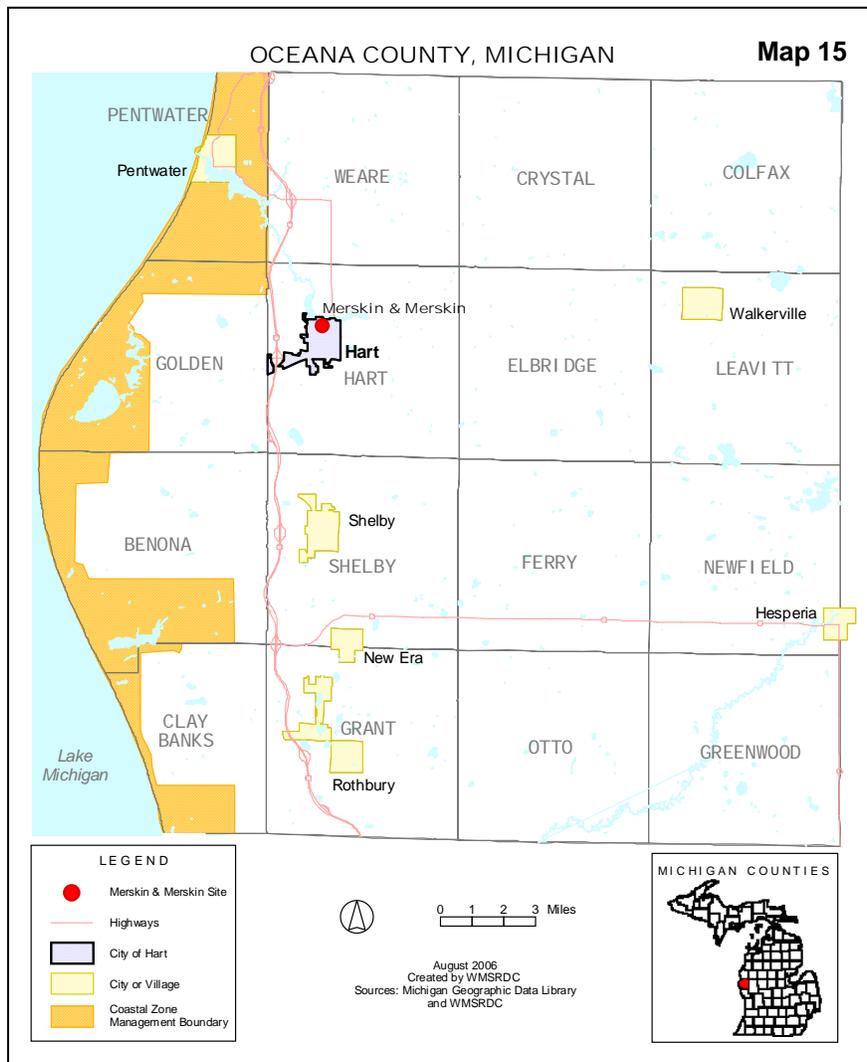
City of Hart, Oceana County

1. OVERVIEW

Community Description

The Merskin & Merskin property is located at 24 and 26 N. State Street in the City of Hart, which is the county seat as well as a state-designated “Core Community”. Hart is located near US-31 and is about seven miles east of Lake Michigan. This scenic town is situated south of Hart Lake, which was formed by a dam on the Pentwater River.

Hart was founded by several early pioneers including Nelson Grove, who was the first to arrive in 1856, and Wellington Hart, who arrived a couple years later. In 1862, Lyman Corbin gave permanence to the area by building a sawmill and a gristmill. He later built additional structures and helped officially plat the area in 1864. Hart became the county seat in 1865, was incorporated into a village in 1885, and was incorporated as a city in 1946.



There were 1,950 persons in the City of Hart in 2000, according to the U.S. Census, of which 336 (17.2%) were over the age of 65. There were 832 housing units, of which 759 were occupied and 72 were vacant. Of the vacant units, 20 were for “seasonal or occasional use”. Approximately 20% of the City’s population was classified as having income below the poverty level and just over 20% experienced disability or mobility limitations.

Major critical public or private facilities in the City consist of four schools, a medical care facility, two group homes, two senior housing units containing 46 units, the County Building, Annex and Jail, police and fire departments, the County fairgrounds, a public water system, a public wastewater system, a hydro-electric plant, a linear State Park, and five to seven major employers. Major natural terrain features are Hart Lake, Russell Creek, and the Pentwater River; all of which flow to Lake Michigan.

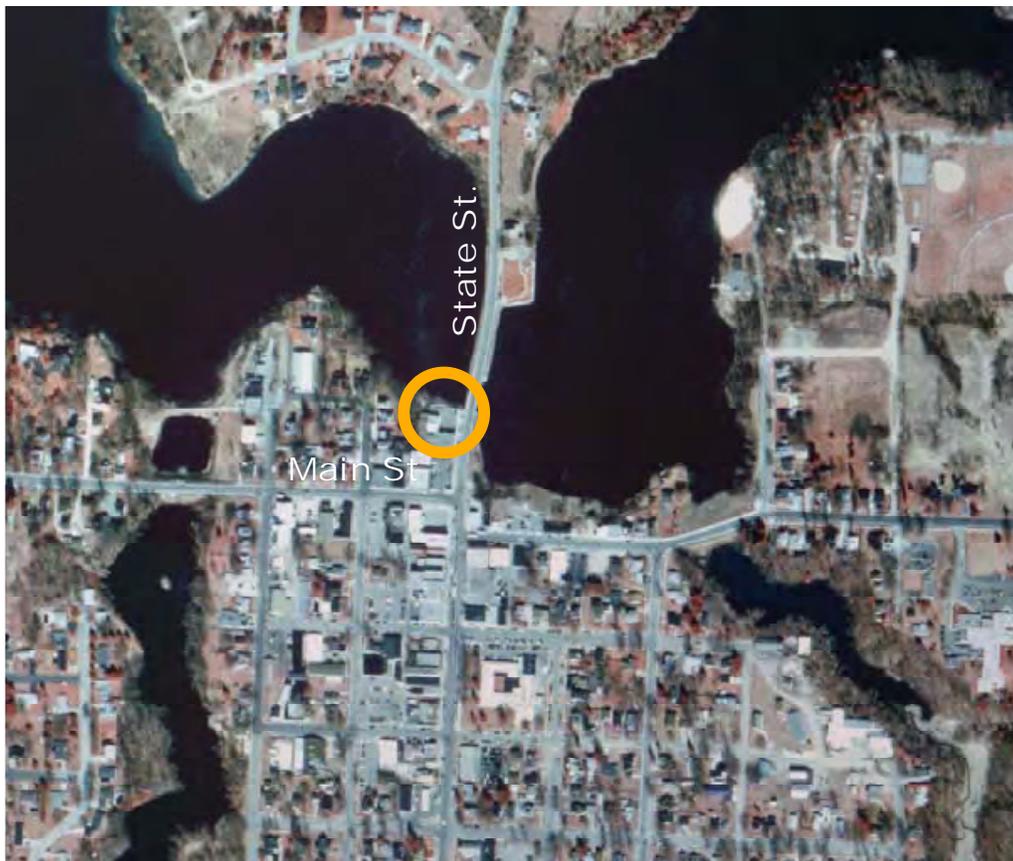
Site Description

The subject property consists of approximately 0.4 acres located in the southeast quarter of Section 8, Township 15 North, Range 17 West. It is located on the west side of N. State Street, just south of Hart Lake. The nearest cross street is E. Main Street. The subject property contains an 11,600 square foot building, partially brick and partially pole barn. Approximately 3,700 square feet is being used as health-care-related office space. The remaining 7,900 square feet was previously used for dry storage. The building is in good condition and does not present a health or safety threat.

The property is located at the bottom of a hill and is in the 100 year flood plain with 120’ of frontage on Hart Lake. In spite of this, the worst period of flooding in Hart’s recorded history did not lead to flooding or damage of the property. Heavy rains from September 10-19, 1986 caused Hart Lake to rise to the bottom of the bridge crossing it and banks to erode on the property. Further damage was averted by the failure of Hart Dam, downriver from the property. Hart Lake drained, the north-bound bridge over the Pentwater River on US-31 collapsed, and the President of the United States declared a Major Disaster for the area. Federal and state grants, as listed below, later assisted with repairs needed because of storm-related damages.

September 1986 Flood Disaster (FEMA-0774): STATE AND FEDERALLY ASSISTED FLOOD MITIGATION PROJECTS	
City of Hart	Acquired land for construction of emergency spillway for Hart Lake Dam; constructed emergency access road to dam; automated floodgates for dam; stabilized stream bank.
Village of Pentwater	Replaced and relocated lift station within floodplain.

Source: Michigan Hazard Analysis, December 2001



0 0.1 0.2 0.3 Miles

WMSRDC August 2006.
Aerial photograph is from the 1998 Series
USGS Digital Orthophoto Quadrangles
obtained from MiGDL.

2. DETAILED DESCRIPTION of SITE

Past Use

Although historical use of the property has not been thoroughly researched, it is known that the property was home to a mill from 1890-1900 and to Bennett Lumber and Manufacturing Company from 1900-1920. Buildings associated with these businesses have long since been demolished.

The existing building (date of construction unknown) was home to Oceana Electric Coop from an unknown date until 1983, when it was sold to the Ludington Professional Center. It was then rented to Merskin & Merskin, an accounting firm, from 1983 to 2003. In addition, a tanning salon occupied part of the building from 1997-2003. Oceana Electric Cooperative merged with O & A Electric Cooperative of Newaygo County in 1997 to form Great Lakes Energy Cooperative, which is currently located at 2183 N. Water Road in Hart.

The property was sold to Gayle Forner in February of 2003 and is currently available for sale. Demolition of the existing building and construction of 24 units of elderly housing has been proposed. The current tenants have been advised of the need to relocate.

Contamination

MDEQ records indicate that the subject property is an Open Leaking Underground Storage Tank (LUST) site referred to as Merskin & Merskin PC and that an approximately 1,000 gallon diesel UST was reportedly installed at the subject property in 1966. An approximately 1,200 gallon gasoline UST was reportedly installed at the subject property in 1971. These tanks were closed in place in 1992. A confirmed release was reported from these USTs on November 6, 1992, but a Closure Report has not been submitted.

The subject property is classified as a "213", or LUST, facility because testing of groundwater indicated the presence of petroleum products including BTEX and two PNA compounds with concentrations above the Part 201 Generic Residential Drinking Water Criterion for some target constituents. Testing associated with a Baseline Environmental Assessment in 2003 confirmed benzene in groundwater with concentrations in excess of the Part 201 Generic Residential Cleanup Criterion.

On April 11, 2006, KIESER & ASSOCIATES (K&A) conducted a limited Phase II Environmental Site Assessment (ESA). The analytical results of this ESA confirm the subject property's designation as a facility under Part 213 of 1994's P.A. 451, as amended. ESA sampling revealed that existing soils in the vicinity of the two closed USTs exceed Part 213 Risk Based Screening Levels (RBSLs) for drinking water protection, groundwater-surface water interface, and volatilization to indoor air criteria. These shallow soils (approximately 90-120 cubic yards) could potentially be removed during any future site redevelopment (along with the two closed USTs) at this property.

Similarly, the K&A Phase II analytical data for shallow groundwater situated above a shallow clay layer in the vicinity of the two closed USTs also exceeded Part 213 RBSLs for drinking water protection, groundwater-surface water interface, and volatilization to indoor air criteria. K&A concluded that it appeared that shallow groundwater contamination was limited at this site to the areas immediately surrounding and downgradient (east) of the two closed USTs. It was also concluded that this shallow groundwater could also be reasonably removed for proper treatment/disposal during any future site redevelopment at this property. Removal could largely come with dewatering associated with soil excavation efforts, while some subsequent groundwater recovery might be needed for any residual shallow groundwater contamination.

Environmental Remediation

A groundwater treatment system was previously installed, operated for two months, and shut down in June 1995. A granulated active carbon groundwater treatment system is located in the garage portion of the building but is inactive.

In order for development of the currently proposed housing project to proceed, the property must meet cleanup standards for residential development. These standards have the most restrictive criteria for site remediation, generally because it is assumed that there is the greatest opportunity for exposure to contamination in residential settings. When a facility is cleaned up to residential standards, the property is considered safe for all uses. Listed below are the proposed cleanup tasks.

- Completion of a Baseline Environmental Assessment (including an updated Phase I Environmental Site Assessment).
- Demolition and appropriate disposal of remaining building structures.
- Removal and disposal of two formerly closed-in-place USTs.
- Excavation of approximately 120 cubic yards of contaminated soils in the immediate vicinity of the USTs.
- VSR soil sampling and waste characterization.
- Appropriate disposal of contaminated soil and groundwater.
- Development and implementation of Due Care activities associated with any residual groundwater contamination that may remain following excavation and until removed.
- Installation of a groundwater collection system (underdrain) above the clay layer following soil excavation for removal of residual contaminated groundwater.
- Installation of temporary wells for monitoring and/or extraction of contaminated groundwater.
- Groundwater extraction (and disposal) for up to two years as needed to meet Tier 1 RBSLs.
- Four quarters of groundwater monitoring to confirm Tier 1 RBSLs have been met.
- Quarterly reporting and closure reporting.

Past or Pending Legal Issues

According to the City of Hart, an examination of the title to the property has not revealed any condition (except for its status as a facility) which would prevent its development. Additional research on previous use and ownership would be necessary to clearly ascertain liability for contamination.

3. PLANNING ANALYSIS

Land Use and Zoning

The site is located on the lakefront in the traditional and very healthy downtown of Hart. There is limited developable land in the downtown area and very few

vacancies in existing buildings. There are numerous viable commercial businesses within walking distance including two fitness centers, seven eating establishments, two floral shops, a bank, two pharmacies, three gift and card shops, a photography studio, an optometrist, two used clothing stores, and a furniture store. There are also three churches, a library, city hall, and the county building nearby.

The property was rezoned in 2005 from Central Business to Planned Unit Development (PUD) to allow for the construction of elderly housing. The property is included in the City's Tax Increment Financing Authority district.

Comprehensive Economic Development Strategy (CEDS)

The CEDS is an annually updated document that helps the Regional Commission and other local interests to better evaluate economic development goals, objectives, projects, and general economic conditions within the Economic Development District. The CEDS is required by federal enabling legislation to maintain the region's eligibility for federal development assistance. It is the document that forms the planning and implementation framework for the region's economic development. The CEDS also lists and prioritizes major development projects proposed by local governments in the region.

Redevelopment of the site, which is not a typical economic development project, was not submitted for consideration in the Comprehensive Economic Development Strategy (CEDS) process. However, it has been estimated that a multiple housing development for the elderly would result in one full-time on-site job. It has also been estimated that the project-generated increase in downtown business would result in the indirect creation of 3-4 jobs in the businesses that serve the needs of the residents. Finally, it has been anticipated that property values would increase in the area because of the development.

The City of Hart has been in contact with the West Michigan Shoreline Regional Development Commission regarding the project. In addition, the City submitted three proposals for consideration in the 2005 CEDS that are related to the project. The first called for enlargement and retrofitting of the East Main Lift Station and the second called for downtown beautification, including construction of a lakeside pedestrian boardwalk on the east side of State Street across from the Merskin & Merskin site. A third project called for a Downtown Market Study.

Community Input

The City of Hart has assigned a high level of importance to the development of the site because of its key waterfront location and the need for affordable elderly housing. The project will accommodate a need for low and moderate income senior housing in the community.

The need for senior housing has been documented in the Oceana County Strategic Housing Plan (1998-2003). The document was based on input from

persons and agencies working in the housing field and was adopted by the Oceana County Planning Commission on March 5, 1998. It encouraged construction of appropriate rental housing for the elderly and called for one to two small scale subsidized senior projects to be constructed. It further stated that “appropriate rental units; which need to be ground floor (or with an elevator), close to services, and preferably with an adjacent community room; are few”.

The need for elderly housing was given a mathematical description in the Housing Needs Assessment for Oceana County, prepared for the Oceana County Housing Council in 2005. “Using historic mover-ship rates provided by the Michigan State Housing Development Authority, there is demand for up to 28 units of additional affordable rental housing for persons over age 65 in 2006. The demand forecast includes those elderly households earning \$8,000-\$23,500” and could be driven higher by those elderly households seeking to return to Oceana County to be near family during retirement.

The City of Hart is also making a substantial financial commitment to the downtown area as plans are developed and approved. The City completed its downtown marketing study in 2005 at a cost of \$20,000. The Michigan Economic Development Corporation provided \$10,000 for this study and the City of Hart Tax Increment Financing Authority paid the balance. A community recreation study is also underway at a cost of \$29,000 paid by local City funds. The recreation study will research and recommend improvements to Hart Lake and adjacent parks.

4. RECOMMENDATIONS

Future Land Use

The proposed development is for 24 units of senior housing. Due to the desirable lake-front site and the documented need for senior housing, full occupancy of the building is anticipated.

Future Project Development

The proposed project would be called “Lake Point Elderly” and would be owned and operated by Lake Pointe Limited Dividend Housing Association Limited Partnership, a general partnership comprised of Hollander Development Corp. (“HDC”) of Portage, Michigan and New Town, Inc. (“NTI”) of Whitehall. HDC has more than 25 years of experience in the development of more than 3,000 units of multifamily housing in West and Central Michigan. NTI was co-developer with HDC for the Harbour Point project in the City of Montague, Muskegon County. It would be marketed and managed by Republic Management Corp., an affiliate of HDC, also located in Portage.

All utilities, including public walkways, are presently available and none would require extension to the site by the City. Michigan State Housing Development Authority (MSHDA) design standards would be followed for the building. These

standards, in many instances including energy efficiency, exceed local and state codes. Because of the small size of the site, it would be necessary for the project to have three floors to accommodate its 24 units. However, the building's height would be off-set by the fact that it would be built at the base of a hill.

It would be impossible to contain all stormwater runoff or to strictly follow green building or LEED's building concepts in this project. However, runoff from parking areas would be retained on site and runoff from the roof and other impervious surfaces would be filtered before leaving the site. The development would establish a green belt along the lake and add vegetation to a presently barren site.

5. IMPLEMENTATION

Financial Arrangements

MSHDA has set aside scarce federal HOME funds to establish feasibility for this project. Following completion of the study and closing of a MSHDA-financed loan, the property would be sold to the developer at a price not yet firmly established. Financial arrangements also need to be made regarding remediation.

The City of Hart has adopted an ordinance establishing a service charge of 4% of annual shelter rents in lieu of ad valorem taxes, which represents an approximate reduction in taxes of 65%. It has also secured a Community Development Block Grant in the amount of \$137,500 and will match that amount for the replacement of the East Main Lift Station near the development. This lift station will accommodate the wastewater flows from the development. The MDEQ has applied an "unofficial" moratorium on connections to the East Main Lift Station tributary area until the facility is upgraded to prevent overflows.

Funding Sources

The City of Hart is a "Core Community", giving it certain additional incentives such as Tax Increment Financing (TIF) and Small Business Tax Credits (SBT) for financing or assisting brownfield redevelopment activities. In addition, there are expanded definitions for eligible properties (functionally obsolete or blighted properties in addition to facilities) and eligible activities. Core Communities can utilize TIF financing to cover the costs of public infrastructure, lead and asbestos abatement, site preparation, and demolition that is not a response activity in addition to covering the costs of environmental assessments, due care plans and activities, and demolition as a response activity.

To utilize these incentives, activities must be included in an approved brownfield redevelopment plan for the property. Approvals must be obtained by a local Brownfield Redevelopment Authority (BRA) and, in some instances, the State of Michigan. However, neither the City nor the County has a BRA and these options are not currently useable.

While this has some impact on available incentives for project development, the impact is mitigated due to the particular circumstances of the project. For instance, the site is already considered a “facility” by the State of Michigan so use of the expanded definition of eligible properties is not needed. In addition, all utilities are available so the expanded definition of eligible activities is not required for them.

TIF capture of property taxes by the BRA is a limited option since ad valorem property taxes have already been substituted with a service charge by the City. In addition, if TIF capture were possible, increased taxes would be first captured by the City’s Tax Increment Financing Authority (TIFA). The BRA could capture any remaining taxes, such as school taxes and those remaining after expiration of the TIFA recapture. A significant impact of not having a Brownfield Redevelopment Authority could be that the developer cannot utilize Small Business Tax Credits (SBT) for brownfield redevelopment. However, the experienced developer has not requested brownfield SBT credits.

The City is applying to MDEQ for a Brownfield Redevelopment Grant and has submitted the following funding plan for redevelopment of the property. Since the price of property acquisition has not been firmly established, it can be assumed that dollar amounts are estimates at the time of application submittal.

USES OF FUNDS	Brownfield Grant or Loan	Local Funds (public)	Developer Funds (private)	BRA funds (non brown-field loan)	Other (list sources)	Total
Investigation	\$53,475	-	-	-	-	\$53,475
Baseline Environmental Assessment	\$5,000	-	-	-	-	\$5,000
Due Care	\$5,500	-	-	-	-	\$5,500
Other Environmental Response Actions	\$79,660	-	-	-	-	\$79,660
Demolition	\$35,000	-	-	-	-	\$35,000
Grant Administration	-	-	-	-	-	-
Property Acquisition	-	-	\$175,000	-	-	\$175,000
New Construction	-	-	\$1,103,138	-	\$1,604,804 (HOME-MSHDA)	\$2,707,942
Remodel/ Upgrade Existing Buildings	-	-	-	-	-	-
Infrastructure Imp. – Lift Station	-	\$137,500	-	-	\$137,500 (CDBG)	\$275,000
Machinery & Equipment	-	-	-	-	-	-
Total	\$178,635	\$137,500	\$1,278,138	-	\$1,742,304	\$3,336,577

If the MDEQ offers a loan (with repayment beginning five years after award) in combination with or instead of a grant, the City would need to consider all options for repayment of the loan including capture of future taxes.

Implementation Agencies

City of Hart, Michigan State Housing Development Authority, Michigan Department of Environmental Quality, Michigan Economic Development Corporation, Lake Pointe Limited Dividend Housing Association Limited Partnership

TOOLS FOR IMPLEMENTATION

There are many financial hurdles associated with brownfield redevelopment projects that don't exist with traditional greenfield development projects, primarily those related to contamination and remediation. Activities, required by the Natural Resources and Environmental Protection Act of 1994 for its voluntary cleanup program, include the following.

- baseline environmental assessments (BEAs) to provide new property owners and operators exemption from liability for existing contamination. BEAs must simply be completed and submitted to the MDEQ prior to or within 45 days of purchase, foreclosure, or becoming the operator.
- “due care” actions when redeveloping the property, such as treatment or removal of contaminants to prevent exposure or exacerbation and barriers to prevent exposure, exacerbation, or third party impacts.
- cleanup standards based on proposed land use.
- remedial action plans and response activities as requested by either liable or non-liable parties.

Securing sufficient funding is an important key to helping brownfields compete with greenfields. Remediation and cleanup must be compensated for if the playing field is to remain even. Fortunately, many state and federal financing options exist that may provide monetary relief.

Federal programs which focus explicitly on brownfields and were specifically created for brownfield redevelopment are administered by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD). There are also numerous federal programs that can help communities navigate through the various aspects of brownfield re-use such as basic site preparation, planning, site assessment, clean-up, and construction. Although they are not necessarily geared towards brownfields, they may be applicable to a redevelopment project given the right situation and some creativity.

State programs are administered by the Michigan Department of Environmental Quality and are split between the Environmental Science and Services Division (ESSD), which handles non-regulatory programs, and the Remediation and Redevelopment Division (RRD), which deals with regulatory programs.

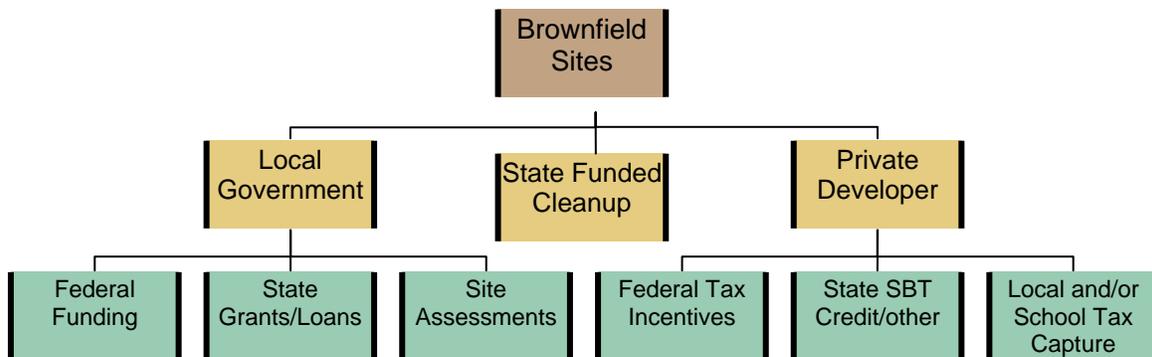
- ☑ The RRD administers Parts 201 (sites of environmental contamination) and 213 (leaking underground storage tanks) of NREPA and portions of the federal Superfund program. It oversees regulated party cleanups, addresses public health and environmental threats at sites of environmental contamination, and facilitates brownfield redevelopment.

The RRD also coordinates DEQ implementation of the Brownfield Redevelopment Financing Act, as amended.

- ☑ The ESSD oversees a number of outreach and assistance services (technical assistance, grants, and loans) leading to improvements in environmental quality and provides non-regulatory services related to MDEQ’s environmental programs. The ESSD works with brownfields through incentive programs instead of through regulatory methods. It provides financial assistance to local units of government and Brownfield Redevelopment Authorities to conduct due care site assessment, demolition, and remediation activities and to prepare BEAs and due care plans in preparation for redevelopment.

State incentives and programs are also administered by the Michigan Economic Growth Authority, which reviews requests from developers through Brownfield Redevelopment Authorities for Single Business Tax Credits, the Michigan Economic Development Corporation, and the Michigan Department of Treasury. They offer options for developers, owners, and operators of brownfield sites.

The following chart illustrates the types of assistance that are available for private developers, local governments, and the State of Michigan in negotiating brownfield assessment and cleanup.



The following section outlines resources that may be used to help assess and redevelop brownfield sites and provides enabling legislation. Although eligibility requirements are noted for all resources, contacts should be made early in the development process with the listed resource persons. They can verify that funds are available, ensure that eligibility requirements are met, and provide information on possible liable party and policy issues.

State Resources for Local Governments

Targeted Brownfield Assessments

The Michigan Department of Environmental Quality (MDEQ) is able to provide assessment work at brownfield properties for no cost to communities through a grant from the United States Environmental Protection Agency (USEPA). Targeted Brownfield Assessments (TBA) are made available through a task in the MDEQ's 128a Brownfield grant made possible by the Federal Small Business Liability Relief and Brownfields Revitalization Act. They are designed to help minimize the uncertainties of contamination often associated with brownfields.

Funds can be used to conduct field investigations including the collection and analysis of environmental samples to determine whether environmental contamination exists at a property at concentrations in excess of Part 201 remediation criteria. A property investigation consists of a review of background information, identification of past operational practices, identification of evidence of contamination from file searches, a property visit to evaluate the need for sample collection, and field sampling of appropriate media such as soils, groundwater, surface water, or sediments. If there are standing buildings on the property, the local unit of government may be asked to conduct a building safety/condemnation survey before the state conducts its sample.

The investigation provides information that could be used as a basis for a facility determination pursuant to Part 201. The data may also provide the basis for a Baseline Environmental Assessment although supplemental data may be necessary. A review of the potential imminent hazard is made to assist in determining whether a removal action may be needed at the property. A health assessment may also be conducted by the Michigan Department of Community Health. The data is shared with the local unit of government, any potential developer, and the DEQ District Office as soon as it is available so the property redevelopment discussion can occur. While federal funds are used, a property is not entered into the Superfund evaluation or National Priorities List nomination process unless specifically requested by the state.

Candidate properties are identified by a local unit of government. Properties under consideration for development of public facilities are eligible for investigation. For consideration in the program, a form must be completed and sent to the MDEQ Brownfield Assessment Program Manager along with a letter requesting the TBA. This information is necessary for the MDEQ staff to prioritize the project and to obtain information required by the USEPA to determine project eligibility.

Qualification Requirements

- The property is publicly owned.

- ☑ The property meets the definition of “Brownfield”.
- ☑ The applicant cannot be a potentially responsible party that has caused or contributed to the contamination of the property (funding cannot be used to assist potentially responsible parties).
- ☑ The property has potential for redevelopment and reuse.
- ☑ Federal funds have not been used for remedial activities on the property.
- ☑ The property cannot be on the National Priorities List (NPL), a portion of an NPL site, or associated with an NPL site.

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Michigan Brownfield Redevelopment Grants and Loans

The Michigan Department of Environmental Quality (MDEQ) offers grants and loans for environmental assessments and cleanups at brownfield properties through the Environmental Science and Services Division. Funds are targeted to projects that promote economic development and reuse of brownfield properties. Applicants may be local units of government, Brownfield Redevelopment Authorities (BRA), or other public bodies created by or pursuant to state law, including state-funded schools and universities.

- **Brownfield Redevelopment Grants (BRG) and Site Reclamation Grants (SRG)** – Part 196 of the NREPA and PA 252 of 2003; 1998 Clean Michigan Initiative (CMI) Bond for BRG. Part 195 of the NREPA and Rules; 1988 Environmental Response Fund Bond for SRG.

Brownfield Redevelopment Grants and Site Reclamation Grants provide funding to local units of government, Brownfield Redevelopment Authorities, and other public bodies to investigate and remediate known or suspected sites of environmental contamination which will be used for identified economic redevelopment projects. A proposed project must result in economic benefit for the community through job creation, private investment, and/or property tax increase.

The property must meet the definition of a facility. Eligible activities include environmental investigations and assessments, interim response, and due care response (BRG) or remediation (SRG) activities necessary for the proposed development. A liable party may not profit from the expenditure of state funds nor be relieved of responsibility for environmental response

activities. The maximum grant award is \$1 million per project for BRG and \$2 million per project for SRG. Only one project may be awarded to an applicant during any fiscal year. There is no local match requirement.

Evaluation criteria include level of economic development, applicant and owner liability, environmental benefit, and other factors. In order to be competitive, proposed projects need to demonstrate the applicant’s need for financial assistance; local financial commitment to the project; use of principles such as site re-use, green space preservation, smart growth, storm water runoff reduction, or other sustainable development concepts; and location in or near a Cool Cities neighborhood or within walking distance of a traditional downtown.

LOCAL AWARDS-BRG			
City of Ludington	Bryant Woods	\$100,000	5/06
City of Muskegon	Muskegon Lakeshore Smart Zone	\$1,000,000	7/02
City of Whitehall	Whitehall Leather Tannery & South Shore Redevelopment	\$850,000	8/04

LOCAL AWARDS-SRG			
City of Ludington	Star Watch Case	\$855,700	9/93
City of Muskegon	Cole’s Quality foods (Anaconda)	\$448,000	3/98

Contact

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- **Brownfield Redevelopment Loans (BRL) and Revitalization Revolving Loans (RRL)** – Part 196 of the NREPA and PA 253 of 2003; 1998 CMI Bond and \$1 million USEPA Grant for BRL. Part 201 of the NREPA; funded by paid loan obligations for RRL.

Brownfield Redevelopment Loans and Revitalization Revolving Loans are awarded to local units of government and Brownfield Redevelopment Authorities for response activities at brownfield sites with redevelopment potential. Eligible sites are those which meet the definition of a facility or sites suspected of being facilities based on the historical use of the property.

Eligible activities include environmental investigations and assessments, interim response activities, and demolition in limited situations where environmental remediation is being conducted. Due care response activities

necessary for the proposed development are BRL-eligible but not RRL-eligible. Only one loan may be awarded to an applicant during any fiscal year. A liable party may not profit from the expenditure of state funds nor be relieved of responsibility for environmental response activities. The maximum award is \$1,000,000 per project. There is no local match requirement.

A municipality must pledge its full faith and credit to secure the loan. When the BRA is the applicant, the municipality under which the BRA was formed must make this pledge. The Michigan Department of Treasury will approve the applicant’s ability to incur the debt. Loans are offered at an interest rate of no more than 50% of prime. Currently, the rate is set at 2.0 percent, simple interest. There are no payments or interest due for the first five years after a loan is awarded. Annual payments and interest accrual begin in the fifth year of the loan. The full amount must be repaid within 15 years of the loan award. This arrangement provides an excellent opportunity for a community, or a BRA, to use tax increment financing to capture future taxes generated from the redevelopment of the property to repay the loan.

Evaluation criteria include level of economic development, applicant and owner liability, environmental benefit, and other factors. In order to be competitive, proposed projects need to demonstrate the applicant’s need for financial assistance; local financial commitment to the project; use of principles such as site re-use, green space preservation, smart growth, storm water runoff reduction, or other sustainable development concepts; and location in or near a Cool Cities neighborhood or within walking distance of a traditional downtown.

LOCAL AWARDS-BRL		
City of Ludington Area-wide	\$80,000	8/04
City of Muskegon Environmental Assessment	\$500,000	8/04
City Whitehall Leather Tannery	\$748,000	8/04

Contact

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State-Funded Cleanup

Environmental Cleanup and Redevelopment Program

The RRD initiates and oversees state-funded cleanup actions at Michigan sites of environmental contamination when there are no financially liable person(s) or where the liable person(s) refuses to act in a timely manner and immediate action is needed. Cleanup projects are proposed annually by the DEQ and are approved by the Legislature via an appropriations bill. Historically, sites selected and approved are those that present the most significant risks to public health or the environment. However, with passage of the CMI, sites are also selected and approved based on their redevelopment potential.

The program is used to conduct state-funded cleanup projects at specific sites of environmental contamination and focuses on cleanup projects needed to protect public health and the environment, in particular at sites that have acute health or environment problems, and at those leaking underground storage tank sites where no liable party can be identified or where the liable party is unwilling or unable to proceed with cleanup.

LOCAL AWARDS

Numerous cleanups have been done in the region with funding from this program. A list from the 2005 Consolidated Report can be viewed on the MDEQ website at <http://www.deq.state.mi.us/documents/deq-rrd-FY05ConsolidatedReport.pdf>.

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Environmental Cleanup and Redevelopment Emergency and Contingency Program

Under this program, the RRD initiates and oversees state-funded cleanup actions that are of an emergency or short-term nature, such as:

- ☑ Removal of abandoned drums.
- ☑ Restricting access to a location by fencing the area.
- ☑ Spill responses.
- ☑ Abating imminent fire and explosion hazards.
- ☑ Abating imminent public health hazards.
- ☑ Mitigating the discharge of regulated substances into surface waters and/or other sensitive environmental receptors.
- ☑ Providing bottled water and/or temporary treatment devices to residences with contaminated drinking water until a permanent replacement is provided.
- ☑ Monitoring threatened drinking water wells.
- ☑ Providing emergency drinking water replacement.

The RRD identifies emergency cleanup actions and contingencies as the need arises. Examples of the use of these funds include: disposing of barrels that are a threat to public health and the environment; assessing suspect sites to evaluate acute risk; cleanup of truck, tanker, and rail car spills; providing bottled water to residences at sites of environmental contamination where the groundwater is impacted and abating an imminent threat to the public health caused by a release of a regulated substance to the environment.

LOCAL AWARDS

Numerous cleanups have been done in the region with funding from this program. A list from the 2005 Consolidated Report can be viewed on the MDEQ website at <http://www.deq.state.mi.us/documents/deq-rrd-FY05ConsolidatedReport.pdf>.

Contact

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State Resources for Owners/Developers

Tax Increment Financing

The Brownfield Redevelopment Financing Act, PA 381 of 1996 as amended, provides Brownfield Redevelopment Authorities (BRAs) with the ability to use tax increment financing (TIF) to help cover costs associated with eligible response activities conducted on an eligible property being redeveloped. Under Act 381, only a BRA may capture the increase in property taxes from a redeveloped property and the BRA may only capture taxes from properties included in its approved brownfield plan. The captured funds may be used to pay for eligible expenses incurred on that property or to establish a Local Site Remediation Revolving Fund from eligible tax capture for up to five years to cover eligible expenses on other eligible properties within the BRA's jurisdiction.

For each project listed in a locally approved brownfield plan, a BRA may choose to capture some or all of the available local property and school tax revenues. The school tax includes the local school district operating tax and the State Education Tax (SET), while the local property tax includes the local government taxing jurisdictions in addition to the Community College and the Intermediate School District. When school taxes are targeted for capture, an approval must be received from MEGA and/or the MDEQ, as appropriate. The MDEQ must approve the environmental response work plan at any property that is a facility under Part 201 of the NREPA, while the Michigan Economic Growth Authority (MEGA) must approve the economic development activity work plan for the site's eligible activities in a qualified local governmental unit. Regardless of the taxes to be captured, a work plan must be approved by the MEGA board if:

- ☑ it includes properties that are adjacent or contiguous to an eligible property and taxes will be captured for public infrastructure improvements that directly benefit the eligible property; or
- ☑ if it includes demolition, lead or asbestos abatement, or site preparation that is not a response activity under Part 201 of the NREPA.

There are many different scenarios where properties are considered to be eligible for TIF under Act 381. First and foremost, an eligible property must have been or currently be used for commercial, industrial or residential purposes. Next, if the property is located in a qualified local governmental unit, it may either be a facility (as defined in Part 201 of the NREPA), functionally obsolete, or blighted. This includes tax reverted property owned or property under the control of a land bank fast track authority. If the property is not located in a qualified local governmental unit, it may still be eligible if it is a facility. Additionally, parcels that are contiguous and adjacent to that property are also considered eligible property if development of these parcels will increase the captured taxable value of that property.

Eligible activities are defined by Act 381 to include (1) response activities to complete a Baseline Environmental Assessment, (2) response activities needed for an owner or operator to comply with due care requirements of Part 201 of the NREPA, and (3) additional response activities that are above and beyond BEA or due care activities for a facility. In qualified local governmental units, eligible activities also include public infrastructure improvements, demolition that is not a contamination response activity, lead or asbestos abatement, and site preparation that is not a response activity. Assistance to a land bank fast track authority in clearing or quieting title to, or selling to otherwise conveying, property owned or under the control of a land bank fast track authority is an eligible activity. Relocation of public buildings and operations for economic development is also an eligible activity. With the exception of work plan preparation costs, the cost of activities started prior to the approval of a work plan are not eligible for Act 381 tax capture.

LOCAL AWARDS

See "Selection of Sites for Feasibility Analyses" for a list of local Brownfield Redevelopment Authorities.

Contact for Environmental Response Activities:

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Single Business Tax Credit

The Single Business Tax (SBT) credit was originally enabled by PA 228 of 1975, as amended. Public Act 145 of 2000 amended the Brownfield Redevelopment Financing Act (PA 381 of 1996) to allow the use of SBT credits as incentives for the redevelopment or improvement of a facility (contaminated property) or a functionally obsolete or blighted property located within a qualified local governmental unit.

A qualified taxpayer may claim either a “large” or “small” tax credit against the SBT, provided the taxpayer has a pre-approval letter from the Michigan Economic Growth Authority (MEGA) for projects issued after December 31, 1999 and before January 1, 2008, and the project is completed no more than five years after the pre-approval letter is issued. “Small” brownfield SBT credits, awarded for \$1 million or less, are approved by the MEGA Chairperson. These credits are equal to 10% of the eligible investment costs and have an annual statewide limit of \$30 million. “Large” credits, awarded for \$1 million up to \$30 million, must be approved by the MEGA board. Annually, there are 15 “large” credits available statewide. Three of these credits may be between \$10 million and \$30 million, while three other credits may be applied to facilities located in non-qualified local governmental units.

The SBT credit must be claimed in the tax year in which the project is completed. It is not claimed in the year the investment is made unless the activities are completed within the same year. For a project with total credits greater than \$10 million, 10% of the credits must be claimed each year for 10 years, beginning with the first year specified on the Certificate of Completion.

An eligible property must have been included in a locally approved brownfield plan under the Brownfield Redevelopment Financing Act. Priority is given to projects located in Core Communities and eligible distressed areas and mixed use properties in their downtowns. Additionally, the eligible property’s tax-paying owner or lessee must certify that the MDEQ has not sued or issued a unilateral order to the taxpayer to compel response activity on that property. The MDEQ also may not have expended any state funds for response activity to the property and then demanded reimbursement from the taxpayer.

Eligible investments include demolition, construction, restoration, alteration, renovation, or improvement of buildings or site improvements on eligible property and the addition of machinery, equipment and fixtures to the eligible property. Certain “soft” costs, such as legal, engineering, and architectural expenses, are considered eligible investments if they are directly related to the previously mentioned investments on an eligible property. In order to receive the SBT credit, these activities must occur after the date a pre-approval letter has been received.

Eligible activities defined by Act 381, such as baseline environmental assessment activities, due care plans, and remediation costs, are not eligible investments. The cost of these activities may be financed through tax increment financing (TIF). Other ineligible SBT investments include costs reimbursed to the taxpayer or paid on behalf of the taxpayer, costs associated with the purchase of land, investment attributable or related to the operation of a sports stadium or a casino, and investment attributable or related to the construction or expansion of a landfill.

LOCAL AWARDS

See "Selection of Sites for Feasibility Analyses" for a list of local Brownfield Redevelopment Authorities.

Contacts

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Obsolete Property Rehabilitation Act

The Obsolete Property Rehabilitation Act (OPRA), officially known as Public Act 146 of 2000, promotes rehabilitation of commercial and commercial housing properties. OPRA authorizes qualified local governmental units to establish obsolete property rehabilitation districts. Buildings and improvements within these districts are eligible for exemption from ad valorem property taxes for up to 12 years. The exemption does not include the land where the rehabilitated facility is located or personal property other than buildings on leased land.

Owners of rehabilitated buildings pay an obsolete property tax, instead of ad valorem taxes, on buildings and improvements. This tax is calculated by multiplying the current tax millage (including school mills) with the pre-rehabilitation taxable value of the property. A portion (up to 50%) of the local school operating tax and State Education Tax (SET) may be additionally excluded by the State Treasurer for up to 6 years. Essentially, OPRA provides an exemption for the amount invested in a rehabilitated facility from millage levied in a local unit, except for local school operating millage and the SET, and where a reduction of school millage may be approved by the State Treasurer.

To qualify for the exemption, a property must meet specific criteria. The property must be commercial property or commercial housing property; located in a qualified governmental unit; and considered blighted property, functionally obsolete, or contaminated with concentrations of hazardous materials in excess of mandated safety levels. The obsolete property rehabilitation exemption must also be approved by both the local governing body and the State Tax Commission. The sunset for granting exemptions is December 31, 2010. The use of OPRA at a brownfield site will lessen the amount of tax revenues a BRA can capture.

LOCAL AWARDS
Refer to "Selection of Sites for Feasibility Analyses" for a listing of Core Communities in the region.

Contacts

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ELIGIBLE ACTIVITIES FOR STATE OF MICHIGAN BROWNFIELD INCENTIVES

Brownfield Assessments	Grants and Loans	Tax Increment Financing	Tax Increment Financing	Single Business Tax Credit	Obsolete Property Rehabilitation
MDEQ Eligible Activities	MDEQ Eligible Activities	MDEQ Eligible Activities	MEGA Eligible Activities (QLUGs/Core Communities Only)	Eligible Investments	MEGA Eligible Activities
Background Reviews	Phase I & II ESA	Phase I & II ESA			
Field Investigations	Baseline Environmental Assessment	Baseline Environmental Assessment			
	Due Care Plan	Due Care Plan			
	Due Care Response Activities	Due Care Response Activities	Lead Abatement Asbestos Abatement		
	Demolition as Response Activity	Demolition as Response Activity	Demolition – Not as Response Activity	Demolition – Costs not covered by TIF	
	Additional Response Activities	Additional Response Activities	Public Infrastructure		
	Incremental Brownfield Costs		<ul style="list-style-type: none"> - Infrastructure improvements that directly benefit eligible property (for instance publicly-owned streets, roads, sidewalks, parking structures and parking facilities, alleys, bridges, sewers, drainage systems, waterways, water storage facility, rail line, utility line or pipeline, storm sewers, transportation & communications systems located in public ROW or easement) - Public utilities providing water, 		

			<p>electricity, connection up to property line</p> <p>Site Preparation</p> <ul style="list-style-type: none"> - Activities necessary to prepare site for construction (for instance relocation of utilities, addition/removal of soils, trenching and pit excavation costs, clearing and grubbing, land balancing, grading, test borings, foundation work to address special soil concerns) - Soft costs directly associated with site preparation activities or to ready the property for sale or transfer (for instance engineering, design, legal and professional fees and costs including title work, commitments and insurance, title clearing and quieting costs, costs of notices and service process, court costs and recording fees, surveys, etc, or other such costs related to the above and at the discretion of the MEGA) <p>Relocation of Public Buildings or Operations for economic development purposes.</p>	<p>Site Improvements (on eligible property)</p> <ul style="list-style-type: none"> - Privately financed improvements to a project site that increase its value (for instance clearing land, adding sewer or water lines or other utilities, relocating existing utilities, landscaping, adding or removing soils, installing fences, lighting, walkways, driveways, or parking lots, trenching and pit excavation costs, and related improvements) <p>Construction, Restoration, Alteration, Renovation, or Improvement of Buildings</p> <p>Addition of Machinery, Equipment, and Fixtures</p>	<p>Construction or Rehabilitation of Commercial or Commercial Housing Buildings</p>
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Source: WMSRDC and GES LLC

Sources of State Funding

The financial assistance and incentives offered by the State of Michigan in cleaning up and redeveloping brownfields are funded through a variety of sources. These include bond initiatives, general funds, and grants and loans from the federal government, particularly EPA. Major sources of state-generated funding, as described by MDEQ, are identified below.

- **Cleanup and Redevelopment Fund (CRF)**

The CRF was created by the July 1996 amendments to Part 201 of NREPA to provide a permanent, on-going funding mechanism for the state's environmental cleanup and redevelopment program. The funds included in the CRF consist of 80 percent of the state's share of annual unclaimed bottle deposit revenues and the transfer of Environmental Protection Bond Fund (EPBF) revenues appropriated in prior fiscal years to the DEQ for solid waste alternative projects. It was capitalized at \$30 million per year in FY97 and FY98 and also supports **Revitalization Revolving Loan Fund** program loans to local governments.

- **Clean Michigan Initiative (CMI)**

In November 1998, Michigan citizens approved a \$675 million CMI Bond to be used for brownfield redevelopment and environmental cleanup, protecting and enhancing Michigan's lakes, rivers, and streams; reclaiming and revitalizing local waterfronts; making critical state park improvements; enhancing local parks and recreational opportunities; pollution prevention; and protecting the public from lead hazards. Part 196 of NREPA provides for the specific use of these funds. The \$675 million bond issue included \$335 million for brownfield activities.

- ☑ \$243 million to \$263 million is specifically designated to clean up contaminated sites that will promote redevelopment.
- ☑ Between \$40 million and \$60 million of the \$335 million is to be used at contaminated facilities that pose an imminent or substantial endangerment to the public health, safety, or welfare, or to the environment.
- ☑ \$20 million is designated for grants and loans to local governments and brownfield authorities for cleanup of sites with redevelopment potential.

- **Environmental Protection Bond Fund (EPBF)**

In November 1988, Michigan voters approved Proposal C, Environmental Bond Issue. This proposal authorized the DEQ to use \$660 million of general obligation bonds for environmental protection. Part 195, Environmental Protection Bond Fund of NREPA, provides for the specific use of these funds. The bonds are authorized for financing environmental protection programs to

clean up sites of toxic and other environmental contamination, contribute to a regional Great Lake Protection Fund, address solid waste problems, treat sewage and other water quality problems, re-use industrial sites, and preserve open space. \$45 million was appropriated for the Site Assessment and Site Reclamation Fund which provides grants to local units of government for assessing the nature and extent of contamination at a property and for grants to local units of government to undertake response activities at contaminated properties that were identified for their redevelopment potential. An estimated \$340.5 million was appropriated for the Environmental Cleanup and Redevelopment Program. A proposed \$10 million has been appropriated for Emergency Cleanup Actions and Contingencies.

- **Environmental Protection Fund (EPF)**

The Environmental Protection Fund provided appropriations totaling \$32,000,000 in FY 02 through FY 04 for cleanup activities. The source of funds included deposits from the sale of royalty interest the state holds in hydrocarbons produced from Devonian or Antrim shale gas wells, qualifying for the non-conventional fuel credit contained in Section 29 of the Internal Revenue Code of 1986. Additional appropriations from this fund are not anticipated.

These funding sources have allowed for several programs to be offered to communities and developers for brownfield cleanup and redevelopment, some of which have been heavily utilized. Budgets have been entirely expended for the following programs: Site Assessment Grant Program, which assessed nine properties in Muskegon County between 1994 and 2004 and several in Ludington in 2004; Municipal Landfill Cost-Share Program, which assisted with the cleanup of the Mason County Landfill (previously a Superfund site); and the Waterfront Redevelopment Grants Program, which financed projects in the Cities of Ludington, Montague, Muskegon, and Whitehall. These programs are no longer available as brownfield tools.

Federal Brownfield Programs and Incentives

The primary federal brownfield legislation is the Small Business Liability Relief and Brownfields Revitalization Act, which was passed in January 2002. The goals of the act were to provide relief from Superfund liability for small businesses and certain property owners and to promote the revitalization of brownfields. In order to ease liability issues, the act generally prohibits federal enforcement action at contaminated sites being addressed under State oversight. To promote brownfields revitalization, the act authorizes federal funding for state brownfields programs and for grants and loans for brownfields assessment and remediation. The 2002 statutory authority requires that 25 percent of EPA's brownfield funding goes to petroleum-impacted sites.

There are numerous federal programs that can help communities navigate through the various aspects of brownfield reuse such as basic site preparation, planning, site assessment, cleanup, and construction. However, only two agencies focus explicitly on brownfields: the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Housing and Urban Development (HUD). Other potential funding sources are less obvious and might require some creativity to connect them to brownfield-related activities.

EPA Brownfields Programs

The EPA's Brownfields Program is designed to empower states, communities, and other stakeholders to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. EPA offers technical and financial assistance for brownfield activities through an approach based on four main goals: protecting human health and the environment, sustaining reuse, promoting partnerships, and strengthening the marketplace. Brownfield grants serve as the foundation of the Brownfields Program and support revitalization efforts by funding environmental assessment, cleanup, and job training activities.

The following EPA funding programs have been used extensively to spur brownfield redevelopment.

- **Brownfield Assessment Grants** provide funding for a grant recipient to inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites. An applicant may apply for a community-wide assessment grant if a specific site has not been identified or if the assessment will address more than one site within the community. A site-specific grant must be applied for if the assessment is limited to one site. An eligible entity may apply for up to \$200,000 to assess a site contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and up to \$200,000 to address a site contaminated by petroleum. Eligible applicants are state, local, and tribal

governments; land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; or state or government entities.

LOCAL AWARDS		
City of Muskegon Heights	Pilot 1999 Grant	\$100,000
County of Mason	2004 Grant	\$200,000
County of Lake	2005 Grant for Petroleum	\$200,000
	2005 Hazardous Substances	\$200,000

- **Targeted Brownfield Assessment Grants** are administered by the regional offices of EPA and, in Michigan, by the Remediation and Redevelopment Division of MDEQ. The program is designed to help states, tribes, and municipalities (especially those without EPA Brownfields Assessment pilots/grants) supplement and work with other efforts under EPA’s Brownfields Program. Funds can be used for a screening or “all appropriate inquiry” (Phase I) assessment, including a background and historical investigation and a preliminary site inspection; a full (Phase II) environmental assessment, including sampling activities to identify the types and concentrations of contaminants and the areas of contamination to be cleaned; and establishment of cleanup options and cost estimates based on future uses and redevelopment plans.

LOCAL AWARDS
Additional information on this program is presented in the section titled “State Resources for Local Governments”.

- **Cleanup Grants** provide funding for a grant recipient to carry out cleanup activities at brownfield sites. Funds may be used to address sites contaminated by petroleum and/or hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). An eligible entity may apply for up to \$200,000 per site, with a maximum lifetime limit of \$1,000,000 on five sites. Eligible entities include state, local and tribal governments; land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; or state or government entities. In order to receive a cleanup grant, the applicant must own the site for which it is applying by the time the grant is awarded. These sites will usually be tax-reverted and owned by either the state or a local unit of government. A minimum of a Phase I assessment must be completed prior to proposal submission and a 20 percent cost share is required.

LOCAL AWARDS
Although there have been no awards within the region, EPA has awarded funds to both the City of Battle Creek and Jackson County in the past.

- **Revolving Loan Fund (RLF) Grants** provide funding to a grant recipient to capitalize a revolving loan fund that provides sub-grants to carry out cleanup activities at brownfield sites. It addresses sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). At least 60 percent of the awarded funds must be used to implement a revolving loan fund in order to provide no-interest or low-interest loans for brownfields cleanup. RLF grants require a 20 percent cost share. An eligible entity may apply for up to \$1,000,000. Eligible entities include state, local and tribal governments; land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; or state or government entities.

LOCAL AWARDS

The State of Michigan has been awarded a RLF grant by EPA to provide gap and long-term financing to communities and brownfield redevelopment authorities.

- **Job Training Grants** provide training for residents of communities affected by brownfields to facilitate cleanup of brownfields sites and prepare trainees for future employment in the environmental field. This effort links the goal of encouraging site cleanup with that of training for jobs in the environmental fields, including innovative treatment technologies. Eligible entities include state, local and tribal governments; land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; state or government entities, colleges, universities, and community job training organizations. An eligible entity may apply for up to \$200,000.

LOCAL AWARDS

Although no awards have been made within regional boundaries, there have been two awards nearby. EPA awarded \$200,000 to the City of Flint in 2000 and \$200,000 to the Downriver Community Conference, Wayne and Monroe Counties, in 2005.

- **Clean Water State Revolving Loans Funds (CWSRFs)** are just beginning to be used as a brownfields financing tool for excavation and disposal of underground storage tanks; capping wells; excavation, removal, and disposal of contaminated soil or sediments; well abandonment; and Phase I, II or III assessments. They have considerable potential for use at sites where water quality is an issue. Capitalized by EPA, these funds can be used by states for loans of up to 20 years to finance activities that include brownfields mitigation to correct or prevent water quality problems, and which have a revenue stream to provide for loan repayment. There is no limit on the amount of funding that a project can access. Eligible applicants include state, local and tribal government; land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; or state or government

entities according to EPA. States set additional criteria on applicant eligibility and set project priorities.

LOCAL AWARDS

Funds have been used by the states of New Mexico, New York and Ohio, but not yet by Michigan.

- **Contacts for All EPA Programs**

Specific questions regarding EPA's brownfields programs may be directed to either Deborah Orr, Brownfields Coordinator, at (312) 886-7576 or to Joseph Dufficy, Brownfields Section Chief, at (312) 886-1960. The mailing address is:

U.S. Environmental Protection Agency, Region 5
Brownfields & Early Action Section
77 West Jackson Boulevard
Mail Code: SE-4J
Chicago, IL 60604-3507

HUD - Brownfields Economic Development Initiative (BEDI)

The Brownfields Economic Development Initiative (BEDI) is HUD's only program targeted solely to brownfield redevelopment. BEDI is designed to assist the redevelopment of brownfields by stimulating and promoting economic and community development. BEDI grant funds are primarily targeted for use with a particular emphasis upon the redevelopment of brownfield sites in economic development projects and the increase of economic opportunities for low and moderate income persons as part of the creation or retention of businesses, jobs and increases in the local tax base. Applications featuring near-term results and demonstrable economic benefits are preferred over applications whose scope is limited to just site acquisition and/ or remediation.

BEDI grants must be used in tandem with new Section 108 loan guarantee commitments. Section 108 provides federally guaranteed loans for large economic development and revitalization projects, housing, and public infrastructure projects. CDBG recipients must provide security of the Section 108 guaranteed loan (often the assets of the assisted project) and are required to pledge a portion of their current and future CDBG grants to repay the debt in the event the project does not generate sufficient funds to repay it. Eligible entities are CDBG entitlement recipients and states on behalf of non-entitlement jurisdictions.

LOCAL AWARDS

There are three Entitlement Cities in the region, all within Muskegon County. They are the Cities of Muskegon, Muskegon Heights, and Norton Shores.

Contacts

Refer to the Planning or Community Development Departments of the cities listed above for additional information.

EDA - Public Works and Economic Development Facilities Program

The Economic Development Administration (EDA) underwent reauthorization in 2004 and included projects to expand, redevelop, or reuse brownfields, within EDA's existing program structure. The Public Works and Economic Development Program is EDA's primary initiative that affects the redevelopment of brownfields. It supports the construction or rehabilitation of essential public infrastructure and development of facilities necessary to generate private sector jobs and investment. It can be used to redevelop brownfields, especially when it modernizes industrial parks or leads to technology-led or eco-industrial development. Eligible applicants include Economic Development Districts, tribes, states, cities or other political subdivisions, or institutions of higher education. Grants are not awarded to individuals.

LOCAL AWARDS			
2000	Muskegon City	Seaway Industrial Park	\$637,000
2001	White Cloud City	White Cloud Industrial Park	\$602,000
2002	Muskegon Township	P. Don Aley Industrial Park	\$583,000
2004	Pere Marquette Township	First Street Industrial Park	\$2,395,000
2005	Muskegon County	Muskegon Co. Business/Industrial – Park North	\$2,560,000

Contact

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111 North Canal Street, Suite 855
Chicago, IL 60606
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jmacconn@eda.doc.gov

Brownfields Tax Incentive

Another brownfield-specific federal funding source, the Brownfields Tax Incentive, was created by the EPA, the Department of the Treasury, and other federal partners. This tool was signed into law as part of the Taxpayer Relief Act in August 1997, and amended in December of 2000. Under this tax incentive, certain environmental cleanup costs at targeted sites may fully be deducted by eligible taxpayers in the year in which they are incurred, rather than having to be capitalized over time. This is not a tax credit, however it reduces tax burden indirectly by lowering taxable income. The incentive does this by allowing eligible

cleanup costs to be claimed as current expenses, rather than as assets capitalized over the long-term.

Additional Information

To help communities connect with other federal programs for brownfield funding, the EPA has released a guidebook entitled “Brownfields Federal Programs Guide.” It was utilized, and quoted, in this document as it presents information about a range of federal resources that may potentially provide technical and financial support to brownfields cleanup and redevelopment. In addition to information on a variety of federal programs, the guide includes: a quick reference matrix that identifies specific types of projects with specific funding sources; snapshots of brownfields projects that have successfully leveraged funding; additional federal tools and resources; and an extensive overview of tax credit information and other possible financial incentives. The Brownfields Federal Programs Guide may be viewed on the EPA’s website at http://www.epa.gov/swerosps/bf/partners/bf_fed_pr_gd.htm.

The EPA Region 5 website may prove to be another useful resource. Region 5 serves Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, and 35 Tribal Nations. This website provides federal brownfield grant assistance, kits, and forms. It may be viewed at: <http://www.epa.gov/R5Brownfields/html/grants.htm>.

West Michigan Shoreline Regional Development Commission

Brownfield Sites Survey

Definitions: *Brownfield* – Abandoned, idle, or under-used industrial and commercial properties, where expansion or redevelopment is hindered or complicated by real or perceived environmental conditions.

USTfield – Abandoned or underused industrial and commercial properties where revitalization is complicated by real or perceived environmental contamination from underground storage tanks (UST).

Name of Local Unit: _____ County: _____

Are there any Brownfields within your jurisdiction? ___ Yes ___ No

How Many? _____ Please List Name(s)/ Location(s): _____

Are there any UST's within your jurisdiction? ___ Yes ___ No

How Many? _____ Please List Name(s)/ Location(s): _____

Please list the number of acres designated as Brownfields or UST's within your

jurisdiction? _____ Comments: _____

Do you have plans to build on these sites within the next five to ten years?

___ Yes ___ No Location(s)? _____

_____ How many acres? _____

Does your community currently have a Brownfield Redevelopment Authority or a Brownfield Plan? _____

Comments: _____

Is your community engaging in, or has your community ever engaged in, a Brownfield redevelopment feasibility study or any other Brownfield project? _____

Please List: _____

Date: _____

Contact Name: _____

Phone Number: _____

BROWNFIELD ACRONYMS AND DEFINITIONS

Agricultural Processing Renaissance Zone

- Created in 2000 by PA 259 and expanded in 2003. Exemptions from all state and local taxes just like the Renaissance Zones but for qualified agricultural processors who want to expand or begin operations in Michigan. Designed to help keep Michigan's raw commodities in the state and improve markets and profitability for Michigan farmers. Administered by the Michigan Department of Agriculture and the Michigan Economic Development Corporation.

ABP – Available Brownfield Properties

- A database identifying brownfield sites, maintained by MDEQ for properties it has funded or assisted with cleanup at. The database is available on-line and includes site summaries for state funded projects.

Alias

- Alternate names with which a site can be identified. Could be currently in use or used in the past and frequently indicates ownership. May or may not have an association with contamination.

BEA – Baseline Environmental Assessment

- An evaluation of environmental conditions which exist at a facility at the time of purchase, occupancy, or foreclosure that reasonably defines the existing conditions and circumstances at the facility so that in the event of a subsequent release, there is a means of distinguishing the new release from existing contamination. Provides liability protection in Michigan under the following NREPA parts: 201 (Environmental Remediation), 211 (UST), and 213 (LUST) when conducted prior to or no more than 45 days after the date of purchase, foreclosure, or becoming the operator and when results are disclosed as required (MDEQ and subsequent purchasers). A simpler, streamlined alternative to the previously used Covenant Not to Sue liability protection tool. NO SUPERFUND LIABILITY PROTECTION.
 - Category N: Conducted for a facility where the petitioner does not intend to have a significant use of hazardous substances.
 - Category D: Conducted for a facility where the petitioner intends to employ significant hazardous substance, different from those constituting existing contamination.
 - Category S: Conducted for a facility where future significant use of hazardous substances will be similar to those constituting existing contamination.

Blighted

- Property that has been declared a public nuisance in accordance with a local housing, building, plumbing, fire, or other related code or ordinance; is an attractive nuisance to children because of physical condition, use or occupancy; is a fire hazard or is otherwise dangerous to the safety of persons or property; has had utilities, plumbing, heating, or sewerage permanently disconnected, destroyed, removed, or rendered ineffective so that the property is unfit for its intended use; or is tax-reverted property owned by a qualified local governmental unit, by a county, or by this state. Defined in Michigan's PA 145 of 2000 amendments to PA 381 of 1996.

BF-UST – Brownfields-USTfields Database

- Property information about state funded clean-up and redevelopment sites, as well as LUST sites which have had a BEA submitted to MDEQ for redevelopment purposes. The data base is maintained by MDEQ.

BRA – Brownfield Redevelopment Authority (BRA)

- Under PA 145 of 2000, a BRA is an agency of a local unit of government created to develop and implement brownfield redevelopment financing plans. A BRA allows communities the use of various financial tools and incentives in order to foster the environmental assessment and cleanup, and in some cases preparation of the site for development, of brownfield properties.

Brownfield

- Abandoned, idle, or under-used industrial and commercial properties, where expansion or redevelopment is hindered or complicated by real or perceived environmental conditions. (MDEQ)

Brownfield Redevelopment Financing Act

- PA 381 of 1996, as amended by PA 145 of 2000. Provides a method of financing environmental response activities necessary to redevelop contaminated property through the use of tax increment financing, including capture of school taxes, in Michigan. Amendments allowed for a wider variety of properties and activities. In qualified local governmental units, eligible properties include those that are blighted or functionally obsolete and eligible activities include infrastructure improvement, demolition, lead or asbestos abatement, and site preparation.

CEDS – Comprehensive Economic Development Strategy

- A plan that emerges from a broad-based continuous planning process, performed by a recipient of EDA funds, addressing the economic opportunities and constraints of a region. The guidelines for developing a CEDS include effective general planning practices that can be used by any community to design and implement a plan to guide its economic growth. An acceptable CEDS is normally a prerequisite to be eligible to receive funds under most EDA programs.

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

- Enacted by U.S. Congress on December 11, 1980 as 42 U.S.C. s/s 9601 et seq. Created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Provided a federal trust fund, known as “Superfund”, for cleaning up abandoned or uncontrolled hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. . The Superfund Amendments and Reauthorization Act of 1986 (SARA) reauthorized CERCLA to continue cleanup activities around the country.

CMI – Clean Michigan Initiative

- \$675 million general obligation bond approved by the voters on November 3, 1998, and implemented under the authority of Section 6(1) of Part 196, Clean Michigan Initiative Implementation, of NREPA, as amended. To be used for brownfield redevelopment and environmental cleanup; protecting and enhancing Michigan’s lakes, rivers, and streams; reclaiming and revitalizing local waterfronts; making critical state park improvements; enhancing local parks and recreational opportunities; pollution prevention; and protecting the public from lead hazards.

Core Community

- Urban communities and traditional centers of commerce designated by the State of Michigan in 2000 in an effort to spur private development. Incentives unique to Core Communities target new housing development, redevelopment of obsolete facilities, and development of contaminated property. Brownfield tools can be used not only on contaminated property but also on blighted and functionally obsolete properties. In addition, the tax increment-financing component can pay for demolition, site preparation, public infrastructure, and lead and asbestos abatement, as well as environmental remediation. Projects are eligible to apply for a

SBT in excess of the \$1 million maximum elsewhere. The Obsolete Property Rehabilitation Exemption is available only in core communities. Also called Qualified Local Governmental Unit.

CRF – Cleanup and Redevelopment Fund

- Created by the July 1996 amendments, PA 380, to Part 201 of NREPA to provide a permanent, ongoing funding mechanism for the state environmental cleanup and redevelopment program. The fund is used to conduct state-funded cleanup projects at specific sites of environmental contamination and focuses on cleanup projects needed to protect public health and the environment, in particular at sites that have acute health or environment problems and at those leaking underground storage tank sites where no liable party can be identified or where the liable party is unwilling or unable to proceed with cleanup.

Due Care

- Section 20107a of Part 201 of NREPA, as amended. Specifically requires that owners and operators take “due care” measures to ensure that existing contamination on a property does not cause unacceptable risks and is not exacerbated. Such measures include evaluating the contamination (BEA) and taking necessary response actions. Due care requirements are not related to the owner or operator’s liability for the contaminants; they apply to non-liable parties and liable parties alike. The due care requirements were designed so contaminated properties could be safely redeveloped.

Due Diligence

- A potential owner or operator’s obligation to make appropriate inquiry (or, as it is often called, perform due diligence) as to whether environmental contamination is present on a piece of property. The initial step is to ask the seller or owner about any known environmental conditions. The next step is to conduct an environmental assessment of the property. A new purchaser can avoid liability by diligently investigating and documenting the environmental condition of a property. Where a property is found to be contaminated, a Baseline Environmental Assessment can be performed and disclosed to the State of Michigan and subsequent purchasers, thereby avoiding liability for any contamination.

Eligible Activities

- BEA activities, due care activities, additional response activities, and relocation of public buildings or operations for economic development purposes. In a qualified local governmental unit, eligible activities also mean infrastructure improvements that directly benefit eligible property, demolition of structures, lead or asbestos abatement, and site preparation. Assistance to a land bank fast track authority in clearing or quieting title to, or selling or otherwise conveying, property owned or under the control of a land bank fast track authority is also an eligible activity. Defined in Michigan’s PA 145 of 2000 amendments to PA 381 of 1996.

Eligible Investment (for SBT)

- Demolition, construction, restoration, alteration, renovation, or improvement of buildings or site improvements on eligible property and the addition of machinery, equipment and fixtures. For SBT qualification, these activities must occur after the date that eligible activities on the property have begun pursuant to a brownfield plan and after a pre-approval letter has been issued.

Eligible Property

- Defined as property for which eligible activities are identified under a brownfield plan that was used or is currently used for commercial, industrial, or residential purposes that is either in a qualified local governmental unit and is a facility, functionally obsolete, or blighted; or is not in a qualified local governmental unit and is a facility; and includes parcels that are adjacent or contiguous to that property if the development of the adjacent and contiguous parcels is

estimated to increase the captured taxable value of that property. Under Act 381, an eligible property is a facility as defined by Part 201 of NREPA, as amended.

ESA – Environmental Site Assessment

- The process that determines whether contamination is present at a site. Refer to Phase I and Phase II Environmental Site Assessment for additional information.

Facility

- Any area, place, or property where a hazardous substance in excess of the concentrations which satisfy the requirements of Section 20120a(1)(a) or (17) of NREPA or the cleanup criteria for unrestricted residential use under Part 213 has been released, deposited, disposed of, or otherwise comes to be located. "Facility" does not include an area, place, or property at which response activities have been completed. The term "site" is also used for 213 designations.

Functionally Obsolete

- A property that is unable to be used to adequately perform the function for which it was intended due to a substantial loss in value resulting from factors such as overcapacity, changes in technology, deficiencies or super-adequacies in design, or other similar factors that affect the property itself, or the property's relationship with other surrounding property. Defined in Michigan's PA 145 of 2000 amendments to PA 381 of 1996.

Greenfield

- Undeveloped land, especially when unpolluted. Since greenfield sites have not been previously developed, they are generally in rural or suburban areas and their development feeds urban sprawl.

Land Bank

- Created to efficiently hold, manage, and develop tax-foreclosed property. By using the legal tools a land bank provides, a community can ensure that tax-foreclosed property is sold or developed with the long-term interest of the community and the surrounding property owners in mind.

Land Bank Fast Track Authority

- Refers to an authority created under Michigan's Land Bank Fast Track Act, PA 258 of 2003. Amendments to PA 381 in January 2004 expanded the definition of eligible property to include tax reverted property owned or under the control of a land bank fast track authority and the definition of eligible activities to include assistance to a land bank fast track authority in clearing or quieting title to, or selling or otherwise conveying, property owned or under the control of a land bank fast track authority.

Landfill Amendment

- Amendments to Michigan's PA 381 in January 2004 allowed taxes levied for school operating purposes to be used for response activities associated with a landfill without consideration of liability.

LUST – Leaking Underground Storage Tank

- Part 213 sites, as defined by NREPA.

MDEQ – Michigan Department of Environmental Quality

MDNR – Michigan Department of Natural Resources

MEDC – Michigan Economic Development Corporation

MEGA – Michigan Economic Growth Authority

- Created in 1995 to promote high quality economic growth and job creation. Tax credits available through MEGA provide valuable incentives to projects that would otherwise not occur. PA 144 of 2000 provided MEGA with authority to determine tax credit eligibility for Brownfield credits over \$1 million. All brownfield SBTcredits for economic development must now be applied for through MEGA.

MiSite

- Michigan's premier commercial and industrial property database, maintained by Michigan Site Network. The database is available on-line and contains listing for properties that are for sale. It is supported by the Michigan Economic Development Corporation, the Michigan Economic Developers Association, and DTE Energy.

Mixed Use

- A tract of land with two or more different uses, such as residential, office, manufacturing, retail, public, or entertainment.

NPL – National Priorities List

- A list of environmentally contaminated sites, published by U.S. EPA, which pose an immediate or significant public health threat to a local community. These sites are eligible for extensive, long-term cleanup action under the Superfund program.

NREPA – Natural Resources and Environmental Protection Act

- State of Michigan 1994 PA 451, as amended. Instituted risk-based cleanup standards and reduced liability for prospective developers.

Obsolete Property Rehabilitation Act

- Michigan's PA 146 of 2000. Authorized qualified local governmental units to establish obsolete property rehabilitation districts. Buildings and improvements within these districts are eligible for exemption from ad valorem property taxes from 1 to 12 years. To qualify the property must be commercial or commercial housing property is a facility or is blighted or functionally obsolete.

Part 201

- Michigan's environmental cleanup law, known as Environmental Remediation of NREPA. Amendments to the law in 1995 made Part 201 an ideal tool for returning brownfield sites to productive use quickly and economically, while protecting the health and safety of citizens and natural resources. Key components are: causation-based liability system for owners and operators, baseline environmental assessment (BEA) provisions to provide liability protection to new owners and operators, due care provisions to assure contaminated property is used safely, and land use-based clean-up standards.

Phase I Environmental Site Assessment (ESA)

- The purpose of a Phase I ESA is to identify actual and potential site contamination. This involves the evaluation and reporting of information collected through records review, site visits, and interviews. Phase I ESA's are conducted to identify environmental liabilities for property transactions; identify certain baseline environmental conditions; assist in meeting regulatory requirements (such as due care or due diligence); and as an initial step in site remediation. The Phase I report will conclude with a list of Recognized Environmental Concerns (REC) and a determination of the necessity to proceed to a Phase II (or equivalent) investigation.

Phase II Environmental Site Assessment (ESA)

- The Phase II assessment involves further investigation into the RECs, including collecting soil, and/or groundwater samples, determining if underground tanks are present, and identifying abandoned containers and their contents.

Qualified Local Government Unit

- A designated local unit of government in Michigan which is eligible to use the Obsolete Property Rehabilitation Act of 2000 (PA 146). Also called “core community”.

RCRA – Resource Conservation and Recovery Act

- 42 U.S.C. s/s 6901 et seq. (1976) gave the U.S. Environmental Protection Agency the authority to control hazardous waste from the “cradle-to-grave” including the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and does not address abandoned or historical sites.

RCRA TSD – Resource Conservation and Recovery Act Treatment, Storage and Disposal

- Those facilities on which treatment, storage and/or disposal of hazardous wastes take place, as defined and regulated by RCRA.

Renaissance Zone

- Program created by Michigan’s P.A. 376 of 1996 to encourage the development of selected areas. Grants virtually tax-free status to any business or resident presently in a zone or moving into a zone. The zones are designed to provide selected communities with virtually no state or local taxes in order to spur new jobs and investments.

RBCA – Risk Based Corrective Action

- A decision-making process, utilizing the American Society of Testing and Materials Standard Guide for Risk-Based Correction Action, which allows a Qualified Consultant who has been retained by an owner/operator to assess and respond to releases. A Michigan Specific approach, adopted by reference in Part 213, was used to take into account relevant Part 213 requirements.
 - Tier 1 Evaluation: Non-site-specific values based on conservative exposure factors (Risk Based Screening Levels or RBSL), potential exposure pathways, and land use are evaluated to determine appropriate actions.
 - Tier 2 Evaluation: Applying the RBSL at the exposure point, development of Site Specific Target Level (SSTL) for potential indirect exposure pathways based on site-specific conditions, and establishment of points of compliance.
 - Tier 3 Evaluation: Developing values for potential direct and indirect exposure pathways at the exposure point based on site-specific conditions.

SBT – Single Business Tax

- Tax credit originally enabled by Michigan’s PA 228 of 1975, as amended by PA 143 of 2000, and the Brownfield Redevelopment Financing Act (Act 381). Allows the use of SBT credits as incentives for the development or improvement of a facility (contaminated property), or functionally obsolete or blighted property located within a qualified local governmental unit.

Smart Zone

- Collaborations between Michigan’s universities, industry, research organizations, government, and other community institutions intended to stimulate the growth of technology-based businesses and jobs by aiding in the creation of recognized clusters of new and emerging

businesses, those primarily focused on commercializing ideas, patents, and other opportunities surrounding corporate, university or private research institute R&D efforts.

Superfund – Refer to CERCLA

TIF – Tax Increment Financing

- Incremental increases to property tax revenues used to finance eligible activities, including baseline environmental assessments, due care activities and additional response activities. Within Core Communities, tax increment financing can also be used to fund demolition, public infrastructure, site preparation and lead and asbestos abatement. Unlike other Michigan tax increment financing tools (DDA's, LDFA's, etc.), the brownfield program allows for the capture of BOTH local and school taxes. In order to capture school tax levies, Michigan Department of Environmental Quality (MDEQ) and/or Michigan Economic Growth Authority (MEGA) approval is required.

TIFA – Tax Increment Financing Authority

- PA 450 of 1980.

Urban Opportunity Site

- A database maintained by MEDC for selected brownfield sites in ten urban communities. This on-line database includes comprehensive data on utilities, ownership details, environmental reports, topography maps, aerial photographs, potential state and local incentives, etc.

USTfield

- Abandoned or underused industrial and commercial properties where revitalization is complicated by real or perceived environmental contamination from underground storage tanks (UST).

WMSRDC – West Michigan Shoreline Regional Development Commission

- Created in 1970 under state enabling legislation, PA 46, Regional Economic Development Commission Act and PA 281, Regional Planning Commission Act. The Commission is a regional council of governments representing 127 local governments in the counties of Lake, Mason, Muskegon, Newaygo, and Oceana. Its mission is to promote and foster regional development in West Michigan through cooperation amongst local governments.

201 Site

- Location of environmental contamination in Michigan, according to Part 201 of NREPA. Refer to “facility” for additional information.

211 Site – Underground Storage Tank (UST)

- An underground storage tank or combination of tanks, including underground pipes connected to the tank or tanks, which is, was, or may have been used to contain an accumulation of regulated substances, and the volume of which, including the volume of the underground pipes connected to the tank or tanks, is 10% or more beneath the surface of the ground; according to Part 211 of NREPA.

213 Site – Leaking Underground Storage Tank (LUST)

- Location where a release has occurred or a threat of release exists from an underground storage tank system, excluding any location where corrective action was completed which satisfies the cleanup criteria for unrestricted residential use under Part 213 of NREPA.
 - Open: Corrective actions have not been completed to meet the appropriate land use criteria.
 - Closed: Corrective actions have been completed to meet the appropriate land use criteria.

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