above ground storage tank air quality asbestos/lead-based paint baseline environmental assessment brownfield redevelopment building/infrastructure restoration caisson/piles coatings concrete construction materials services corrosion dewatering drilling due care analysis earth retention system environmental site assessment facility asset management failure analyses forensic engineering foundation engineering geodynamic/vibration geophysical survey geosynthetic greyfield redevelopment ground modification hydrogeologic evaluation industrial hygiene indoor air quality/mold instrumentation ISO14001 EMS masonry/stone metals nondestructive testing pavement evaluation/design property condition assessment regulatory compliance remediation risk assessment roof system management sealants/waterproofing settlement analysis slope stability storm water management structural steel/welding underground storage tank

BASELINE ENVIRONMENTAL ASSESSMENT CONDUCTED PURSUANT TO SECTION 20126(1)(C) OF 1994 PA 451, PART 201, AS AMENDED

HOSPITAL PARCEL COMMERCE TOWNSHIP, MICHIGAN

SME Project Number: SE52533-03

December 22, 2006





Soil and Materials Engineers, Inc. 13019 Pauline Drive Shelby Township, MI 48315-3122

> tel (586) 731-3100 fax (586) 731-3582

www.sme-usa.com

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Mark K. Kramer, PE
Frank A. Henderson, PG
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Gerald M. Belian, PE
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James M. Less, CIH
Michael S. Meddock, PE
Larry W. Shook, PE
Michael J. Thelen, PE
John C. Zarzecki, CWI, CDT

January 26, 2007

Mr. Robert Mount Beaumont Services Company, LLC 3601 West Thirteen Mile Road Royal Oak, MI 48073-6769

RE: Category "D" Baseline Environmental Assessment

Hospital Parcel

Commerce Township, Michigan SME Project Number: SE52533-03

Dear Mr. Mount:

SME's Category "D" Baseline Environmental Assessment (BEA) report of the Hospital Parcel, in Commerce Township, Michigan is attached.

The BEA and the signed disclosure form were delivered to the Michigan Department of Environmental Quality (MDEQ) on January 26, 2007. Copies of the MDEQ form and cover letter submitted to the MDEQ are attached.

SME understands the Beaumont Services Company, LLC will rely upon the professional opinions and representations contained in this report in accordance with terms and conditions agreed upon for the project. This reliance is not to be construed as a warranty or guarantee on the part of SME.

If you have any questions or comments concerning the BEA or due care responsibilities, please contact us.

Sincerely,

SOIL AND MATERIALS ENGINEERS, INC.

Jáson C. Lafayette

Environmental Engineer

Jeffrey R. Lanier, PE

Project Environmental Engineer

Attachments: BEA Disclosure Form

Resumes of Environmental Professionals

BEA

Cover Letter to MDEQ

Plymouth Bay City Grand Rapids Kalamazoo Lansing Shelby Township Toledo Traverse City

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Larry W. Shook, PE
Michael J. Thelen, PE
John C. Zarzecki, CWI, CDT

January 26, 2007

Mr. Oladipo Oyinsan Remediation and Redevelopment Division Michigan Department of Environmental Quality Southeast Michigan District Office 27700 Donald Court Warren, MI 48092

RE: Category "D" Baseline Environmental Assessment

Hospital Parcel

Commerce Township, Michigan SME Project Number: SE52533-03

Dear Mr. Oyinsan:

Please find enclosed the completed Category "D" Baseline Environmental Assessment (BEA) for the above referenced property. The attached BEA was completed by SME on behalf of William Beaumont Hospital, the new Property owner, and is being disclosed to the Michigan Department of Environmental Quality in accordance with Section 20126(1)(c) of Part 201 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended.

If you have any questions or comments regarding the attached report, please contact us.

Sincerely,

SOIL AND MATERIALS ENGINEERS, INC.

Jason C. Lafayette

Environmental Engineer

Jeffrey R. Lanier, PE

Project Environmental Engineer

Attachments: Disclosure Form

BEA

Plymouth Bay City Grand Rapids Kalamazoo Lansing Shelby Township Toledo Traverse City

Distribution: Mr. Robert Mount – Beaumont Services Company, LLC

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consultants in the geosciences, materials, and the environment



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION

BEA Disclosure #	:

DISCLOSURE OF A BASELINE ENVIRONMENTAL ASSESSMENT (FORM EQP4446 (REV. 4/03))

(Under the authority of Part 201, 1994 Act 451, as amended, and the Rules promulgated thereunder)

DO NOT use this form for requesting a Baseline Environmental Assessment ("BEA") adequacy determination, OR if the property is not a facility, OR if the BEA was complete before the effective date of the BEA rules. Please answer the following questions as completely as possible.

(indi Willi 360	ne and address of submitter* ividual or legal entity): iam Beaumont Hospital 1 W. Thirteen Mile Rd. al Oak, Mi 48073-6769	Former Curre Owner*		ective [Address/locates Address/locates Address/locates Address Contheast con Roads Commerce Ty	ducted: e <u>l</u> ner of Welch vp., Michigan	and M	
for	vide the property tax identific the property identified in the 25-376-017, 17-25-376-021, 17-25-	BEA. Required purs	suant to F	Rule 907.		nd item nui	mber(:	s)
Con	tact person: Robert Mount	Telephone #: <u>248</u> -	293-1036	<u> </u>				
used Bear B11 Rock	e address of the person seeking liad to correspond with the contact person seeking liad to correspond with the contact personance. South Blvd, Suite 200 hester Hills, Mi 48307 eck the appropriate response to of the following? • A leaking underground s	erson, please provide each of the following	e the conta ng quest	ions.	n's address: s primarily f	rom any	YES	NO
	 451, as amended. A licensed landfill or soli A licensed hazardous wa Oil and gas development The source of the release that res DEQ division will maintain a file re 	d waste managen iste treatment, sto related activities. sulted in this property	nent faci orage, or	ility. · dispos	al facility.			
2.	Based on the Part 201 Rules	, this BEA is a:				Category N Category D Category S		
3.	Is the property at which the I Section 20101? If the answer to t			-		у	YES	NO

4.	Was the BEA conducted* prior to or within 45 days after the date of purchase*, occupancy, or foreclosure of the property, whichever is earliest, and completed* not more than 15 days after the date required by Section 20126(1)(c) or Rule 299.5903(8)? If the answer to either portion of this question is no, you are ineligible for an exemption from liability based on the BEA.	YES	NO
5.	Is the BEA being disclosed to the DEQ no later than 8 months after the earliest of the date of purchase, occupancy, or foreclosure? All disclosures pursuant to Rule 919(3) must be submitted to the DEQ no later than 8 months after the earliest of the date of purchase, occupancy, or foreclosure.	YES	NO
6.	Are any USTs or abandoned or discarded containers identified in the BEA? If yes, this information must be provided on Form EQP4476.	YES	NO ⊠
7.	Does this BEA rely on an isolation zone or an engineering control that requires an affidavit pursuant to Rule 299.5909(3) or 299.5909(4)? If yes, a completed affidavit, Form EQP4479, must be attached or the BEA will not be considered complete.	YES	NO ⊠
an	th my signature below, I certify that the enclosed BEA and all related materials are complete d accurate to the best of my knowledge and belief. I understand that intentionally submitting se information to the DEQ is a felony and may result in fines up to \$25,000 for each violation.		
•	gnature of Submitter: 2/1/67 erson legally authorized to bind the person seeking liability protection) Date		
Na	me (Typed or Printed) Eric R. Hunt		

Title

Vice President Operations

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Attachment D: SME's Phase I ESA Update

Attachment E: Soil Probe and Test Pit Logs - 31-Acre Site (SP1, and TP9-TP14), and SP102-SP107.

Attachment F: Laboratory Analytical Results Tables 1 and 2

Attachment G:Laboratory Analytical Reports and Chain of Custodies



1. IDENTIFICATION OF AUTHOR AND DATE BEA WAS CONDUCTED AND DATE BEA WAS COMPLETED

This Baseline Environmental Assessment (BEA) report was prepared by Mr. Jason C. Lafayette and reviewed by Mr. Daniel O. Roeser, PG. This BEA was conducted on November 20, 2006, and completed on December 22, 2006.

2. INTRODUCTION

This report presents the results of Soil and Materials Engineers, Inc.'s (SME's) BEA of the property located near the northeast corner of Welch and West Maple Roads in Commerce Township, Oakland County, Michigan, hereinafter referred to as the Property. The Property consists of one parcel of land, totaling approximately 22 acres, previously assessed and described as part of "31-Acre Site". Figure 1 of Attachment A is a Property Location Map. Figure 2 in Attachment A depicts the location of the Property on the 31-Acre Site. The legal description and tax identification number of the Property is included in Attachment B.

SME prepared and submitted this BEA on behalf of William Beaumont Hospital pursuant to Section 20126 of Part 201 of the NREPA, Public Act 451, 1994, as amended. This report is intended to meet the requirements of a Category "D" BEA and was prepared according to Part 9 of the Administrative Rules for Part 201, Baseline Environmental Assessments, dated December 20, 2002.

2.1 Current Uses

The current uses of the Property were evaluated and discussed in the following SME reports:

- SME's October 8, 2004, Phase I Environmental Site Assessment (ESA);
- SME's October 14, 2004, BEA; and
- SME's August 14, 2006, Phase I ESA Update.

On August 19, 2004, and June 12, 2006, SME performed observational walkovers of the Property. SME's Phase I ESA and Phase I ESA Update reports are included in Attachments C and D.

At the time of SME's walkovers, the Property consisted of approximately 22 acres of vacant land. The Property was generally covered by densely wooded areas with thick underbrush. SME observed a marsh with standing water along the northern Property boundary,



and several low-lying wet areas were present on the north and central portions of the Property, while the southern portion of the Property consisted mostly of open grass fields. Overhead utility lines traversed the southern and northern Property boundaries. SME observed a paved access road that extended from West Maple Road to the central portion of the Property; several two-tracks were also observed throughout the Property. SME observed no operations, activities and processes at the Property during the walkovers.

Photographs taken during the 2004 walkover are included in Appendix C of SME's October 8, 2004, Phase I ESA in Attachment C.

2.2 Historical Uses

The historical uses of the Property were evaluated as part of SME's October 8, 2004, Phase I ESA. Based on SME's review of historical information, it appeared the Property was vacant and/or utilized for agricultural purposes from at least 1949 to 1954. The Property was developed with a muffler testing facility, automobile insurance company, and towing service from approximately 1963 and 1997. From 1997 to present, the Property appeared vacant. During the 2004 and 2006 walkovers, SME observed no buildings, foundations, vehicles, or equipment located on the Property. Figure 3 in Appendix A of SME's October 8, 2004, Phase I ESA included in Attachment C depicts historical Property features on the 31-Acre Site.

2.3 Basis for BEA

SME's 2004 Phase I ESA identified the following recognized environmental conditions (RECs) in connection with the Property:

- 1. Historical excavation and backfilling activities on the Property; and
- 2. Historical off-site drum storage associated with the former Venture Rim Products operations.

To address the identified RECs, SME conducted subsurface assessments at the Property that consisted of test pit and soil probe sampling activities on September 9 and 10, 2004, and soil probe sampling activities on June 14, 2006. The subsurface assessments are further discussed in Section 4.0. For the purposes of this BEA, SME compared analytical results from the subsurface assessments to the 2006 MDEQ Part 201 Generic Residential Cleanup Criteria, judged by SME to be applicable. Tables 1 and 2 in Attachment F present SME's laboratory analytical results compared to applicable MDEQ residential cleanup criteria.



The results of SME's subsurface assessments conducted at the Property indicated arsenic was present in soil, and trichloroethene (TCE) was present in groundwater at concentrations exceeding MDEQ Part 201 Generic Residential Cleanup Criteria. Therefore, the Property is indicated to be a "facility" as defined by Part 201.

3. PROPERTY DESCRIPTION & INTENDED HAZARDOUS SUBSTANCE USE

3.1 Property Description

The Property was located in the southwest quarter of Section 25, Township 2 North, Range 8 East, in Commerce Township, Oakland County, Michigan. More specifically, the Property was located near the northeast corner of Welch and West Maple Roads. Figure 2 of Attachment A depicts the Property boundaries.

The Property consists of approximately 22 acres of relatively flat land. At the time of SME's walkovers, the Property was vacant land.

The Property tax identification numbers are 17-25-376-017, 17-25-376-021, 17-25-376-022, 17-25-376-035, and 17-25-376-036. The Property was zoned I-1, light industrial.

3.2 Proposed Hazardous Substance Use

SME understands William Beaumont Hospital purchased the Property on October 26, 2006, and the Property will remain vacant until the development of a four-story medical center and parking areas. The significant hazardous substance use was determined for this Property based on information and Material Safety Data Sheets (MSDSs) provided by Mr. Robert Mount with the Beaumont Services Company, LLC and discussions with Beaumont Hospital's legal counsel, Butzel Long. Additionally, SME visited the recently constructed Beaumont North Macomb Medical Center, located at 15979 Hall Road, in the city of Macomb, Michigan, in order to evaluate the typical significant hazardous substance use of the medical centers. According to Mr. Mount, the North Macomb Medical Center design and operations are similar to the proposed medical center on the Property. Therefore, SME representative Mr. Jeffrey R. Lanier toured the North Macomb Medical Center on August 25, 2006. SME was accompanied during this walkover by Mr. Mount and the materials management director, Mr. Mark Mason. During the walkover, an emergency generator with a 200-gallon diesel fuel AST was observed in the truck bay area. The generator and AST were enclosed within a secondary containment enclosure, situated on concrete pavement. Adjacent to the diesel generator enclosure was a hydraulic trash



compactor with a 3-gallon hydraulic fluid reservoir. Based on the walkover of the North Macomb Medical Center, interviews with hospital staff, discussions with legal counsel, and review of MSDS information, SME understands the proposed significant hazardous substance use will consist of diesel fuel and hydraulic oil. Therefore, according to Table 4 in Attachment 8 of Operational Memorandum No. 2, the following chemicals are included in the proposed significant hazardous substance use of the Property:

\mathbf{v}_{0}	olatiles (VOCs)
Benzene	71-43-2
Ethylbenzene	100-41-4
Toluene	108-88-3
Xylenes	1330-20-7
1,2,4-Trimethylbenzene	95-63-6
1,3,5-Trimethylbenzene	108-67-8
	omatic Hydrcarbons (PAHs)
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Benzo(g,h,i)perylene	191-24-2
Benzo(k)fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd)pyrene	193-39-5
2-Methylnaphthalene	91-57-6
Phenanthrene	85-01-8
Pyrene	129-00-0

SME understands, based on the nature, volume, and use of the remaining proposed chemical use, William Beaumont Hospital does not propose other "significant hazardous substance use" as defined by Rule 901(o). Rule 901(o) defines "significant hazardous substance use" as "the use, storage, handling, or management, at any time, of hazardous substances in quantities that exceed those commonly used for typical residential or office purposes." Therefore, SME prepared this Category "D" BEA as a means of distinguishing a new release from existing contamination.



4. KNOWN CONTAMINATION

The following is a summary of two SME subsurface assessments conducted on the Property.

2004 Subsurface Assessment

On September 9 and 10, 2004, SME conducted three soil probes (SP1-SP3) and six test pits (TP9-TP14) on the Property to assess the RECs. Utilizing a direct-push soil probe rig, SME advanced the soil probes to depths ranging from approximately 16 to 20 feet below ground surface (BG). Mr. Jeffery Edwards, was on site during the soil probe and test pit activities. SME observed subsurface conditions, screened samples with a photo-ionization detector (PID), and collected samples for potential analytical testing.

2006 Subsurface Assessment

On June 14, 2006, SME conducted six soil probes (SP102-SP107) on the Property as part of a subsurface assessment of the entire development parcel, which extends offsite. Utilizing a direct-push soil probe rig, SME advanced the soil probes to approximately 12 to 28 feet BG. SME representative, Mr. Jason C. Lafayette was on site during the soil probe activities. SME observed subsurface conditions, screened samples with a photo-ionization detector (PID), and collected samples for potential analytical testing.

SME submitted a total of two soil samples and eight groundwater samples from the two subsurface assessments for various laboratory analyses, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), and the 10 Michigan metals. Figure 2 of Attachment A depicts the locations of the soil probes completed on the Property. Field procedures and results of SME's soil and groundwater sampling activities are discussed below.

4.1 SME Field Procedures

4.1.1 Soil Samples

Soil samples were obtained from a 1-3/8 inch outside diameter GeoProbe® large bore sampler lined with a disposable acetate liner. The soil samples were obtained from the acetate liner by cutting open the liner with a utility knife and transferring the soil to pre-cleaned glass jars provided by the analytical laboratory, as well as glass jars for classification and PID screening. A new acetate liner was used for each soil sample. The sampler and other down-hole



tools were washed with high-pressure, detergent rinse water prior to collecting each soil sample. In addition, the utility knife was cleaned with a laboratory grade detergent and rinsed with distilled water prior to cutting each acetate liner. A new pair of disposable nitrile sampling gloves was used to transfer each sample into the sample jars. Additional grab soil samples were obtained directly from soil mound excavation areas using laboratory supplied glass jars.

PID field screening was conducted by allowing time for the headspace above the collected soils to equilibrate in the glass jars. The jars were then opened enough to insert the tip of a PID. The PID registers the presence of volatile organic vapors on a parts-per-million (ppm) scale. PID screening results are presented on the soil probe logs in Attachment E of this report. Soil cuttings generated from the soil probes were returned to the probe holes. The remaining spaces in the soil probe holes were backfilled with bentonite chips.

4.1.2 Groundwater Sampling

A temporary well point was installed and groundwater samples were collected using a PVC, GeoProbe® Screen Point-15 Sampler, driven into the saturated zone. The well screens used by SME were five feet in length, with a slot size of 0.010 inches. The top of the well screen was either placed at the depth groundwater was encountered, or approximately one foot above the water table; groundwater was purged at a low flow rate prior to sampling. The groundwater screening depths are presented on Table 2 in Attachment F. Purging was conducted using a peristaltic pump and polyethylene tubing. Purged groundwater obtained from the soil probe holes during groundwater sampling was returned to the holes prior to backfilling with soil cuttings. Groundwater samples were obtained directly from a peristaltic pump at a low-flow rate.

4.1.3 Sample Preservation and Analytical Protocol

As indicated above, soil and groundwater samples were placed into the appropriate containers provided by the laboratory. Soil samples collected for VOC analysis were obtained in general accordance with USEPA Method 5035 and were methanol preserved in the field.

Samples collected for potential analytical testing were transferred to an ice-packed cooler upon collection, and were kept cool until delivery to the analytical laboratory. SME followed chain of custody protocol. Quantum Laboratories, Inc of Wixom, Michigan, and Fibertec Environmental Services of Holt, Michigan, conducted analytical testing. The chain of custodies, laboratory analytical methods, and detection limits are listed on the analytical reports in Attachment G.



4.2 Subsurface Conditions

The subsurface soil profile at the soil probe locations generally consisted of fill, underlain by natural sands and/or natural silty clay, underlain by natural sand.

SME encountered no staining or PID readings at the various soil probe and test pit locations on the Property.

SME encountered groundwater at depths ranging from 4 to 17 feet BG. The groundwater flow direction at the Property is unknown.

4.3 Applicable MDEQ Part 201 Criteria

For this Category "D" BEA, SME compared the analytical results to the MDEQ Part 201 Generic Residential Cleanup Criteria, updated January 23, 2006.

SME included drinking water as a potentially relevant pathway since a complete assessment of aquifer conditions has not been conducted, and domestic water wells were formerly in use in the surrounding area.

In addition, the groundwater surface water interface (GSI) pathway may be a relevant exposure pathway at the Property since the Property region includes several marshes, low-lying wet areas, and drains, and a northwest adjacent retention pond. The GSI criteria for selected metals were calculated using the MDEQ default hardness of 150 mg/L for Lower Michigan. In addition, the assumption of "groundwater protected as a drinking water source" was used in calculating the criteria.

The analytical results for the Property are presented below.

4.4 Contamination Identification and Distribution

The following tables summarize the constituents in soil and groundwater that exceeded Part 201 residential criteria judged by SME to be applicable.

	Su	mmary of Soil	Analytical Results		
Constituent	CAS#	Sample ID	Location	Criteria Exceeded (µg/kg)	Analytica Result (µg/kg)
Arsenic	7440382	SP107	Southern portion of Property.	Drinking Water Protection (5,800)	6,100



Summary of Groundwater Analytical Results							
Constituent	CAS#	Sample ID	Location	Criteria Exceeded (µg/kg)	Analytical Result (µg/kg)		
Trichloroethene (TCE)	79016	SP1	Western portion of Property.	Drinking Water Protection (5)	97		

No SVOCs or PAHs were reported above laboratory method detection limits (MDL) for the analyzed soil and groundwater samples. Refer to Figure 2 in Attachment A for the locations of the soil probe and test pits on the Property.

4.5 Summary of Contamination Identification and Location

Arsenic and TCE concentrations were identified at levels that define the Property as a "facility." Arsenic was detected in one soil sample at the southwest corner of the Property. No arsenic was detected above the laboratory reporting limits in the analyzed groundwater samples.

The detected TCE in groundwater in the west portion of the Property at SP1 appears to be related to a TCE groundwater plume. Similar analytical findings were identified off-site to the west and southwest.

The remaining parameters analyzed in soil and groundwater samples were either below the method detection limit (MDL) or below MDEQ Part 201 residential cleanup criteria. Table 1 and Table 2 of Attachment F summarize the analytical results for soil and groundwater, respectively.

5. LIKELIHOOD OF OTHER CONTAMINATION

Based on the results of SME's Phase I ESA, Phase I ESA Update, and subsurface assessments, SME identified no on-site areas of concern other than those addressed by the subsurface assessment activities. SME selected the sampling locations based on the locations of RECs identified in SME's Phase I ESA report.

Although SME identified no on-site areas of concern other than those addressed by the subsurface assessment activities, SME cannot guarantee all potential contaminants have been identified, or that unknown contamination may exist at the Property resulting from historical



SME Project Number: SE52533-03 December 22, 2006 – Page 9

activities or off-site sources. Therefore, the possibility exists that other potential contaminants may be present at the Property. Furthermore, the extent of identified constituents at elevated levels has not been determined.

SME identified no records of USTs, ASTs, or other abandoned containers containing hazardous substances at the Property.

6. CONCLUSIONS

SME has performed this Category "D" BEA of the approximate 22-acre Property, located in Commerce Township, Oakland County, Michigan. The results of SME's subsurface assessment indicate the Property meets the criteria of a "facility", due to concentrations of arsenic and TCE reported in soil and groundwater at the Property.

SME understands William Beaumont Hospital purchased the Property on October 26, 2006, and the Property will remain vacant until the development of a commercial hospital building and associated parking areas. No proposed significant hazardous substances related to diesel fuel and hydraulic fluid were detected on the Property above MDEQ residential cleanup criteria. Furthermore, SME understands the proposed significant hazardous substance use at the Property will not include arsenic and TCE. Therefore, a future release of diesel fuel or hydraulic fluid can be distinguished from existing contamination.

SME has performed the Baseline Environmental Assessment based upon conditions observed by SME during the completion of the October 8, 2004 Phase I ESA, Phase I ESA Update, and subsurface assessments. In the process of obtaining information in preparation of this BEA, SME followed procedures that represent current reasonable and accepted engineering and hydrogeological practices and principles, in a manner consistent with the level of care and skill ordinarily exercised by members of these professions.

7. REFERENCES

- 1. Part 201 of 1994 PA 451, as amended, the Natural Resources and Environmental Protection Act, and the Part 9 and Part 10 Rules, December 21, 2002.
- Department of Health and Human Services National Institute for Occupational Safety and Health, NIOSH Pocket Guide to Chemical Hazards, June 1997.



- 3. The Michigan Department of Environmental Quality, Commonly Asked Questions about Baseline Environmental assessments and Section 7a ("Due Care") Compliance under Part 201, June 24, 1999.
- 4. The Michigan Department of Environmental Quality, Training Material for Part 201 Cleanup Criteria / Use of Criteria to Determine a Location is a "Facility", January 1998.
- 5. RRD Operational Memorandum No 1, Part 201 and Part 213 Cleanup Criteria, dated June 24, 2004.
- 6. RRD Operational Memorandum No 2, Sampling and Analysis, dated December 10, 2004.
- 7. RRD Operational Memorandum No 5, Groundwater Surface Water Interface Criteria, dated December 10, 2004.
- 8. RRD Operational Memorandum No. 11, Criteria to Eliminate the Potable Groundwater Pathway, August 25, 1997.

