July 11, 2016 Reference No. 058502

Ms. Christine Aiello **Transmitted via E mail**
Michigan Department of Environmental Quality
Permits Section – Water Resource Division
525 West Allegan
P.O. Box 30457
Lansing, MI 48909

Dear Ms. Aiello:

Re: Response to Comments
NPDES Reissuance (Submission #2DM-ZEC4-66B7)
Saginaw Nodular Iron, 2100 Veterans Memorial Parkway, Saginaw, MI

The following letter and corresponding attachments has been prepared by GHD on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust to respond to MDEQ comments received on June 30, 2016 via email on RACER Trust/GHD's National Pollutant Discharge Elimination System (NPDES) industrial/commercial application form (reissuance) for RACER's Nodular Industrial Land (Site) in Saginaw, MI submitted on April 2, 2016. The following Attachments are included as part of GHD's responses.

Attachment A – Redline version of Attachment 1 – Narrative Descriptions - outfalls
Attachment B – Attachment 6 - Additional 2016 Secondary Pond Characterization
Attachment C – Attachment 7 - Outfall 21 Lowering Correspondence and Approval

For ease of review, MDEQ comments are provided below in *italics* followed by GHD/RACER responses.

MDEQ Comment No. 1

Section IC.5. indicates "Yes," the discharge will be an increased loading of pollutants to the surface waters of the state. A "yes" in this section is necessary only if you request authorization for a new or increased use (e.g., increased discharge flow rate, new wastewater type, new receiving water and/or outfall, etc., - basically any change that represents a potential source/quantity of pollution not already addressed in the current permit). Based on the remainder of your application, the correct response in this section would appear to have been "No." If you did intend to select "yes," please explain what new or increased use you are requesting. For more information about Antidegradation, please see Section IC.5. of the application itself, and the application Appendix available at http://www.michigan.gov/documents/deq/wb-npdes-application_appendix_197962_7.pdf.

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RACER/GHD Response No.1

The response to Section IC.5 will remain as a "Yes", as we are requesting that the MDEQ approve possible occasional short-term increases of the discharge rate up to 5 MGD during periods when RACER plans to conduct evaluations on the secondary pond sediments or when RACER plans to conduct remedial activities on the sediments, as necessary. The duration of discharge will be dependent on the activity and will potentially range from weeks to 2-3 months. At this time RACER does not have a schedule for when the sediment evaluations or remedial activities will be completed, however, RACER will notify the MDEQ of any plans for an increased discharge rate prior to discharging at an increased rate. The following modifications have been made to the application:

- Under Section 5 Rule 98 – Antidegradation Requirements, under the heading, "Antidegradation Requirements Attachment", the following comment has been included: *"Attachment 1 - Narrative Descriptions – Outfalls has been revised to include a narrative description of the possible short-term increase in discharge rate".*
- Under Section 10 Water Flow Diagram and Narrative Description, Attachment 1 – Narrative Descriptions – Outfalls has been revised to include a narrative description of the possible short-term increase in discharge rate. (See Attachment A for a redline version of Attachment 1, a clean copy of the revised Attachment 1 will be uploaded to the application).

MDEQ Comment No. 2

Section IIIB.1.G. for outfall 021 requires that the applicant provide the Maximum Authorized Daily Discharge Flow rate for this outfall. This would be the maximum daily flow rate that you are seeking authorization to discharge from outfall 021. Your current permit authorizes a maximum of 1.63 MGD from outfall 021. Unless you are requesting an increased use (see also comment #2 above), this is the flow rate you would request here.

RACER/GHD Response No.2

The application has been modified under Section IIIB.1 G to identify a Maximum Authorized Daily Discharge Flow Rate of 1.63 MGD, as discussed in our call on July 7, 2016. In addition, Attachment 1 – Narrative Descriptions – Outfalls has been revised to include a narrative description of the possible short-term increase in discharge rate. (See Attachment A for a redline version of Attachment 1, a clean copy of the revised Attachment 1 will be uploaded to the application)

MDEQ Comment No. 3

The application indicates that the discharge through both outfalls is seasonal (Section IIIB.1.H. for both 021 and 022). Per page 3, item 1.F. of the application Appendix, a facility is considered to have a seasonal discharge if wastewater is treated and stored throughout a portion of the year and then discharged over a specified period or periods of days, weeks, or months. If the discharge does not meet this definition, it is considered a continuous discharge. Please confirm that your facility's discharges through both 021 and 022 are in fact seasonal, or revise the application as needed for continuous discharges.

RACER/GHD Response No.3

Upon further discussion with the MDEQ on July 7, 2016, Outfalls 21 and 22 are considered continuous discharges and not seasonal discharges and as such the following modifications have been made to the application

- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (1)(Outfall 21), under H. Seasonal Discharge, all information provided has been removed.
- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (1)(Outfall 21), under I. Continuous Discharge, the following responses were provided to the questions:
  - How often is there a discharge from this outfall (on average)? **24** Hours/Day.
  - How often is there a discharge from this outfall (on average)? **4** Days/Year.
- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (2)(Outfall 22), under H. Seasonal Discharge, all information provided has been removed.
- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (2)(Outfall 22), under I. Continuous Discharge, the following responses were provided to the questions:
  - How often is there a discharge from this outfall (on average)? **24** Hours/Day.
  - How often is there a discharge from this outfall (on average)? **3** Days/Year.

MDEQ Comment No. 4

Per page 4, item 3 of the Appendix, all applicants are required to report Biochemical Oxygen Demand – 5 day (BOD5), Chemical Oxygen Demand (COD), Total Organic Carbon (TOC), Total Suspended Solids (TSS), Ammonia as N, Temperature (both summer and winter), and pH. The applicant may, however, request that data reporting for one or more of these required parameters be waived for one or more outfalls; however, such requests shall be supported by adequate rationale. For both outfall 021 and 022, please provide the omitted data, or request a waiver supported by adequate rationale. The data and/or waiver request may be incorporated into the tables under Section IIIB.3. of the application, or they may be submitted as an attachment to the application.

RACER/GHD Response No.4

Upon further discussions with the MDEQ on July 7, 2016, the following modifications have been made to the application regarding the required reporting of BOD5, COD, TOC, TSS, Ammonia as N, Temperature, and pH:

- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (1)(Outfall 21), under Section 3. Effluent Characteristics – Conventional Pollutants, a waiver for temperature indicating that the water discharged will be at ambient temperature as there are no processes affecting the temperature of the water has been provided, a waiver for BOD5 indicating that samples are already provided for CBOD5 which is a similar analysis to BOD5, and a note for COD and TOC indicating that samples will be collected, analyzed, and submitted to the MDEQ by the end of July has been included.

- Under Section IIIB. Outfall Information – Industrial / Commercial Facilities (2)(Outfall 22), under Section 3. Effluent Characteristics – Conventional Pollutants, a waiver for CBOD5, BOD5, COD, TOC, Ammonia as N, and temperature indicating that the discharged water does not come in contact with material that would affect these parameters has been provided.

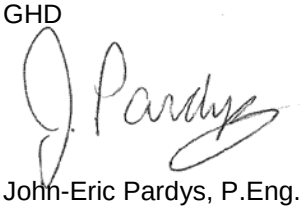
In addition, as part of the emailed comments provided on June 30, 2016, MDEQ requested that a "Facility Contact" and an "Applicant Contact" be provided. The "Facility Contact" and "Applicant Contact" will be Dave Favero (RACER Trust). His contact information has already been provided in the application.

Lastly, since the submittal of the NPDES industrial/commercial application form (reissuance) on April 2, 2016, RACER conducted additional characterization of the secondary pond and also lowered the discharge pipe for Outfall 21 approximately 5 feet. The application has been revised to include Attachment 6 - Additional 2016 Secondary Pond Characterization (herein attached as Attachment B) and Attachment 7 – Outfall 21 Lowering Correspondence and Approval (herein attached as Attachment C). In addition, Attachment 1 – Narrative Descriptions – Outfalls has been updated to identify that Outfall 21 has been lowered.

Please contact me if you would like to discuss this matter further.

Yours truly,

GHD



John-Eric Pardys, P.Eng.

JEP/kf/2

cc: David Favero, RACER (via e-mail)
Michael Tomka, GHD (via e-mail)

Attachment A
Redline Version of Attachment 1 - Narative Descriptions 0 outfalls

NARRATIVE DESCRIPTION

GENERAL INFORMATION

It is noted that as of ~~April 1~~July 11, 2016, there are efforts in progress to sell the southwest portion of this Site, which has frontage to Veterans Memorial Parkway. This permit renewal application is being submitted based on the assumption that the sale of the property will not be completed. Should that sale of the southwest portion of the Site be completed or should remediation of the sediment be necessary, it is possible that there would be modifications to the drainage area (Secondary Pond) for Outfall 21 and to Outfall 21 itself (see further details below under Proposed Modifications). Should these modifications be desired/necessary, the MDEQ will be kept informed of the proposed plans and RACER will provide supplemental information or prepare a revised NPDES Permit Renewal Application, if necessary.

~~Assuming the sale of the southwest portion of the Site is not completed,~~ RACER obtained MDEQ approval (see Attachment 7) to ~~RACER intends to~~ lower the elevation of the discharge pipe for Outfall 21 by approximately ~~three to~~ five feet~~.~~. The discharge pipe was lowered~~which was completed~~ on June 24, 2016~~.~~ An upward facing riser pipe with 1-foot removable sections was installed on the inlet to ensure the ~~If the elevation of the discharge pipe for this outfall is lowered, the water level in the secondary pond will first have to be lowered. Based on communication with MDEQ, RACER understands that formal approval from MDEQ is not required for this activity. However, RACER understands that MDEQ expects the~~ intake, while lowering the water level, ~~will be~~is located near the surface of the water in the secondary pond (to limit solids in the discharge). As a result of the modification to Outfall 21, previous modifications approved by the MDEQ to the frequency and analysis of sampling were rescinded, which is documented in a letter from the MDEQ provided on June 15, 2016 (see Attachment 7). ~~and all permit required effluent sampling, analyses, and reporting will be performed during lowering of the water level.~~

Lowering the elevation of the discharge pipe ~~would~~ will be documented in the Storm Water Pollution Prevention Plan (SWPPP) and Annual Report.

~~Should that sale of the southwest portion of the Site be completed it is possible that there would be modifications to the drainage area (Secondary Pond) for Outfall 21 and to Outfall 21 itself (see further details below under Proposed Modifications). Should these modifications be desired/necessary, the MDEQ will be kept informed of the proposed plans and RACER will prepare a revised NPDES Permit Renewal Application, if necessary.~~

FIGURE 1

Figure 1 presents the Site Map for the facility. Please note that the treatment plant and associated basins stopped receiving process water in November 2010 and the only water inputs to the Site include storm water that falls on the Site and within the respective outfall drainage basins.

There are currently two outfalls that are strictly storm water outfalls and therefore are not included in the current NPDES permit. Please note that details for these two outfalls are included in the SWPPP. These outfalls continue to be strictly storm water outfalls and therefore are not included in this renewal application:

- Outfall 20 (to Diekman Drain) Note that the drainage basin for this outfall includes property that is owned by other parties in addition to RACER.
- Outfall 23 Drainage pipe that drains the railway ditches to Koehler Drain. Note that the drainage basin for this outfall includes property owned by other parties in addition to RACER.

There are currently two outfalls that are included in the existing NPDES permit and are included in this renewal application:

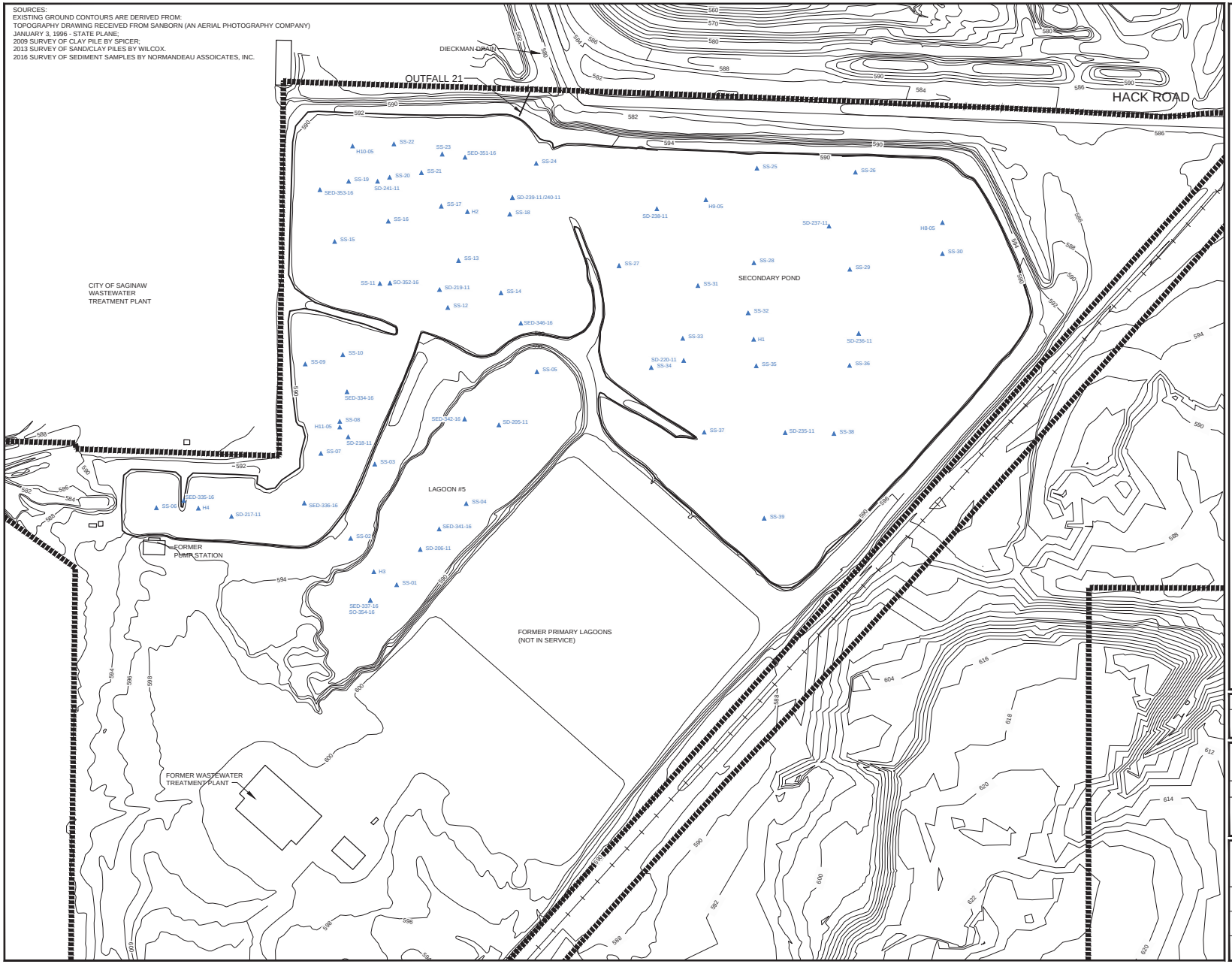
- Outfall 21 - discharge from the secondary pond to unnamed ditch to the north, which flows into the Gage Drain, and ultimately drains to the Saginaw River.
- Outfall 22 - located off of RACER property, south of the entrance to Tri-cap, east of Veterans Memorial Parkway, which drains the North Ditch area and outlets to the Saginaw River. Note that the drainage basin for this outfall includes property that is owned by other parties in addition to RACER.

PROPOSED MODICATIONS

- Outfall 21 – RACER is currently evaluating options to remediate sediments in the Secondary Pond, which may affect Outfall 21. Possible modifications to Outfall 21 include: ~~a~~possible short-term increases~~d~~ of the discharge rate of 5 MGD, lowering the elevation of Outfall 21 again to further lower the water elevation in the Secondary Pond; and constructing a new uncontrolled outfall (upon completion of remedial activities). The short term increases to the discharge rate would possibly occur during periods when RACER plans to conduct evaluations on the secondary pond sediments or when RACER plans to conduct remedial activities on the sediments, as necessary. The duration of the short term increases to the discharge will be dependent on the activity and will potentially range from weeks to 2-3 months. At this time RACER does not have a schedule for when ~~the~~ additional sediment evaluations or remedial activities will be completed. MDEQ will be informed of any proposed modifications to Outfall 21. ~~None at this time.~~
-
- Outfall 22 - RACER has obtained MDEQ Water Resources Division Permit (15-73-0003-P) that provides for modifying the drainage in the North Ditch area and the existing inlet from the North Ditch area to the catch basin that provides for discharge to the Saginaw River. The proposed plans involve: removing the standing water in the North Ditch; covering impacted sediments in the North Ditch; installing a new catch basin on RACER property in the North Ditch that would connect via a subsurface pipe to the existing catch basin that provides discharge to the Saginaw River, and grading the ditch so that storm water gravity flows to the new catch basin on RACER property in the North Ditch. Note that RACER is working with the adjacent property owners within the Outfall 22 drainage basin to obtain needed approvals to complete this work. From the remediation perspective, USEPA Region 5 RCRA Corrective Action program also approved the proposed modifications to the North Ditch. A schedule to complete the North Ditch work is to be determined.

  Following completion of the North Ditch work, RACER proposes to collect samples from three separate discharge events with the intent of demonstrating that storm water continues to meet discharge limits. Pending the receipt and review of the analytical results, RACER would petition the MDEQ to classify Outfall 22 as strictly a storm water outfall and thereby remove the Outfall 22 from the NPDES permit. Upon MDEQ approval of this outfall as strictly a storm water outfall, the modifications would be incorporated into the SWPPP, as well as, an NPDES permit modification request, if necessary.

Attachment B
Attachment 6 – Additional 2016 Secondary Pond Characterization



REVITALIZING AUTOMOTIVE COMMUNITY ENVIRONMENTAL RESPONSE

SAGINAW, MICHIGAN

ADDITIONAL SECONDARY POND AND LAGOONS CHARACTERIZATION LOCATIONS

Source Reference: MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88 TOPO - SANBORN, 1996			
Project Manager: I.R.	Reviewed By: M.T.	Date: JULY 2016	
Scale: 1" = 200'	Project №: 58502-T02	Report №: MEMO019	Drawing №: figure 1

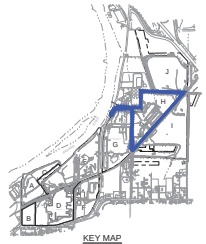
58502-T02(MEMO02)GN-WA001 MAY 25, 2016

N

0 75 150 ft

LEGEND

- A — INVESTIGATIVE UNIT BOUNDARY AND IDENTIFIER
- APPROXIMATE LIMITS OF RACER PROPERTY
- 590 EXISTING GROUND CONTOUR (NGVD)
- ▲ POND WATER AND SEDIMENT SAMPLE LOCATION
- ⊠ WATER SAMPLE LOCATION



KEY MAP

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

REVITALIZING AUTOMOTIVE COMMUNITY ENVIRONMENTAL RESPONSE

SAGINAW, MICHIGAN

POND WATER SAMPLE LOCATIONS

GHD

Source Reference: MICHIGAN STATE PLANE SOUTH, NAD 83 USING INTERNATIONAL FEET, NGVD 88 TOPO - SANBORN, 1996			
Project Manager: I.R.	Reviewed By: M.T.	Date: JULY 2016	
Scale: 1" = 200'	Project №: 58502-T02	Report №: MEMO018	Drawing №: figure 2

58502-T02(MEMO018)GN-WA002 APR 15, 2016

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SED-334-16	SED-335-16	SED-336-16	SED-337-16	SED-341-16	SED-342-16	SED-346-16	SED-351-16	SED-353-16
Sample ID:						S-58502-031716-SSH-1628	S-58502-031716-SSH-1630	S-58502-031716-SSH-1629	S-58502-032416-SSH-1640	S-58502-032416-SSH-1639	S-58502-032416-SSH-1638	S-58502-031716-SSH-1627	S-58502-031716-SSH-1625	S-58502-031716-SSH-1626
Sample Date:						3/17/2016	3/17/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016	3/17/2016	3/17/2016
Sample Depth:						-	-	-	-	-	-	-	-	-
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
VOAs		**a**	**b**	**c**	**d**									
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,1-Dichloroethane	mg/kg	-	15	87000	27000	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,1-Dichloroethene	mg/kg	-	2.6	660	200	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
1,2-Dichloroethane	mg/kg	-	7.2	420	91	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,2-Dichloropropane	mg/kg	-	4.6	660	140	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	2.2 U	2.2 U	3 U	5 U	1.3 U	1.7 U	2.4 U	2 U	3.4 U
2-Hexanone	mg/kg	-	-	100000	32000	7.2 U	7.4 U	10 U	17 U	4.2 U	5.5 U	8.2 U	6.8 U	11 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	7.2 U	7.4 U	10 U	17 U	4.2 U	5.5 U	8.2 U	6.8 U	11 U
Acetone	mg/kg	-	34	73000	23000	2.2 U	2.2 U	3 U	5 U	1.3 U	1.7 U	2.4 U	2 U	3.4 U
Benzene	mg/kg	-	4	840	180	0.32	0.46	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.28	0.22 U
Bromodichloromethane	mg/kg	-	-	490	110	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
Bromoform	mg/kg	-	-	3800	820	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Carbon disulfide	mg/kg	-	-	43000	7200	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Carbon tetrachloride	mg/kg	-	0.9	440	96	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Chlorobenzene	mg/kg	-	0.5	14000	4300	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Chloroethane	mg/kg	-	22	12000	2600	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Cyclohexane	mg/kg	-	-	-	-	3.4 U	3.5 U	4.8 U	7.9 U	2 U	2.6 U	3.9 U	3.2 U	5.4 U
Dibromochloromethane	mg/kg	-	-	500	110	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
Ethylbenzene	mg/kg	-	0.36	71000	22000	0.14	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.17	0.22 U
Isopropyl benzene	mg/kg	-	3.2	80000	25000	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Methyl acetate	mg/kg	-	-	-	-	3.4 U	3.5 U	4.8 U	7.9 U	2 U	2.6 U	3.9 U	3.2 U	5.4 U
Methyl cyclohexane	mg/kg	-	-	-	-	3.4 U	3.5 U	4.8 U	7.9 U	2 U	2.6 U	3.9 U	3.2 U	5.4 U
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Methylene chloride	mg/kg	-	30	5800	1300	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Styrene	mg/kg	-	2.1	1900	400	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Tetrachloroethene	mg/kg	-	1.2	930	200	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Toluene	mg/kg	-	5.4	160000	50000	0.41	0.55	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.32	0.45 U
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Trichloroethene	mg/kg	-	4	660	110	0.14 U	0.15 U	0.2 U	0.33 U	0.085 U	0.11 U	0.16 U	0.14 U	0.22 U
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	0.29 U	0.29 U	0.4 U	0.66 U	0.17 U	0.22 U	0.33 U	0.27 U	0.45 U
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	0.72 U	0.74 U	1 U	1.7 U	0.42 U	0.55 U	0.82 U	0.68 U	1.1 U
Vinyl chloride	mg/kg	-	0.26	34	3.8	0.11 U	0.12 U	0.16 U	0.26 U	0.068 U	0.088 U	0.13 U	0.11 U	0.18 U
Xylenes (total)	mg/kg	-	0.82	1000000	410000	0.43 U	0.44 U	0.6 U	0.99 U	0.25 U	0.33 U	0.49 U	0.41 U	0.67 U
SVOAs														
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	5.7	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,4-Dinitrophenol	mg/kg	-	-	-	-	2.5 U	3.4 U	1.2 U	0.67 U	0.84 U	0.28 U	1.4 U	0.31 U	0.8 U
2,4-Dinitrotoluene	mg/kg	-	-	220	48	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2,6-Dinitrotoluene	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2-Chloronaphthalene	mg/kg	-	-	180000	56000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2-Chlorophenol	mg/kg	-	0.36	4500	1400	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	4.4 U	5.9 U	2.5	1.2 U	1.5 U	0.49 U	2.4 U	1.6	1.7
2-Methylphenol	mg/kg	-	1	36000	11000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.66	1.4 U
2-Nitroaniline	mg/kg	-	-	-	-	3.3 U	4.5 U	1.6 U	0.9 U	1.1 U	0.37 U	1.8 U	0.41 U	1.1 U
2-Nitrophenol	mg/kg	-	-	2000	630	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
3&4-Methylphenol	mg/kg	-	1	36000	11000	5.6[b]	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.65	1.4 U
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	27 U	36 U	12 U	7.2 U	8.9 U	3 U	15 U	3.3 U	8.5 U
3-Nitroaniline	mg/kg	-	-	-	-	3.3 U	4.5 U	1.6 U	0.9 U	1.1 U	0.37 U	1.8 U	0.41 U	1.1 U
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	2.5 U	3.4 U	1.2 U	0.67 U	0.84 U	0.28 U	1.4 U	0.31 U	0.8 U
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SED-334-16	SED-335-16	SED-336-16	SED-337-16	SED-341-16	SED-342-16	SED-346-16	SED-351-16	SED-353-16
Sample ID:						S-58502-031716-SSH-1628	S-58502-031716-SSH-1630	S-58502-031716-SSH-1629	S-58502-032416-SSH-1640	S-58502-032416-SSH-1639	S-58502-032416-SSH-1638	S-58502-031716-SSH-1627	S-58502-031716-SSH-1625	S-58502-031716-SSH-1626
Sample Date:						3/17/2016	3/17/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016	3/17/2016	3/17/2016
Sample Depth:						-	-	-	-	-	-	-	-	-
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
SVOAs (cont'd)														
4-Chloroaniline	mg/kg	-	-	-	-	3.3 U	4.5 U	1.6 U	0.9 U	1.1 U	0.37 U	1.8 U	0.41 U	1.1 U
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
4-Nitroaniline	mg/kg	-	-	-	-	3.3 U	4.5 U	1.6 U	0.9 U	1.1 U	0.37 U	1.8 U	0.41 U	1.1 U
4-Nitrophenol	mg/kg	-	-	-	-	5.5 U	7.4 U	2.6 U	1.5 U	1.8 U	0.61 U	3 U	0.67 U	1.8 U
Acenaphthene	mg/kg	-	8.7	130000	41000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Acenaphthylene	mg/kg	-	-	5200	1600	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Acetophenone	mg/kg	-	-	150000	47000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Anthracene	mg/kg	-	-	730000	230000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Atrazine	mg/kg	-	0.15	330	71	0.67 U	0.9 U	0.31 U	0.18 U	0.22 U	0.074 U	0.37 U	0.082 U	0.21 U
Benzaldehyde	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Benzo(a)anthracene	mg/kg	-	-	80	20	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Benzo(a)pyrene	mg/kg	-	-	8	2	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Benzo(b)fluoranthene	mg/kg	-	-	80	20	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Benzo(k)fluoranthene	mg/kg	-	-	800	200	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	1.3 U	1.8 U	0.62 U	0.36 U	0.45 U	0.15 U	0.73 U	0.16 U	0.43 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.63	1.4 U
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Caprolactam	mg/kg	-	-	310000	53000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Carbazole	mg/kg	-	1.1	2400	530	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Chrysene	mg/kg	-	-	8000	2000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Dibenzofuran	mg/kg	-	1.7	-	-	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Diethyl phthalate	mg/kg	-	2.2	550000	170000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Fluoranthene	mg/kg	-	5.5	130000	46000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	1.1	1.4 U
Fluorene	mg/kg	-	5.3	87000	27000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.56	1.4 U
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Hexachlorobutadiene	mg/kg	-	0.091	470	100	0.67 U	0.9 U	0.31 U	0.18 U	0.22 U	0.074 U	0.37 U	0.082 U	0.21 U
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Hexachloroethane	mg/kg	-	1.8	730	230	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Isophorone	mg/kg	-	26	22000	4800	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Naphthalene	mg/kg	-	0.73	52000	16000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	1[b]	1.4 U
Nitrobenzene	mg/kg	-	3.6	340	100	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.54 U	1.4 U
Pentachlorophenol	mg/kg	-	-	320	90	2.5 U	3.4 U	1.2 U	0.67 U	0.84 U	0.28 U	1.4 U	0.31 U	0.8 U
Phenanthrene	mg/kg	-	2.1	5200	1600	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	1.3	1.4 U
Phenol	mg/kg	-	9	230000	40000	14[b]	11[b]	2.6	1.2 U	1.5 U	0.49 U	2.4 U	1.3	1.4 U
Pyrene	mg/kg	-	-	84000	29000	4.4 U	5.9 U	2 U	1.2 U	1.5 U	0.49 U	2.4 U	0.97	1.4 U
Metals														
Aluminum	mg/kg	6900	-	370000	50000	-	-	-	-	-	-	-	-	-
Antimony	mg/kg	-	94	670	180	-	-	-	-	-	-	-	-	-
Arsenic	mg/kg	5.8	4.6	37	7.6	3.0 U	3.1 UF1	1.1	-	-	-	1.3 U	3.0 U	2.0
Barium	mg/kg	75	455.4	130000	37000	-	-	-	-	-	-	-	-	-
Beryllium	mg/kg	-	-	1600	410	-	-	-	-	-	-	-	-	-
Cadmium	mg/kg	1.2	3.7	2100	550	6.4[b]	7.1[b]	8.9[b]	0.21	1.5	0.37	20[b]	5.0[b]	7.1[b]
Calcium	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	mg/kg	18	3045000	1000000	790000	76 B	72 B	70 B	-	-	-	72 B	97 B	90 B
Cobalt	mg/kg	6.8	2	9000	2600	-	-	-	-	-	-	-	-	-
Copper	mg/kg	32	74.73	73000	20000	1.5 U	1.5 UF1F2	1.9 U	5.0	19 F1[b]	9.7	3.4 U	13	2.2 U
Iron	mg/kg	12000	-	580000	160000	-	-	-	-	-	-	-	-	-
Lead	mg/kg	21	5170	900	400	860[d]	790[d]	710[d]	28	280	31	1500[cd]	510[d]	760[d]
Magnesium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-	-
Manganese	mg/kg	440	57.5	90000	25000	-	-	-	-	-	-	-	-	-
Mercury	mg/kg	0.13	0.1	580	160	0.012 U	0.012 U	0.015 U	0.0078 U	0.0082 U	0.0069 U	0.027 U	0.012 U	0.018 U
Nickel	mg/kg	20	78.06	150000	40000	23	22	27	6.4	13	8.2	34	25	22
Potassium	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	mg/kg	0.41	0.4	9600	2600	-	-	-	-	-	-	-	-	-
Silver	mg/kg	1	0.1	9000	2500	1.5 U	1.5 UF1	1.9 U	-	-	-	3.4 U	1.5 U	2.2 U
Sodium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-	-
Thallium	mg/kg	-	4.2	130	35	-	-	-	-	-	-	-	-	-
Vanadium	mg/kg	-	430	5500	750	-	-	-	-	-	-	-	-	-
Zinc	mg/kg	47	169.2	630000	170000	5400[b]	7200[b]	8000[b]	110	910[b]	150	19000[b]	3600[b]	7700[b]

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SED-334-16	SED-335-16	SED-336-16	SED-337-16	SED-341-16	SED-342-16	SED-346-16	SED-351-16	SED-353-16
Sample ID:						S-58502-031716-SSH-1628	S-58502-031716-SSH-1630	S-58502-031716-SSH-1629	S-58502-032416-SSH-1640	S-58502-032416-SSH-1639	S-58502-032416-SSH-1638	S-58502-031716-SSH-1627	S-58502-031716-SSH-1625	S-58502-031716-SSH-1626
Sample Date:						3/17/2016	3/17/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016	3/17/2016	3/17/2016
Sample Depth:						-	-	-	-	-	-	-	-	-
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
MetalsSEM														
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	0.96	1.2	1.1	0.078	0.59	0.25	0.54	2.7	1.4
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.047 U	0.062 U	1.5 U	0.066 U	0.088 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.047 U	0.062 U	1.5 U	0.066 U	0.088 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.047 U	0.062 U	1.5 U	0.066 U	0.088 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.66	0.35	0.2	0.15 U	0.38	0.13	7.6[bd]	0.34	0.36
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.047 U	0.062 U	1.5 U	0.066 U	0.088 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.13	0.062 U	1.5 U	0.075	0.16
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.34 U	0.075 U	0.086 U	0.15 U	0.047 U	0.062 U	1.5 U	0.066 U	0.088 U
Total PCBs	mg/kg	-	1	16	4	0.66	0.35	0.2	0.15 U	0.51	0.13	7.6[bd]	0.415	0.52
Wet														
Ammonia	mg/kg	-	15.3	-	-	-	-	-	-	-	-	-	-	-
Cyanide (total)	mg/kg	0.39	0.1	250	12	-	-	-	-	-	-	-	-	-
Formaldehyde	mg/kg	-	2.4	130000	41000	82[b]	110[b]	120[b]	25[b]	46[b]	13 F2[b]	97[b]	84[b]	64[b]
Sulfide	mg/kg	-	-	-	-	3000	3000 F2	3900	840	860	350	18000	740	2900
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SO-352-16	SO-354-16	SS-01	SS-01	SS-02	SS-02	SS-03	SS-04	SS-04
Sample ID:						S-58502-032416-SSH-1642	S-58502-032416-SSH-1641	S-58502-050516-SSH-SS1A	S-58502-050516-SSH-SS1B	S-58502-050516-SSH-SS2A	S-58502-050516-SSH-SS2B	S-58502-050516-SSH-SS3A	S-58502-050516-SSH-SS4A	S-58502-050516-SSH-SS4B
Sample Date:						3/24/2016	3/24/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						-	-	(0-12) In BGS	(12-23) In BGS	(0-8) In BGS	(8-24) In BGS	(3-20) In BGS	(0-12) In BGS	(12-22) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
VOAs		**a**	**b**	**c**	**d**									
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	0.19 U	0.059 U	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	0.19 U	0.059 U	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	0.19 U	0.059 U	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	0.19 U	0.059 U	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	0.19 U	0.059 U	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	0.96 U	0.3 U	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	0.96 U	0.3 U	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	0.96 U	0.3 U	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	0.38 U	0.12 U	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	0.19 U	0.059 U	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	0.19 U	0.059 U	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	0.38 U	0.12 U	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	0.38 U	0.12 U	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	2.9 U	0.89 U	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	9.6 U	3 U	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	9.6 U	3 U	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	2.9 U	0.89 U	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	0.34	0.059 U	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	0.38 U	0.12 U	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	0.38 U	0.12 U	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	0.96 U	0.3 U	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	0.96 U	0.3 U	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	0.19 U	0.059 U	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	0.19 U	0.059 U	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	0.96 U	0.3 U	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	0.19 U	0.059 U	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	0.96 U	0.3 U	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	0.19 U	0.059 U	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	0.19 U	0.059 U	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	4.6 U	1.4 U	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	0.19 U	0.059 U	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	0.38 U	0.12 U	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	0.22	0.059 U	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	0.96 U	0.3 U	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	4.6 U	1.4 U	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	4.6 U	1.4 U	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	0.96 U	0.3 U	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	0.96 U	0.3 U	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	0.19 U	0.059 U	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	0.19 U	0.059 U	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	0.43	0.12 U	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	0.19 U	0.059 U	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	0.19 U	0.059 U	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	0.19 U	0.059 U	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	0.38 U	0.12 U	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	0.96 U	0.3 U	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	0.15 U	0.048 U	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	0.58 U	0.18 U	-	-	-	-	-	-	-
SVOAs														
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	4.5 U	0.33 U	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	4.5 U	0.33 U	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	4.5 U	0.33 U	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	4.5 U	0.33 U	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	2.6 U	0.19 U	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	4.5 U	0.33 U	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	4.5 U	0.33 U	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	4.5 U	0.33 U	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	4.5 U	0.33 U	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	4.5 U	0.33 U	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	3.4 U	0.25 U	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	4.5 U	0.33 U	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	4.5 U	0.33 U	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	27 U	2 U	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	3.4 U	0.25 U	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	2.6 U	0.19 U	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	4.5 U	0.33 U	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SO-352-16	SO-354-16	SS-01	SS-01	SS-02	SS-02	SS-03	SS-04	SS-04
Sample ID:						S-58502-032416-SSH-1642	S-58502-032416-SSH-1641	S-58502-050516-SSH-SS1A	S-58502-050516-SSH-SS1B	S-58502-050516-SSH-SS2A	S-58502-050516-SSH-SS2B	S-58502-050516-SSH-SS3A	S-58502-050516-SSH-SS4A	S-58502-050516-SSH-SS4B
Sample Date:						3/24/2016	3/24/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						-	-	(0-12) In BGS	(12-23) In BGS	(0-8) In BGS	(8-24) In BGS	(3-20) In BGS	(0-12) In BGS	(12-22) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
SVOAs (cont'd)														
4-Chloroaniline	mg/kg	-	-	-	-	3.4 U	0.25 U	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	3.4 U	0.25 U	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	5.7 U	0.41 U	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	4.5 U	0.33 U	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	4.5 U	0.33 U	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	4.5 U	0.33 U	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	4.5 U	0.33 U	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	0.69 U	0.05 U	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	4.5 U	0.33 U	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	4.5 U	0.33 U	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	4.5 U	0.33 U	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	4.5 U	0.33 U	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	4.5 U	0.33 U	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	1.4 U	0.1 U	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	4.5 U	0.49	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	4.5 U	0.33 U	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	4.5 U	0.33 U	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	4.5 U	0.33 U	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	4.5 U	0.33 U	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	4.5 U	0.33 U	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	4.5 U	0.33 U	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	4.5 U	0.33 U	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	4.5 U	0.33 U	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	4.5 U	0.33 U	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	4.5 U	0.33 U	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	4.5 U	0.33 U	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	4.5 U	0.33 U	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	4.5 U	0.33 U	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	0.69 U	0.05 U	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	4.5 U	0.33 U	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	4.5 U	0.33 U	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	4.5 U	0.33 U	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	4.5 U	0.33 U	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	4.5 U	0.33 U	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	4.5 U	0.33 U	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	4.5 U	0.33 U	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	4.5 U	0.33 U	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	2.6 U	0.19 U	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	4.5 U	0.33 U	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	4.5 U	0.33 U	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	4.5 U	0.33 U	-	-	-	-	-	-	-
Metals														
Aluminum	mg/kg	6900	-	370000	50000	-	-	5500	7400	-	-	15000	6700	6100
Antimony	mg/kg	-	94	670	180	-	-	0.35	0.14	-	-	2.4	0.28	0.14 U
Arsenic	mg/kg	5.8	4.6	37	7.6	-	-	2.8	3.3	-	-	8.0[bd]	3.3	3.0
Barium	mg/kg	75	455.4	130000	37000	-	-	33	43	-	-	98	46	39
Beryllium	mg/kg	-	-	1600	410	-	-	0.29	0.36	-	-	1.2	0.40	0.32
Cadmium	mg/kg	1.2	3.7	2100	550	3.1	0.15 U	0.58	0.17	-	-	3.2	0.23	0.18
Calcium	mg/kg	-	-	-	-	-	-	66000	68000	-	-	24000	59000	63000
Chromium	mg/kg	18	3045000	1000000	790000	-	-	15	22	-	-	79	20	17
Cobalt	mg/kg	6.8	2	9000	2600	-	-	3.9	4.9	-	-	4.5	4.1	4.4
Copper	mg/kg	32	74.73	73000	20000	27	6.4	13 B	16 B	-	-	66 B	30 B	11 B
Iron	mg/kg	12000	-	580000	160000	-	-	9300	14000	-	-	43000	12000	11000
Lead	mg/kg	21	5170	900	400	540[d]	3.4	25	11	-	-	490[d]	24	16
Magnesium	mg/kg	-	-	1000000	1000000	-	-	20000	22000	-	-	7000	19000	20000
Manganese	mg/kg	440	57.5	90000	25000	-	-	640[b]	360	-	-	830[b]	610[b]	420
Mercury	mg/kg	0.13	0.1	580	160	0.0097 U	0.0059 U	0.057 U	0.045 U	-	-	0.083 U	0.044 U	0.049 U
Nickel	mg/kg	20	78.06	150000	40000	19	5.9 U	12	18	-	-	23	13	14
Potassium	mg/kg	-	-	-	-	-	-	1200	1600	-	-	1600	1300	1200
Selenium	mg/kg	0.41	0.4	9600	2600	-	-	1.9[b]	2.1[b]	-	-	4.8[b]	2.2[b]	1.9[b]
Silver	mg/kg	1	0.1	9000	2500	-	-	0.10 U	0.070 U	-	-	1.4[b]	0.096 U	0.072 U
Sodium	mg/kg	-	-	1000000	1000000	-	-	290	200	-	-	840	260	200
Thallium	mg/kg	-	4.2	130	35	-	-	0.17	0.11	-	-	0.51	0.11	0.11
Vanadium	mg/kg	-	430	5500	750	-	-	13	16	-	-	15	14	14
Zinc	mg/kg	47	169.2	630000	170000	9300[b]	16	150	77	-	-	420[b]	340[b]	180[b]

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SO-352-16**	**SO-354-16**	**SS-01**	**SS-01**	**SS-02**	**SS-02**	**SS-03**	**SS-04**	**SS-04**
Sample ID:						**S-58502-032416-SSH-1642**	**S-58502-032416-SSH-1641**	**S-58502-050516-SSH-SS1A**	**S-58502-050516-SSH-SS1B**	**S-58502-050516-SSH-SS2A**	**S-58502-050516-SSH-SS2B**	**S-58502-050516-SSH-SS3A**	**S-58502-050516-SSH-SS4A**	**S-58502-050516-SSH-SS4B**
Sample Date:						**3/24/2016**	**3/24/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**
Sample Depth:						**-**	**-**	**(0-12) In BGS**	**(12-23) In BGS**	**(0-8) In BGS**	**(8-24) In BGS**	**(3-20) In BGS**	**(0-12) In BGS**	**(12-22) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
MetalsSEM														
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	13	0.0010 NC	-	-	-	-	-	-	-
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.072 U	0.052 U	0.06 U	0.042 U	0.04 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.072 U	0.052 U	0.06 U	0.042 U	0.04 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.072 U	0.052 U	0.06 U	0.042 U	0.04 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	3.6[b]	0.061	0.051 U	0.039 U	0.072 U	0.13	0.06 U	0.042 U	0.04 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.2	0.052 U	0.34	0.042 U	0.04 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.072 U	0.052 U	0.06 U	0.042 U	0.04 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.85 U	0.041 U	0.051 U	0.039 U	0.072 U	0.052 U	0.06	0.042 U	0.04 U
Total PCBs	mg/kg	-	1	16	4	3.6[b]	0.061	0.051 U	0.039 U	0.2	0.13	0.4	0.042 U	0.04 U
Wet														
Ammonia	mg/kg	-	15.3	-	-	-	-	340[b]	160[b]	-	-	370[b]	150[b]	140[b]
Cyanide (total)	mg/kg	0.39	0.1	250	12	-	-	0.83 U	0.55 U	-	-	0.92 U	1.1[b]	0.56 U
Formaldehyde	mg/kg	-	2.4	130000	41000	52[b]	3.6[b]	3.2[b]	2.4 U	-	-	40[b]	4.5 U	2.4 U
Sulfide	mg/kg	-	-	-	-	360	18 U	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	6000	-	-	-	16000	3500	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-05	SS-06	SS-06	SS-07	SS-07	SS-08	SS-08	SS-09	SS-09
Sample ID:						S-58502-050516-SSH-SS5A	S-58502-050316-SSH-SS06A	S-58502-050316-SSH-SS06B	S-58502-050316-SSH-SS07A	S-58502-050316-SSH-SS07B	S-58502-050316-SSH-SS08A	S-58502-050316-SSH-SS08B	S-58502-050316-SSH-SS09A	S-58502-050316-SSH-SS09B
Sample Date:						5/5/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016
Sample Depth:						(11-18) In BGS	(0-21) In BGS	(21-30) In BGS	(0-8) In BGS	(8-57) In BGS	(0-13) In BGS	(13-27) In BGS	(0-10) In BGS	(10-37) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
VOAs		**a**	**b**	**c**	**d**									
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-	-
SVOAs														
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-	-

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-05	SS-06	SS-06	SS-07	SS-07	SS-08	SS-08	SS-09	SS-09
Sample ID:						S-58502-050516-SSH-SS5A	S-58502-050316-SSH-SS06A	S-58502-050316-SSH-SS06B	S-58502-050316-SSH-SS07A	S-58502-050316-SSH-SS07B	S-58502-050316-SSH-SS08A	S-58502-050316-SSH-SS08B	S-58502-050316-SSH-SS09A	S-58502-050316-SSH-SS09B
Sample Date:						5/5/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016
Sample Depth:						(11-18) In BGS	(0-21) In BGS	(21-30) In BGS	(0-8) In BGS	(8-57) In BGS	(0-13) In BGS	(13-27) In BGS	(0-10) In BGS	(10-37) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
SVOAs (cont'd)														
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-	-
Metals														
Aluminum	mg/kg	6900	-	370000	50000	6600	14000	8000	20000	22000	-	-	13000	20000
Antimony	mg/kg	-	94	670	180	0.38	22	0.47	3.5	3.2	-	-	2.3	2.9
Arsenic	mg/kg	5.8	4.6	37	7.6	3.1	36[bd]	4.5	13[bd]	13[bd]	-	-	8.2[bd]	12[bd]
Barium	mg/kg	75	455.4	130000	37000	43	140	57	150	150	-	-	81	89
Beryllium	mg/kg	-	-	1600	410	0.35	1.2	0.49	1.7	1.8	-	-	1.1	1.5
Cadmium	mg/kg	1.2	3.7	2100	550	0.82	17 F1[b]	0.47	5.4[b]	5.3[b]	-	-	2.2	3.1
Calcium	mg/kg	-	-	-	-	72000	51000 F1	33000	38000	29000	-	-	21000	23000
Chromium	mg/kg	18	3045000	1000000	790000	17	110	47	110	130	-	-	71	130
Cobalt	mg/kg	6.8	2	9000	2600	4.6	8.8[b]	4.0	5.4	5.5	-	-	3.9	7.5[b]
Copper	mg/kg	32	74.73	73000	20000	17 B	350[b]	25	96[b]	100[b]	-	-	57	97[b]
Iron	mg/kg	12000	-	580000	160000	10000	42000	15000	55000	63000	-	-	39000	70000
Lead	mg/kg	21	5170	900	400	38	1300[cd]	94	770[d]	780[d]	-	-	380	420[d]
Magnesium	mg/kg	-	-	1000000	1000000	22000	8800	8300	9200	8600	-	-	4800	7700
Manganese	mg/kg	440	57.5	90000	25000	610[b]	4400[b]	1000[b]	6300[b]	6800[b]	-	-	2200[b]	3800[b]
Mercury	mg/kg	0.13	0.1	580	160	0.055 U	0.13 U	0.047 U	0.33[b]	0.076 U	-	-	0.11 U	0.075 U
Nickel	mg/kg	20	78.06	150000	40000	14	38	31	28	29	-	-	23	46
Potassium	mg/kg	-	-	-	-	1400	1700	1000	2500	3100	-	-	1200	1900
Selenium	mg/kg	0.41	0.4	9600	2600	2.0[b]	20[b]	2.5[b]	7.6[b]	7.4[b]	-	-	4.9[b]	6.8[b]
Silver	mg/kg	1	0.1	9000	2500	0.12	3.9[b]	0.15	2.4[b]	2.5[b]	-	-	0.83	1.3[b]
Sodium	mg/kg	-	-	1000000	1000000	280	1300 B	350 B	1200 B	1200 B	-	-	940 B	1200 B
Thallium	mg/kg	-	4.2	130	35	0.25	9.3[b]	0.21	1.1	0.98	-	-	0.45	0.66
Vanadium	mg/kg	-	430	5500	750	15	53	15	18	19	-	-	14	19
Zinc	mg/kg	47	169.2	630000	170000	230[b]	24000[b]	340[b]	3900[b]	3300[b]	-	-	1800[b]	3100[b]

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Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-05	SS-06	SS-06	SS-07	SS-07	SS-08	SS-08	SS-09	SS-09
Sample ID:						S-58502-050516-SSH-SS5A	S-58502-050316-SSH-SS06A	S-58502-050316-SSH-SS06B	S-58502-050316-SSH-SS07A	S-58502-050316-SSH-SS07B	S-58502-050316-SSH-SS08A	S-58502-050316-SSH-SS08B	S-58502-050316-SSH-SS09A	S-58502-050316-SSH-SS09B
Sample Date:						5/5/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016
Sample Depth:						(11-18) In BGS	(0-21) In BGS	(21-30) In BGS	(0-8) In BGS	(8-57) In BGS	(0-13) In BGS	(13-27) In BGS	(0-10) In BGS	(10-37) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**									
MetalsSEM														
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.041 U	0.69 U	0.33 U	0.057 U	0.04 U	0.89 U	0.065 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.041 U	0.69 U	0.33 U	0.057 U	0.04 U	0.89 U	0.065 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.041 U	0.69 U	0.33 U	0.057 U	0.04 U	0.89 U	0.065 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.11	2.6[b]	2.9[b]	0.13	0.04 U	0.89 U	0.086
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.049	1.1 U	0.041 U	0.69 U	0.33 U	0.057 U	0.04 U	0.89 U	0.065 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.067	0.69 U	0.62	0.057 U	0.04 U	0.89 U	0.075
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.046 U	1.1 U	0.041 U	0.69 U	0.33 U	0.057 U	0.04 U	0.89 U	0.065 U
Total PCBs	mg/kg	-	1	16	4	0.049	1.1 U	0.177	2.6[b]	3.52[b]	0.13	0.04 U	0.89 U	0.161
Wet														
Ammonia	mg/kg	-	15.3	-	-	170[b]	720[b]	120[b]	230[b]	95 U	-	-	150[b]	97 U
Cyanide (total)	mg/kg	0.39	0.1	250	12	0.65 U	8.2 U	0.62 U	1.7[b]	1.4[b]	-	-	1.5 U	1.0 U
Formaldehyde	mg/kg	-	2.4	130000	41000	3.0[b]	50[b]	4.1[b]	83[b]	57[b]	-	-	55[b]	91[b]
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	100000	-	-	-	-	-	-	-

Notes:

U	Not detected at the associated reporting limit.
J	Estimated concentration.
UJ	Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-10**	**SS-10**	**SS-11**	**SS-11**	**SS-12**	**SS-12**	**SS-13**	**SS-13**
Sample ID:						**S-58502-050316-SSH-SS10A**	**S-58502-050316-SSH-SS10B**	**S-58502-050316-SSH-SS11A**	**S-58502-050316-SSH-SS11B**	**S-58502-050316-SSH-SS12A**	**S-58502-050316-SSH-SS12B**	**S-58502-050316-SSH-SS13A**	**S-58502-050316-SSH-SS13B**
Sample Date:						**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**
Sample Depth:						**(0-13) In BGS**	**(13-58) In BGS**	**(0-26) In BGS**	**(26-34) In BGS**	**(0-12) In BGS**	**(12-44) In BGS**	**(0-30) In BGS**	**(30-54) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-10	SS-10	SS-11	SS-11	SS-12	SS-12	SS-13	SS-13
Sample ID:						S-58502-050316-SSH-SS10A	S-58502-050316-SSH-SS10B	S-58502-050316-SSH-SS11A	S-58502-050316-SSH-SS11B	S-58502-050316-SSH-SS12A	S-58502-050316-SSH-SS12B	S-58502-050316-SSH-SS13A	S-58502-050316-SSH-SS13B
Sample Date:						5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016
Sample Depth:						(0-13) In BGS	(13-58) In BGS	(0-26) In BGS	(26-34) In BGS	(0-12) In BGS	(12-44) In BGS	(0-30) In BGS	(30-54) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	7300	14000	28000	6900	-	-	18000	18000
Antimony	mg/kg	-	94	670	180	3.2	1.5	4.6	0.36	-	-	7.7	2.2
Arsenic	mg/kg	5.8	4.6	37	7.6	**7.5[b]**	**7.0[b]**	**18[bd]**	3.5	-	-	**24[bd]**	**11[bd]**
Barium	mg/kg	75	455.4	130000	37000	50	86	190	49	-	-	150	100
Beryllium	mg/kg	-	-	1600	410	0.56	0.95	2.2	0.40	-	-	1.5	1.3
Cadmium	mg/kg	1.2	3.7	2100	550	**5.3[b]**	1.9	**5.1[b]**	0.61	-	-	**12[b]**	2.5
Calcium	mg/kg	-	-	-	-	14000	23000	38000	58000	-	-	59000	26000
Chromium	mg/kg	18	3045000	1000000	790000	43	83	170	20	-	-	150	100
Cobalt	mg/kg	6.8	2	9000	2600	2.2	4.0	**8.9[b]**	5.9	-	-	**8.1[b]**	5.4
Copper	mg/kg	32	74.73	73000	20000	41	62	**130[b]**	17	-	-	**220[b]**	**78[b]**
Iron	mg/kg	12000	-	580000	160000	20000	42000	79000	13000	-	-	69000	58000
Lead	mg/kg	21	5170	900	400	120	270	**700[d]**	64	-	-	**1500[cd]**	380
Magnesium	mg/kg	-	-	1000000	1000000	2300	5400	10000	17000	-	-	10000	7200
Manganese	mg/kg	440	57.5	90000	25000	**1100[b]**	**2900[b]**	**7800[b]**	**540[b]**	-	-	**8000[b]**	**4000[b]**
Mercury	mg/kg	0.13	0.1	580	160	0.061 U	0.061 U	0.12 U	0.057 U	-	-	0.19 U	0.068 U
Nickel	mg/kg	20	78.06	150000	40000	12	24	47	16	-	-	47	33
Potassium	mg/kg	-	-	-	-	660 U	1400	1800	880	-	-	1700	2100
Selenium	mg/kg	0.41	0.4	9600	2600	**2.9[b]**	**4.2[b]**	**10[b]**	**3.2[b]**	-	-	**9.2[b]**	**6.0[b]**
Silver	mg/kg	1	0.1	9000	2500	0.34	0.88	**2.9[b]**	0.26	-	-	**3.8[b]**	**1.1[b]**
Sodium	mg/kg	-	-	1000000	1000000	440 B	930 B	1000 B	230 B	-	-	1100 B	930 B
Thallium	mg/kg	-	4.2	130	35	0.96	0.40	1.1	0.16	-	-	1.6	0.51
Vanadium	mg/kg	-	430	5500	750	11	15	29	16	-	-	28	17
Zinc	mg/kg	47	169.2	630000	170000	**1100[b]**	**1200[b]**	**8100[b]**	**1500[b]**	-	-	**33000[b]**	**2100[b]**

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-10	SS-10	SS-11	SS-11	SS-12	SS-12	SS-13	SS-13
Sample ID:						S-58502-050316-SSH-SS10A	S-58502-050316-SSH-SS10B	S-58502-050316-SSH-SS11A	S-58502-050316-SSH-SS11B	S-58502-050316-SSH-SS12A	S-58502-050316-SSH-SS12B	S-58502-050316-SSH-SS13A	S-58502-050316-SSH-SS13B
Sample Date:						5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016
Sample Depth:						(0-13) In BGS	(13-58) In BGS	(0-26) In BGS	(26-34) In BGS	(0-12) In BGS	(12-44) In BGS	(0-30) In BGS	(30-54) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.058 U	0.056 U	0.49 U	0.22 U	1.2 U	12 U	0.68 U	0.61 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.058 U	0.056 U	0.49 U	0.22 U	1.2 U	12 U	0.68 U	0.61 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.058 U	0.056 U	0.49 U	0.22 U	1.2 U	12 U	0.68 U	0.61 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.089	0.27	2.7[b]	0.39	1.2 U	39[bcd]	0.68 U	3.2[b]
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.058 U	0.056 U	0.49 U	0.22 U	1.2 U	12 U	2.6[b]	0.61 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.058 U	0.12	0.97	0.22 U	1.2 U	12 U	0.68 U	0.61 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.058 U	0.056 U	0.49 U	0.22 U	1.2 U	12 U	0.68 U	0.61 U
Total PCBs	mg/kg	-	1	16	4	0.089	0.39	3.67[b]	0.39	1.2 U	39[bcd]	2.6[b]	3.2[b]
Wet													
Ammonia	mg/kg	-	15.3	-	-	84 U	82 U	480[b]	74[b]	-	-	620[b]	91 U
Cyanide (total)	mg/kg	0.39	0.1	250	12	0.87 U	0.88 U	13[bd]	0.66 U	-	-	2.0 U	1.9[b]
Formaldehyde	mg/kg	-	2.4	130000	41000	30[b]	75[b]	98[b]	8.3[b]	-	-	130[b]	68[b]
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	14000	17000	-	-	-	-	52000	140000

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-14**	**SS-14**	**SS-14**	**SS-14**	**SS-15**	**SS-15**	**SS-16**	**SS-16**
Sample ID:						**S-58502-050316-SSH-SS14A**	**S-58502-050316-SSH-SS14B**	**S-58502-050316-SSH-SS14C**	**S-58502-050316-SSH-SS14D**	**S-58502-050316-SSH-SS15A**	**S-58502-050316-SSH-SS15B**	**S-58502-050416-SSH-SS16A**	**S-58502-050416-SSH-SS16B**
Sample Date:						**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/4/2016**	**5/4/2016**
Sample Depth:						**(0-25) In BGS**	**(25-45) In BGS**	**(45-57) In BGS**	**(45-57) In BGS** ***(Duplicate)***	**(0-27) In BGS**	**(27-34) In BGS**	**(0-17) In BGS**	**(26-41) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-14**	**SS-14**	**SS-14**	**SS-14**	**SS-15**	**SS-15**	**SS-16**	**SS-16**
Sample ID:						**S-58502-050316-SSH-SS14A**	**S-58502-050316-SSH-SS14B**	**S-58502-050316-SSH-SS14C**	**S-58502-050316-SSH-SS14D**	**S-58502-050316-SSH-SS15A**	**S-58502-050316-SSH-SS15B**	**S-58502-050416-SSH-SS16A**	**S-58502-050416-SSH-SS16B**
Sample Date:						**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/3/2016**	**5/4/2016**	**5/4/2016**
Sample Depth:						**(0-25) In BGS**	**(25-45) In BGS**	**(45-57) In BGS**	**(45-57) In BGS *(Duplicate)***	**(0-27) In BGS**	**(27-34) In BGS**	**(0-17) In BGS**	**(26-41) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	-	-	-	-	21000	32000	-	-
Antimony	mg/kg	-	94	670	180	-	-	-	-	3.9	5.0	-	-
Arsenic	mg/kg	5.8	4.6	37	7.6	-	-	-	-	12[bd]	20[bd]	-	-
Barium	mg/kg	75	455.4	130000	37000	-	-	-	-	150	210	-	-
Beryllium	mg/kg	-	-	1600	410	-	-	-	-	1.3	2.2	-	-
Cadmium	mg/kg	1.2	3.7	2100	550	-	-	-	-	2.5	3.8[b]	-	-
Calcium	mg/kg	-	-	-	-	-	-	-	-	24000	37000	-	-
Chromium	mg/kg	18	3045000	1000000	790000	-	-	-	-	130	190	-	-
Cobalt	mg/kg	6.8	2	9000	2600	-	-	-	-	5.6	9.9[b]	-	-
Copper	mg/kg	32	74.73	73000	20000	-	-	-	-	85[b]	140[b]	-	-
Iron	mg/kg	12000	-	580000	160000	-	-	-	-	53000	90000	-	-
Lead	mg/kg	21	5170	900	400	-	-	-	-	370	660[d]	-	-
Magnesium	mg/kg	-	-	1000000	1000000	-	-	-	-	8000	13000	-	-
Manganese	mg/kg	440	57.5	90000	25000	-	-	-	-	4900[b]	9400[b]	-	-
Mercury	mg/kg	0.13	0.1	580	160	-	-	-	-	0.085 U	0.13 U	-	-
Nickel	mg/kg	20	78.06	150000	40000	-	-	-	-	31	54	-	-
Potassium	mg/kg	-	-	-	-	-	-	-	-	1600	2400	-	-
Selenium	mg/kg	0.41	0.4	9600	2600	-	-	-	-	7.6[b]	12[b]	-	-
Silver	mg/kg	1	0.1	9000	2500	-	-	-	-	1.9[b]	3.0[b]	-	-
Sodium	mg/kg	-	-	1000000	1000000	-	-	-	-	900 B	1200 B	-	-
Thallium	mg/kg	-	4.2	130	35	-	-	-	-	0.90	1.2	-	-
Vanadium	mg/kg	-	430	5500	750	-	-	-	-	19	28	-	-
Zinc	mg/kg	47	169.2	630000	170000	-	-	-	-	2500[b]	3100[b]	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-14	SS-14	SS-14	SS-14	SS-15	SS-15	SS-16	SS-16
Sample ID:						S-58502-050316-SSH-SS14A	S-58502-050316-SSH-SS14B	S-58502-050316-SSH-SS14C	S-58502-050316-SSH-SS14D	S-58502-050316-SSH-SS15A	S-58502-050316-SSH-SS15B	S-58502-050416-SSH-SS16A	S-58502-050416-SSH-SS16B
Sample Date:						5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/3/2016	5/4/2016	5/4/2016
Sample Depth:						(0-25) In BGS	(25-45) In BGS	(45-57) In BGS	(45-57) In BGS *(Duplicate)*	(0-27) In BGS	(27-34) In BGS	(0-17) In BGS	(26-41) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	4.6 U	0.53 U	5.4 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	4.6 U	0.53 U	5.4 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	4.6 U	0.53 U	5.4 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	2.2 P[b]	1.8[b]	1.5[b]	1.7[b]	56[bcd]	42[bcd]	0.53 U	5.4 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	4.6 U	1.1[b]	38[bcd]
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	6[bd]	0.53 U	5.4 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.48 U	0.48 U	0.44 U	0.45 U	12 U	4.6 U	0.53 U	5.4 U
Total PCBs	mg/kg	-	1	16	4	2.2 P[b]	1.8[b]	1.5[b]	1.7[b]	56[bcd]	48[bcd]	1.1[b]	38[bcd]
Wet													
Ammonia	mg/kg	-	15.3	-	-	-	-	-	-	250[b]	370[b]	-	-
Cyanide (total)	mg/kg	0.39	0.1	250	12	-	-	-	-	2.6[b]	1.4[b]	-	-
Formaldehyde	mg/kg	-	2.4	130000	41000	-	-	-	-	50[b]	71[b]	-	-
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	35000	63000	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-17	SS-17	SS-18	SS-18	SS-18	SS-19	SS-19	SS-19
Sample ID:						S-58502-050416-SSH-SS17A	S-58502-050416-SSH-SS17B	S-58502-050416-SSH-SS18A	S-58502-050416-SSH-SS18B	S-58502-050416-SSH-SS18C	S-58502-050416-SSH-SS19A	S-58502-050416-SSH-SS19B	S-58502-050416-SSH-SS19C
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016
Sample Depth:						(0-16) In BGS	(16-32) In BGS	(10-20) In BGS	(20-55) In BGS	(55-59) In BGS	(4-10) In BGS	(10-56) In BGS	(56-58) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-17	SS-17	SS-18	SS-18	SS-18	SS-19	SS-19	SS-19
Sample ID:						S-58502-050416-SSH-SS17A	S-58502-050416-SSH-SS17B	S-58502-050416-SSH-SS18A	S-58502-050416-SSH-SS18B	S-58502-050416-SSH-SS18C	S-58502-050416-SSH-SS19A	S-58502-050416-SSH-SS19B	S-58502-050416-SSH-SS19C
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016
Sample Depth:						(0-16) In BGS	(16-32) In BGS	(10-20) In BGS	(20-55) In BGS	(55-59) In BGS	(4-10) In BGS	(10-56) In BGS	(56-58) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	-	-	-	-	-	-	-	-
Antimony	mg/kg	-	94	670	180	-	-	-	-	-	-	-	-
Arsenic	mg/kg	5.8	4.6	37	7.6	-	-	-	-	-	-	-	-
Barium	mg/kg	75	455.4	130000	37000	-	-	-	-	-	-	-	-
Beryllium	mg/kg	-	-	1600	410	-	-	-	-	-	-	-	-
Cadmium	mg/kg	1.2	3.7	2100	550	-	-	-	-	-	-	-	-
Calcium	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	mg/kg	18	3045000	1000000	790000	-	-	-	-	-	-	-	-
Cobalt	mg/kg	6.8	2	9000	2600	-	-	-	-	-	-	-	-
Copper	mg/kg	32	74.73	73000	20000	-	-	-	-	-	-	-	-
Iron	mg/kg	12000	-	580000	160000	-	-	-	-	-	-	-	-
Lead	mg/kg	21	5170	900	400	-	-	-	-	-	-	-	-
Magnesium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Manganese	mg/kg	440	57.5	90000	25000	-	-	-	-	-	-	-	-
Mercury	mg/kg	0.13	0.1	580	160	-	-	-	-	-	-	-	-
Nickel	mg/kg	20	78.06	150000	40000	-	-	-	-	-	-	-	-
Potassium	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	mg/kg	0.41	0.4	9600	2600	-	-	-	-	-	-	-	-
Silver	mg/kg	1	0.1	9000	2500	-	-	-	-	-	-	-	-
Sodium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Thallium	mg/kg	-	4.2	130	35	-	-	-	-	-	-	-	-
Vanadium	mg/kg	-	430	5500	750	-	-	-	-	-	-	-	-
Zinc	mg/kg	47	169.2	630000	170000	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-17**	**SS-17**	**SS-18**	**SS-18**	**SS-18**	**SS-19**	**SS-19**	**SS-19**
Sample ID:						**S-58502-050416-SSH-SS17A**	**S-58502-050416-SSH-SS17B**	**S-58502-050416-SSH-SS18A**	**S-58502-050416-SSH-SS18B**	**S-58502-050416-SSH-SS18C**	**S-58502-050416-SSH-SS19A**	**S-58502-050416-SSH-SS19B**	**S-58502-050416-SSH-SS19C**
Sample Date:						**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**
Sample Depth:						**(0-16) In BGS**	**(16-32) In BGS**	**(10-20) In BGS**	**(20-55) In BGS**	**(55-59) In BGS**	**(4-10) In BGS**	**(10-56) In BGS**	**(56-58) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	7.1 U	12 U	0.21 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	7.1 U	12 U	0.21 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	7.1 U	12 U	0.21 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	27[bcd]	110[bcd]	0.59
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	2.1[b]	2.1[b]	13[bd]	1.4[b]	0.18	7.1 U	12 U	0.21 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	7.1 U	12 U	0.21 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.53 U	0.64 U	1.8 U	0.35 U	0.039 U	7.1 U	12 U	0.21 U
Total PCBs	mg/kg	-	1	16	4	2.1[b]	2.1[b]	13[bd]	1.4[b]	0.18	27[bcd]	110[bcd]	0.59
Wet													
Ammonia	mg/kg	-	15.3	-	-	-	-	-	-	-	-	-	-
Cyanide (total)	mg/kg	0.39	0.1	250	12	-	-	-	-	-	-	-	-
Formaldehyde	mg/kg	-	2.4	130000	41000	-	-	-	-	-	-	-	-
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-20**	**SS-20**	**SS-21**	**SS-21**	**SS-21**	**SS-22**	**SS-22**	**SS-23**
Sample ID:						**S-58502-050416-SSH-SS20A**	**S-58502-050416-SSH-SS20B**	**S-58502-050416-SSH-SS21A**	**S-58502-050416-SSH-SS21B**	**S-58502-050416-SSH-SS21C**	**S-58502-050416-SSH-SS22A**	**S-58502-050416-SSH-SS22B**	**S-58502-050416-SSH-SS23A**
Sample Date:						**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**
Sample Depth:						**(0-21) In BGS**	**(21-33) In BGS**	**(2-12) In BGS**	**(12-30) In BGS**	**(30-39) In BGS**	**(0-6) In BGS**	**(6-58) In BGS**	**(0-30) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-20	SS-20	SS-21	SS-21	SS-21	SS-22	SS-22	SS-23
Sample ID:						S-58502-050416-SSH-SS20A	S-58502-050416-SSH-SS20B	S-58502-050416-SSH-SS21A	S-58502-050416-SSH-SS21B	S-58502-050416-SSH-SS21C	S-58502-050416-SSH-SS22A	S-58502-050416-SSH-SS22B	S-58502-050416-SSH-SS23A
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016	5/4/2016
Sample Depth:						(0-21) In BGS	(21-33) In BGS	(2-12) In BGS	(12-30) In BGS	(30-39) In BGS	(0-6) In BGS	(6-58) In BGS	(0-30) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	14000	16000	-	-	-	-	-	22000
Antimony	mg/kg	-	94	670	180	8.6 F1	1.3	-	-	-	-	-	0.63 U
Arsenic	mg/kg	5.8	4.6	37	7.6	**20[bd]**	**9.8[bd]**	-	-	-	-	-	4.4
Barium	mg/kg	75	455.4	130000	37000	120	93	-	-	-	-	-	170
Beryllium	mg/kg	-	-	1600	410	1.6	0.97	-	-	-	-	-	2.7
Cadmium	mg/kg	1.2	3.7	2100	550	**11[b]**	1.1	-	-	-	-	-	**13[b]**
Calcium	mg/kg	-	-	-	-	45000 F1	44000	-	-	-	-	-	51000
Chromium	mg/kg	18	3045000	1000000	790000	130 F1	65	-	-	-	-	-	180
Cobalt	mg/kg	6.8	2	9000	2600	6.0	4.9	-	-	-	-	-	**8.1[b]**
Copper	mg/kg	32	74.73	73000	20000	**190 F1[b]**	46	-	-	-	-	-	**210[b]**
Iron	mg/kg	12000	-	580000	160000	61000	31000	-	-	-	-	-	90000
Lead	mg/kg	21	5170	900	400	**1400[cd]**	200	-	-	-	-	-	**1400[cd]**
Magnesium	mg/kg	-	-	1000000	1000000	8400	11000	-	-	-	-	-	14000
Manganese	mg/kg	440	57.5	90000	25000	**4900[b]**	**2600[b]**	-	-	-	-	-	**8500[b]**
Mercury	mg/kg	0.13	0.1	580	160	0.14 UF1	0.057 U	-	-	-	-	-	0.15 U
Nickel	mg/kg	20	78.06	150000	40000	42	23	-	-	-	-	-	60
Potassium	mg/kg	-	-	-	-	1300	1600	-	-	-	-	-	1800
Selenium	mg/kg	0.41	0.4	9600	2600	**8.8[b]**	**4.3[b]**	-	-	-	-	-	**1.9[b]**
Silver	mg/kg	1	0.1	9000	2500	**3.4[b]**	0.77	-	-	-	-	-	0.35
Sodium	mg/kg	-	-	1000000	1000000	1100 B	500 B	-	-	-	-	-	1200 B
Thallium	mg/kg	-	4.2	130	35	1.6	0.40	-	-	-	-	-	0.31 U
Vanadium	mg/kg	-	430	5500	750	21	17	-	-	-	-	-	29
Zinc	mg/kg	47	169.2	630000	170000	**31000 F2[bd]**	**920[b]**	-	-	-	-	-	**39000[b]**

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-20**	**SS-20**	**SS-21**	**SS-21**	**SS-21**	**SS-22**	**SS-22**	**SS-23**
Sample ID:						**S-58502-050416-SSH-SS20A**	**S-58502-050416-SSH-SS20B**	**S-58502-050416-SSH-SS21A**	**S-58502-050416-SSH-SS21B**	**S-58502-050416-SSH-SS21C**	**S-58502-050416-SSH-SS22A**	**S-58502-050416-SSH-SS22B**	**S-58502-050416-SSH-SS23A**
Sample Date:						**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**	**5/4/2016**
Sample Depth:						**(0-21) In BGS**	**(21-33) In BGS**	**(2-12) In BGS**	**(12-30) In BGS**	**(30-39) In BGS**	**(0-6) In BGS**	**(6-58) In BGS**	**(0-30) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.67 U	0.9 U	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.67 U	0.9 U	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.67 U	0.9 U	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.67 U	4.4[bd]	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	1.3[b]	0.9 U	3.2[b]	1.4[b]	0.14	2.5[b]	1.6[b]	1.6[b]
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.67 U	0.9 U	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.67 U	0.9 U	2.2 U	0.54 U	0.04 U	0.78 U	0.66 U	0.66 U
Total PCBs	mg/kg	-	1	16	4	1.3[b]	4.4[bd]	3.2[b]	1.4[b]	0.14	2.5[b]	1.6[b]	1.6[b]
Wet													
Ammonia	mg/kg	-	15.3	-	-	600[b]	150[b]	-	-	-	-	-	560[b]
Cyanide (total)	mg/kg	0.39	0.1	250	12	18 F2[bd]	0.70 U	-	-	-	-	-	32[bd]
Formaldehyde	mg/kg	-	2.4	130000	41000	140[b]	6.7[b]	-	-	-	-	-	120[b]
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	48000

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-23	SS-24	SS-24	SS-25	SS-26	SS-27	SS-27	SS-27
Sample ID:						S-58502-050416-SSH-SS23B	S-58502-050416-SSH-SS24A	S-58502-050416-SSH-SS24B	S-58502-050516-SSH-SS25A	S-58502-050516-SSH-SS26A	S-58502-050516-SSH-SS27A	S-58502-050516-SSH-SS27B	S-58502-050516-SSH-SS27C
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						(30-42) In BGS	(0-32) In BGS	(32-34) In BGS	(0-26) In BGS	(0-28) In BGS	(14-37) In BGS	(37-53) In BGS	(53-59) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-23	SS-24	SS-24	SS-25	SS-26	SS-27	SS-27	SS-27
Sample ID:						S-58502-050416-SSH-SS23B	S-58502-050416-SSH-SS24A	S-58502-050416-SSH-SS24B	S-58502-050516-SSH-SS25A	S-58502-050516-SSH-SS26A	S-58502-050516-SSH-SS27A	S-58502-050516-SSH-SS27B	S-58502-050516-SSH-SS27C
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						(30-42) In BGS	(0-32) In BGS	(32-34) In BGS	(0-26) In BGS	(0-28) In BGS	(14-37) In BGS	(37-53) In BGS	(53-59) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	9500	12000	5000	10000	19000	13000	18000	7900
Antimony	mg/kg	-	94	670	180	2.5	0.47	4.6	7.9	9.9	7.2	3.2	0.22
Arsenic	mg/kg	5.8	4.6	37	7.6	8.0[bd]	11[bd]	9.2[bd]	19[bd]	28[bd]	18[bd]	16[bd]	3.2
Barium	mg/kg	75	455.4	130000	37000	64	87	42	84	230	110	140	39
Beryllium	mg/kg	-	-	1600	410	0.52	0.99	0.27	0.97	1.8	1.3	2.0	0.36
Cadmium	mg/kg	1.2	3.7	2100	550	0.37	9.8[b]	0.21	11[b]	12[b]	11[b]	6.6[b]	0.28
Calcium	mg/kg	-	-	-	-	38000	46000	30000	32000	120000	43000	38000	67000
Chromium	mg/kg	18	3045000	1000000	790000	20	110	8.7	94	180	120	140	18
Cobalt	mg/kg	6.8	2	9000	2600	6.1	5.2	3.6	6.1	9.4[b]	6.9[b]	6.5	5.5
Copper	mg/kg	32	74.73	73000	20000	13	190[b]	5.9	150 B[b]	230 B[b]	160 B[b]	120 B[b]	17 B
Iron	mg/kg	12000	-	580000	160000	17000	45000	7600	39000	69000	56000	68000	13000
Lead	mg/kg	21	5170	900	400	29	1100[cd]	5.5	930[cd]	1400[cd]	1100[cd]	710[d]	31
Magnesium	mg/kg	-	-	1000000	1000000	14000	7400	4900	5900	12000	8100	11000	22000
Manganese	mg/kg	440	57.5	90000	25000	530[b]	3800[b]	140	2600[b]	6700[b]	4800[b]	6500[b]	410
Mercury	mg/kg	0.13	0.1	580	160	0.052 U	0.11 U	0.054 U	0.10 U	0.18 U	0.13 U	0.17[b]	0.051 U
Nickel	mg/kg	20	78.06	150000	40000	18	36	8.8	34	55	41	44	16
Potassium	mg/kg	-	-	-	-	1200	1300	820	1200	1900	1400	1700	1700
Selenium	mg/kg	0.41	0.4	9600	2600	3.4[b]	6.6[b]	3.7[b]	8.7[b]	11[b]	7.0[b]	7.6[b]	2.5[b]
Silver	mg/kg	1	0.1	9000	2500	1.3[b]	0.25	1.2[b]	2.6[b]	3.2[b]	3.0[b]	2.3[b]	0.11
Sodium	mg/kg	-	-	1000000	1000000	210 B	960 B	190 B	870	1300	860	740	160
Thallium	mg/kg	-	4.2	130	35	0.51	0.32	0.92	2.4	2.7	1.5	0.66	0.19
Vanadium	mg/kg	-	430	5500	750	18	24	12	22	35	22	20	19
Zinc	mg/kg	47	169.2	630000	170000	460[b]	24000[b]	92	19000[b]	38000[b]	26000[b]	20000[b]	110

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-23	SS-24	SS-24	SS-25	SS-26	SS-27	SS-27	SS-27
Sample ID:						S-58502-050416-SSH-SS23B	S-58502-050416-SSH-SS24A	S-58502-050416-SSH-SS24B	S-58502-050516-SSH-SS25A	S-58502-050516-SSH-SS26A	S-58502-050516-SSH-SS27A	S-58502-050516-SSH-SS27B	S-58502-050516-SSH-SS27C
Sample Date:						5/4/2016	5/4/2016	5/4/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						(30-42) In BGS	(0-32) In BGS	(32-34) In BGS	(0-26) In BGS	(0-28) In BGS	(14-37) In BGS	(37-53) In BGS	(53-59) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.047 U	0.5 U	0.041 U	0.096 U	0.14 U	0.11 U	0.9 U	0.039 UF2
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.047 U	0.5 U	0.041 U	0.096 U	0.14 U	0.11 U	0.9 U	0.039 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.047 U	0.5 U	0.041 U	0.096 U	0.14 U	0.11 U	0.9 U	0.039 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.067	0.5 U	0.041 U	0.37	0.54	0.11 U	3.7[b]	0.075
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.047 U	1	0.041 U	0.096 U	0.14 U	1.6[b]	0.9 U	0.039 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.047 U	0.5 U	0.041 U	0.11	0.14 U	0.11 U	0.9 U	0.039 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.047 U	0.5 U	0.041 U	0.096 U	0.14 U	0.11 U	0.9 U	0.039 UF2
Total PCBs	mg/kg	-	1	16	4	0.067	1	0.041 U	0.48	0.54	1.6[b]	3.7[b]	0.075
Wet													
Ammonia	mg/kg	-	15.3	-	-	96[b]	330[b]	82[b]	700[b]	1000[b]	860[b]	660[b]	190[b]
Cyanide (total)	mg/kg	0.39	0.1	250	12	0.72 U	13[bd]	0.58 U	42[bd]	55[bd]	26[bd]	4.5[b]	1.2 U
Formaldehyde	mg/kg	-	2.4	130000	41000	6.7[b]	130[b]	2.5 U	53 F1[b]	78[b]	66[b]	70[b]	3.1[b]
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	18000	-	-	38000	-	41000	34000	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-28	SS-28	SS-28	SS-29	SS-29	SS-30	SS-31	SS-31
Sample ID:						S-58502-050516-SSH-SS28A	S-58502-050516-SSH-SS28B	S-58502-050516-SSH-SS28C	S-58502-050516-SSH-SS29A	S-58502-050516-SSH-SS29B	S-58502-050516-SSH-SS30A	S-58502-050516-SSH-SS31A	S-58502-050516-SSH-SS31B
Sample Date:						5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016
Sample Depth:						(10-54) In BGS	(10-54) In BGS *(Duplicate)*	(54-56) In BGS	(0-32) In BGS	(32-34) In BGS	(0-24) In BGS	(0-40) In BGS	(40-42) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-28**	**SS-28**	**SS-28**	**SS-29**	**SS-29**	**SS-30**	**SS-31**	**SS-31**
Sample ID:						**S-58502-050516-SSH-SS28A**	**S-58502-050516-SSH-SS28B**	**S-58502-050516-SSH-SS28C**	**S-58502-050516-SSH-SS29A**	**S-58502-050516-SSH-SS29B**	**S-58502-050516-SSH-SS30A**	**S-58502-050516-SSH-SS31A**	**S-58502-050516-SSH-SS31B**
Sample Date:						**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**
Sample Depth:						**(10-54) In BGS**	**(10-54) In BGS** *(Duplicate)*	**(54-56) In BGS**	**(0-32) In BGS**	**(32-34) In BGS**	**(0-24) In BGS**	**(0-40) In BGS**	**(40-42) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	15000	15000	7600	17000	-	12000	-	-
Antimony	mg/kg	-	94	670	180	4.7	4.6	0.17 U	3.5	-	10	-	-
Arsenic	mg/kg	5.8	4.6	37	7.6	**17[bd]**	**17[bd]**	3.1	**16[bd]**	-	**18[bd]**	-	-
Barium	mg/kg	75	455.4	130000	37000	110	110	41	110	-	130	-	-
Beryllium	mg/kg	-	-	1600	410	1.6	1.5	0.38	1.9	-	1.2	-	-
Cadmium	mg/kg	1.2	3.7	2100	550	**8.1[b]**	**8.8[b]**	0.20	**6.2[b]**	-	**12[b]**	-	-
Calcium	mg/kg	-	-	-	-	30000	54000	69000	23000	-	46000	-	-
Chromium	mg/kg	18	3045000	1000000	790000	120	140	17	130	-	85	-	-
Cobalt	mg/kg	6.8	2	9000	2600	6.4	**7.1[b]**	6.3	6.3	-	6.5	-	-
Copper	mg/kg	32	74.73	73000	20000	**140 B[b]**	**160 B[b]**	14 B	**120 B[b]**	-	**160 B[b]**	-	-
Iron	mg/kg	12000	-	580000	160000	55000	69000	13000	65000	-	29000	-	-
Lead	mg/kg	21	5170	900	400	**850[d]**	**1200[cd]**	21	**740[d]**	-	**840[d]**	-	-
Magnesium	mg/kg	-	-	1000000	1000000	7800	8100	24000	8300	-	7600	-	-
Manganese	mg/kg	440	57.5	90000	25000	**4500[b]**	**5200[b]**	380	**4000[b]**	-	**3400[b]**	-	-
Mercury	mg/kg	0.13	0.1	580	160	0.12 U	0.14 U	0.050 U	0.12	-	0.15 U	-	-
Nickel	mg/kg	20	78.06	150000	40000	41	46	18	43	-	31	-	-
Potassium	mg/kg	-	-	-	-	1200	1200	1600	1300	-	1500	-	-
Selenium	mg/kg	0.41	0.4	9600	2600	**8.1[b]**	**6.9[b]**	**2.5[b]**	**7.8[b]**	-	**8.4[b]**	-	-
Silver	mg/kg	1	0.1	9000	2500	**3.0[b]**	**2.6[b]**	0.083 U	**3.2[b]**	-	**2.8[b]**	-	-
Sodium	mg/kg	-	-	1000000	1000000	870	810	180	740	-	1100	-	-
Thallium	mg/kg	-	4.2	130	35	1.2	0.81	0.14	0.54	-	2.8	-	-
Vanadium	mg/kg	-	430	5500	750	21	20	19	18	-	28	-	-
Zinc	mg/kg	47	169.2	630000	170000	**27000[b]**	**31000[b]**	160	**32000[b]**	-	**12000[b]**	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-28**	**SS-28**	**SS-28**	**SS-29**	**SS-29**	**SS-30**	**SS-31**	**SS-31**
Sample ID:						**S-58502-050516-SSH-SS28A**	**S-58502-050516-SSH-SS28B**	**S-58502-050516-SSH-SS28C**	**S-58502-050516-SSH-SS29A**	**S-58502-050516-SSH-SS29B**	**S-58502-050516-SSH-SS30A**	**S-58502-050516-SSH-SS31A**	**S-58502-050516-SSH-SS31B**
Sample Date:						**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**
Sample Depth:						**(10-54) In BGS**	**(10-54) In BGS** *(Duplicate)*	**(54-56) In BGS**	**(0-32) In BGS**	**(32-34) In BGS**	**(0-24) In BGS**	**(0-40) In BGS**	**(40-42) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.1 U	0.1 U	0.041 U	0.092 U	0.039 U	0.12 U	0.11 U	0.04 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.1 U	0.1 U	0.041 U	0.092 U	0.039 U	0.12 U	0.11 U	0.04 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.1 U	0.1 U	0.041 U	0.092 U	0.039 U	0.12 U	0.11 U	0.04 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.38	0.38	0.13	0.19	0.039 U	0.33	0.22	0.04 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.1 U	0.1 U	0.041 U	0.092 U	0.039 U	0.12 U	0.11 U	0.04 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.18	0.21	0.041 U	0.12	0.039 U	0.14	0.18	0.04 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.1 U	0.1 U	0.041 U	0.092 U	0.039 U	0.12 U	0.11 U	0.04 U
Total PCBs	mg/kg	-	1	16	4	0.56	0.59	0.13	0.31	0.039 U	0.47	0.4	0.04 U
Wet													
Ammonia	mg/kg	-	15.3	-	-	640[b]	700[b]	200[b]	370[b]	-	1000[b]	-	-
Cyanide (total)	mg/kg	0.39	0.1	250	12	30[bd]	3.2 U	0.63 U	16[bd]	-	26[bd]	-	-
Formaldehyde	mg/kg	-	2.4	130000	41000	84[b]	42[b]	3.3[b]	72[b]	-	170[b]	-	-
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-32**	**SS-32**	**SS-32**	**SS-32**	**SS-33**	**SS-33**	**SS-34**	**SS-34**
Sample ID:						**S-58502-050516-SSH-SS32A**	**S-58502-050516-SSH-SS32B**	**S-58502-050516-SSH-SS32C**	**S-58502-050516-SSH-SS32D**	**S-58502-050516-SSH-SS33A**	**S-58502-050516-SSH-SS33B**	**S-58502-050616-SSH-SS34A**	**S-58502-050616-SSH-SS34B**
Sample Date:						**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(0-16) In BGS**	**(16-40) In BGS**	**(16-40) In BGS** *(Duplicate)*	**(40-42) In BGS**	**(0-10) In BGS**	**(10-36) In BGS**	**(12-40) In BGS**	**(40-42) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-32	SS-32	SS-32	SS-32	SS-33	SS-33	SS-34	SS-34
Sample ID:						S-58502-050516-SSH-SS32A	S-58502-050516-SSH-SS32B	S-58502-050516-SSH-SS32C	S-58502-050516-SSH-SS32D	S-58502-050516-SSH-SS33A	S-58502-050516-SSH-SS33B	S-58502-050616-SSH-SS34A	S-58502-050616-SSH-SS34B
Sample Date:						5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/5/2016	5/6/2016	5/6/2016
Sample Depth:						(0-16) In BGS	(16-40) In BGS	(16-40) In BGS *(Duplicate)*	(40-42) In BGS	(0-10) In BGS	(10-36) In BGS	(12-40) In BGS	(40-42) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	-	-	-	-	-	-	17000	-
Antimony	mg/kg	-	94	670	180	-	-	-	-	-	-	5.6	-
Arsenic	mg/kg	5.8	4.6	37	7.6	-	-	-	-	-	-	**20[bd]**	-
Barium	mg/kg	75	455.4	130000	37000	-	-	-	-	-	-	130	-
Beryllium	mg/kg	-	-	1600	410	-	-	-	-	-	-	1.8	-
Cadmium	mg/kg	1.2	3.7	2100	550	-	-	-	-	-	-	**9.8[b]**	-
Calcium	mg/kg	-	-	-	-	-	-	-	-	-	-	43000	-
Chromium	mg/kg	18	3045000	1000000	790000	-	-	-	-	-	-	150	-
Cobalt	mg/kg	6.8	2	9000	2600	-	-	-	-	-	-	**7.8[b]**	-
Copper	mg/kg	32	74.73	73000	20000	-	-	-	-	-	-	**160 B[b]**	-
Iron	mg/kg	12000	-	580000	160000	-	-	-	-	-	-	74000	-
Lead	mg/kg	21	5170	900	400	-	-	-	-	-	-	**1200[cd]**	-
Magnesium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	10000	-
Manganese	mg/kg	440	57.5	90000	25000	-	-	-	-	-	-	**5800[b]**	-
Mercury	mg/kg	0.13	0.1	580	160	-	-	-	-	-	-	**0.14[b]**	-
Nickel	mg/kg	20	78.06	150000	40000	-	-	-	-	-	-	50	-
Potassium	mg/kg	-	-	-	-	-	-	-	-	-	-	1500	-
Selenium	mg/kg	0.41	0.4	9600	2600	-	-	-	-	-	-	**7.9[b]**	-
Silver	mg/kg	1	0.1	9000	2500	-	-	-	-	-	-	**3.0[b]**	-
Sodium	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	960	-
Thallium	mg/kg	-	4.2	130	35	-	-	-	-	-	-	1.2	-
Vanadium	mg/kg	-	430	5500	750	-	-	-	-	-	-	23	-
Zinc	mg/kg	47	169.2	630000	170000	-	-	-	-	-	-	**33000[b]**	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-32**	**SS-32**	**SS-32**	**SS-32**	**SS-33**	**SS-33**	**SS-34**	**SS-34**
Sample ID:						**S-58502-050516-SSH-SS32A**	**S-58502-050516-SSH-SS32B**	**S-58502-050516-SSH-SS32C**	**S-58502-050516-SSH-SS32D**	**S-58502-050516-SSH-SS33A**	**S-58502-050516-SSH-SS33B**	**S-58502-050616-SSH-SS34A**	**S-58502-050616-SSH-SS34B**
Sample Date:						**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/5/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(0-16) In BGS**	**(16-40) In BGS**	**(16-40) In BGS** *(Duplicate)*	**(40-42) In BGS**	**(0-10) In BGS**	**(10-36) In BGS**	**(12-40) In BGS**	**(40-42) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.18 U	0.094 U	0.1 U	0.045 U	0.2 U	0.099 U	0.12 U	0.04 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.18 U	0.094 U	0.1 U	0.045 U	0.2 U	0.099 U	0.12 U	0.04 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.18 U	0.094 U	0.1 U	0.045 U	0.2 U	0.099 U	0.12 U	0.04 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.65	0.24	0.1 U	0.049	0.2 U	0.099 U	0.16	0.04 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.18 U	0.094 U	0.36	0.045 U	0.86	0.52	0.12 U	0.04 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.24	0.13	0.1 U	0.045 U	0.2 U	0.099 U	0.12 U	0.04 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.18 U	0.094 U	0.1 U	0.045 U	0.2 U	0.099 U	0.12 U	0.04 U
Total PCBs	mg/kg	-	1	16	4	0.89	0.37	0.36	0.049	0.86	0.52	0.16	0.04 U
Wet													
Ammonia	mg/kg	-	15.3	-	-	-	-	-	-	-	-	530[b]	-
Cyanide (total)	mg/kg	0.39	0.1	250	12	-	-	-	-	-	-	28[bd]	-
Formaldehyde	mg/kg	-	2.4	130000	41000	-	-	-	-	-	-	53[b]	-
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-35**	**SS-35**	**SS-36**	**SS-36**	**SS-37**	**SS-37**	**SS-37**	**SS-38**
Sample ID:						**S-58502-050616-SSH-SS35A**	**S-58502-050616-SSH-SS35B**	**S-58502-050616-SSH-SS36A**	**S-58502-050616-SSH-SS36B**	**S-58502-050616-SSH-SS37A**	**S-58502-050616-SSH-SS37B**	**S-58502-050616-SSH-SS37C**	**S-58502-050616-SSH-SS38A**
Sample Date:						**5/6/2016**	**5/6/2016**	**5/6/2016**	**5/6/2016**	**5/6/2016**	**5/6/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(14-42) In BGS**	**(42-44) In BGS**	**(3-52) In BGS**	**(52-54) In BGS**	**(8-24) In BGS**	**(24-45) In BGS**	**(45-47) In BGS**	**(10-56) In BGS**
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
VOAs		**a**	**b**	**c**	**d**								
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-	-	-	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-	-	-	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-	-	-	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-	-	-	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-	-	-	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-	-	-	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-	-	-	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-	-	-	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-	-	-	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-	-	-	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-	-	-	-	-	-
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-	-	-	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-	-	-	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-	-	-	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-35	SS-35	SS-36	SS-36	SS-37	SS-37	SS-37	SS-38
Sample ID:						S-58502-050616-SSH-SS35A	S-58502-050616-SSH-SS35B	S-58502-050616-SSH-SS36A	S-58502-050616-SSH-SS36B	S-58502-050616-SSH-SS37A	S-58502-050616-SSH-SS37B	S-58502-050616-SSH-SS37C	S-58502-050616-SSH-SS38A
Sample Date:						5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016
Sample Depth:						(14-42) In BGS	(42-44) In BGS	(3-52) In BGS	(52-54) In BGS	(8-24) In BGS	(24-45) In BGS	(45-47) In BGS	(10-56) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
SVOAs (cont'd)													
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-	-	-	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-	-	-	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-	-	-	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-	-	-	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-	-	-	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-	-	-	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-	-	-	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-	-	-	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-	-	-	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-	-	-	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-	-	-	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-	-	-	-	-	-
Metals													
Aluminum	mg/kg	6900	-	370000	50000	19000	-	20000	-	-	13000	-	21000
Antimony	mg/kg	-	94	670	180	3.7	-	3.6 F1	-	-	3.4	-	3.6
Arsenic	mg/kg	5.8	4.6	37	7.6	**19[bd]**	-	**19[bd]**	-	-	**13[bd]**	-	**17[bd]**
Barium	mg/kg	75	455.4	130000	37000	130	-	130	-	-	110	-	130
Beryllium	mg/kg	-	-	1600	410	2.1	-	1.9	-	-	1.2	-	1.9
Cadmium	mg/kg	1.2	3.7	2100	550	**7.1[b]**	-	**8.6[b]**	-	-	**4.9[b]**	-	**12[b]**
Calcium	mg/kg	-	-	-	-	30000	-	31000 F1	-	-	47000	-	31000
Chromium	mg/kg	18	3045000	1000000	790000	150	-	170	-	-	120	-	160
Cobalt	mg/kg	6.8	2	9000	2600	**7.3[b]**	-	**7.8[b]**	-	-	6.2	-	**7.2[b]**
Copper	mg/kg	32	74.73	73000	20000	**120 B[b]**	-	**140[b]**	-	-	**120[b]**	-	**130[b]**
Iron	mg/kg	12000	-	580000	160000	74000	-	84000	-	-	61000	-	77000
Lead	mg/kg	21	5170	900	400	**740[d]**	-	**780[d]**	-	-	**800[d]**	-	**730[d]**
Magnesium	mg/kg	-	-	1000000	1000000	10000	-	11000	-	-	9000	-	11000
Manganese	mg/kg	440	57.5	90000	25000	**5500[b]**	-	**6000[b]**	-	-	**4500[b]**	-	**7000[b]**
Mercury	mg/kg	0.13	0.1	580	160	0.11 U	-	**0.16[b]**	-	-	0.081 U	-	0.14 U
Nickel	mg/kg	20	78.06	150000	40000	50	-	55	-	-	43	-	53
Potassium	mg/kg	-	-	-	-	1600	-	1700	-	-	1200	-	2000
Selenium	mg/kg	0.41	0.4	9600	2600	**8.3[b]**	-	**8.5[b]**	-	-	**5.2[b]**	-	**7.5[b]**
Silver	mg/kg	1	0.1	9000	2500	**3.6[b]**	-	**3.3[b]**	-	-	**1.8[b]**	-	**2.6[b]**
Sodium	mg/kg	-	-	1000000	1000000	770	-	850	-	-	760	-	970
Thallium	mg/kg	-	4.2	130	35	0.59	-	0.70	-	-	0.57	-	0.89
Vanadium	mg/kg	-	430	5500	750	21	-	21	-	-	15	-	20
Zinc	mg/kg	47	169.2	630000	170000	**36000[b]**	-	**26000[b]**	-	-	**21000[b]**	-	**25000[b]**

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						SS-35	SS-35	SS-36	SS-36	SS-37	SS-37	SS-37	SS-38
Sample ID:						S-58502-050616-SSH-SS35A	S-58502-050616-SSH-SS35B	S-58502-050616-SSH-SS36A	S-58502-050616-SSH-SS36B	S-58502-050616-SSH-SS37A	S-58502-050616-SSH-SS37B	S-58502-050616-SSH-SS37C	S-58502-050616-SSH-SS38A
Sample Date:						5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016	5/6/2016
Sample Depth:						(14-42) In BGS	(42-44) In BGS	(3-52) In BGS	(52-54) In BGS	(8-24) In BGS	(24-45) In BGS	(45-47) In BGS	(10-56) In BGS
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**								
MetalsSEM													
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-	-	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.095 U	0.046 U	0.092 U	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.095 U	0.046 U	0.092 U	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.095 U	0.046 U	0.092 U	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.32	0.07	0.32	0.049	1.2 U	0.22	0.04 U	1 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.095 U	0.046 U	0.092 U	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.14	0.046 U	0.17	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.095 U	0.046 U	0.092 U	0.045 U	1.2 U	0.075 U	0.04 U	1 U
Total PCBs	mg/kg	-	1	16	4	0.46	0.07	0.49	0.049	1.2 U	0.22	0.04 U	1 U
Wet													
Ammonia	mg/kg	-	15.3	-	-	540[b]	-	460[b]	-	-	390[b]	-	260[b]
Cyanide (total)	mg/kg	0.39	0.1	250	12	28[bd]	-	5.4 F2[b]	-	-	9.4[b]	-	4.9[b]
Formaldehyde	mg/kg	-	2.4	130000	41000	51[b]	-	44 F1[b]	-	-	46[b]	-	90[b]
Sulfide	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	36000	-	-	26000	-	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-38**	**SS-38**	**SS-39**
Sample ID:						**S-58502-050616-SSH-SS38B**	**S-58502-050616-SSH-SS38C**	**S-58502-050616-SSH-SS39**
Sample Date:						**5/6/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(10-56) In BGS**	**(56-58) In BGS**	**(3-33) In BGS**
						(Duplicate)		
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**			
VOAs		**a**	**b**	**c**	**d**			
1,1,1-Trichloroethane	mg/kg	-	1.8	1000000	500000	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	-	1.6	240	53	-	-	-
1,1,2-Trichloroethane	mg/kg	-	6.6	840	180	-	-	-
1,1-Dichloroethane	mg/kg	-	15	87000	27000	-	-	-
1,1-Dichloroethene	mg/kg	-	2.6	660	200	-	-	-
1,2,4-Trichlorobenzene	mg/kg	-	5.9	5800	990	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	-	-	20	4400	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	-	0.11	0.43	0.092	-	-	-
1,2-Dichlorobenzene	mg/kg	-	0.28	63000	19000	-	-	-
1,2-Dichloroethane	mg/kg	-	7.2	420	91	-	-	-
1,2-Dichloropropane	mg/kg	-	4.6	660	140	-	-	-
1,3-Dichlorobenzene	mg/kg	-	0.68	660	200	-	-	-
1,4-Dichlorobenzene	mg/kg	-	0.36	1900	400	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	-	44	700000	120000	-	-	-
2-Hexanone	mg/kg	-	-	100000	32000	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	-	-	180000	56000	-	-	-
Acetone	mg/kg	-	34	73000	23000	-	-	-
Benzene	mg/kg	-	4	840	180	-	-	-
Bromodichloromethane	mg/kg	-	-	490	110	-	-	-
Bromoform	mg/kg	-	-	3800	820	-	-	-
Bromomethane (Methyl bromide)	mg/kg	-	0.7	1000	320	-	-	-
Carbon disulfide	mg/kg	-	-	43000	7200	-	-	-
Carbon tetrachloride	mg/kg	-	0.9	440	96	-	-	-
Chlorobenzene	mg/kg	-	0.5	14000	4300	-	-	-
Chloroethane	mg/kg	-	22	12000	2600	-	-	-
Chloroform (Trichloromethane)	mg/kg	-	7	5500	1200	-	-	-
Chloromethane (Methyl chloride)	mg/kg	-	-	7400	1600	-	-	-
cis-1,2-Dichloroethene	mg/kg	-	12	8000	2500	-	-	-
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-
Cyclohexane	mg/kg	-	-	-	-	-	-	-
Dibromochloromethane	mg/kg	-	-	500	110	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/kg	-	-	170000	52000	-	-	-
Ethylbenzene	mg/kg	-	0.36	71000	22000	-	-	-
Isopropyl benzene	mg/kg	-	3.2	80000	25000	-	-	-
Methyl acetate	mg/kg	-	-	-	-	-	-	-
Methyl cyclohexane	mg/kg	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/kg	-	140	7100	1500	-	-	-
Methylene chloride	mg/kg	-	30	5800	1300	-	-	-
Styrene	mg/kg	-	2.1	1900	400	-	-	-
Tetrachloroethene	mg/kg	-	1.2	930	200	-	-	-
Toluene	mg/kg	-	5.4	160000	50000	-	-	-
trans-1,2-Dichloroethene	mg/kg	-	30	12000	3800	-	-	-
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	-	-
Trichloroethene	mg/kg	-	4	660	110	-	-	-
Trichlorofluoromethane (CFC-11)	mg/kg	-	-	260000	79000	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/kg	-	1.7	1000000	1000000	-	-	-
Vinyl chloride	mg/kg	-	0.26	34	3.8	-	-	-
Xylenes (total)	mg/kg	-	0.82	1000000	410000	-	-	-
SVOAs								
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	73000	23000	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	0.33	3300	710	-	-	-
2,4-Dichlorophenol	mg/kg	-	0.33	3900	660	-	-	-
2,4-Dimethylphenol	mg/kg	-	7.6	36000	11000	-	-	-
2,4-Dinitrophenol	mg/kg	-	-	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	-	-	220	48	-	-	-
2,6-Dinitrotoluene	mg/kg	-	-	-	-	-	-	-
2-Chloronaphthalene	mg/kg	-	-	180000	56000	-	-	-
2-Chlorophenol	mg/kg	-	0.36	4500	1400	-	-	-
2-Methylnaphthalene	mg/kg	-	4.2	26000	8100	-	-	-
2-Methylphenol	mg/kg	-	1	36000	11000	-	-	-
2-Nitroaniline	mg/kg	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	2000	630	-	-	-
3&4-Methylphenol	mg/kg	-	1	36000	11000	-	-	-
3,3'-Dichlorobenzidine	mg/kg	-	2	30	6.6	-	-	-
3-Nitroaniline	mg/kg	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	-	-	260	79	-	-	-
4-Bromophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	-	0.28	15000	4500	-	-	-

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-38**	**SS-38**	**SS-39**
Sample ID:						**S-58502-050616-SSH-SS38B**	**S-58502-050616-SSH-SS38C**	**S-58502-050616-SSH-SS39**
Sample Date:						**5/6/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(10-56) In BGS**	**(56-58) In BGS**	**(3-33) In BGS**
						(Duplicate)		
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**			
SVOAs (cont'd)								
4-Chloroaniline	mg/kg	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-	-	-
4-Nitroaniline	mg/kg	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	-	-	-	-	-	-	-
Acenaphthene	mg/kg	-	8.7	130000	41000	-	-	-
Acenaphthylene	mg/kg	-	-	5200	1600	-	-	-
Acetophenone	mg/kg	-	-	150000	47000	-	-	-
Anthracene	mg/kg	-	-	730000	230000	-	-	-
Atrazine	mg/kg	-	0.15	330	71	-	-	-
Benzaldehyde	mg/kg	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	-	-	80	20	-	-	-
Benzo(a)pyrene	mg/kg	-	-	8	2	-	-	-
Benzo(b)fluoranthene	mg/kg	-	-	80	20	-	-	-
Benzo(g,h,i)perylene	mg/kg	-	-	7000	2500	-	-	-
Benzo(k)fluoranthene	mg/kg	-	-	800	200	-	-	-
Biphenyl (1,1-Biphenyl)	mg/kg	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	mg/kg	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	mg/kg	-	0.1	58	13	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	-	-	12000	2800	-	-	-
Butyl benzylphthalate (BBP)	mg/kg	-	120	120000	36000	-	-	-
Caprolactam	mg/kg	-	-	310000	53000	-	-	-
Carbazole	mg/kg	-	1.1	2400	530	-	-	-
Chrysene	mg/kg	-	-	8000	2000	-	-	-
Dibenz(a,h)anthracene	mg/kg	-	-	8	2	-	-	-
Dibenzofuran	mg/kg	-	1.7	-	-	-	-	-
Diethyl phthalate	mg/kg	-	2.2	550000	170000	-	-	-
Dimethyl phthalate	mg/kg	-	-	1000000	1000000	-	-	-
Di-n-butylphthalate (DBP)	mg/kg	-	11	87000	27000	-	-	-
Di-n-octyl phthalate (DnOP)	mg/kg	-	-	20000	6900	-	-	-
Fluoranthene	mg/kg	-	5.5	130000	46000	-	-	-
Fluorene	mg/kg	-	5.3	87000	27000	-	-	-
Hexachlorobenzene	mg/kg	-	0.35	37	8.9	-	-	-
Hexachlorobutadiene	mg/kg	-	0.091	470	100	-	-	-
Hexachlorocyclopentadiene	mg/kg	-	-	6700	2300	-	-	-
Hexachloroethane	mg/kg	-	1.8	730	230	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	80	20	-	-	-
Isophorone	mg/kg	-	26	22000	4800	-	-	-
Naphthalene	mg/kg	-	0.73	52000	16000	-	-	-
Nitrobenzene	mg/kg	-	3.6	340	100	-	-	-
N-Nitrosodi-n-propylamine	mg/kg	-	-	5.4	1.2	-	-	-
N-Nitrosodiphenylamine	mg/kg	-	-	7800	1700	-	-	-
Pentachlorophenol	mg/kg	-	-	320	90	-	-	-
Phenanthrene	mg/kg	-	2.1	5200	1600	-	-	-
Phenol	mg/kg	-	9	230000	40000	-	-	-
Pyrene	mg/kg	-	-	84000	29000	-	-	-
Metals								
Aluminum	mg/kg	6900	-	370000	50000	18000	-	19000
Antimony	mg/kg	-	94	670	180	4.3	-	4.6
Arsenic	mg/kg	5.8	4.6	37	7.6	**19[bd]**	-	**16[bd]**
Barium	mg/kg	75	455.4	130000	37000	150	-	130
Beryllium	mg/kg	-	-	1600	410	1.8	-	1.5
Cadmium	mg/kg	1.2	3.7	2100	550	**8.1[b]**	-	**8.3[b]**
Calcium	mg/kg	-	-	-	-	56000	-	41000
Chromium	mg/kg	18	3045000	1000000	790000	180	-	160
Cobalt	mg/kg	6.8	2	9000	2600	**8.8[b]**	-	**7.9[b]**
Copper	mg/kg	32	74.73	73000	20000	**170[b]**	-	**150[b]**
Iron	mg/kg	12000	-	580000	160000	86000	-	76000
Lead	mg/kg	21	5170	900	400	**1300[cd]**	-	**980[cd]**
Magnesium	mg/kg	-	-	1000000	1000000	9900	-	10000
Manganese	mg/kg	440	57.5	90000	25000	**6000[b]**	-	**5400[b]**
Mercury	mg/kg	0.13	0.1	580	160	0.11 U	-	0.098 U
Nickel	mg/kg	20	78.06	150000	40000	60	-	55
Potassium	mg/kg	-	-	-	-	1600	-	1500
Selenium	mg/kg	0.41	0.4	9600	2600	**7.7[b]**	-	**7.1[b]**
Silver	mg/kg	1	0.1	9000	2500	**2.7[b]**	-	**2.6[b]**
Sodium	mg/kg	-	-	1000000	1000000	880	-	1000
Thallium	mg/kg	-	4.2	130	35	0.66	-	1.0
Vanadium	mg/kg	-	430	5500	750	21	-	22
Zinc	mg/kg	47	169.2	630000	170000	**37000[b]**	-	**27000[b]**

Table 1

Analytical Results Summary for Additional Characterization of Secondary Pond - Sediments
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						**SS-38**	**SS-38**	**SS-39**
Sample ID:						**S-58502-050616-SSH-SS38B**	**S-58502-050616-SSH-SS38C**	**S-58502-050616-SSH-SS39**
Sample Date:						**5/6/2016**	**5/6/2016**	**5/6/2016**
Sample Depth:						**(10-56) In BGS**	**(56-58) In BGS**	**(3-33) In BGS**
						(Duplicate)		
Parameters	**Units**	**Res/Non_Res/Statewide Default Bkgd Levels**	**Res/Non_Res/GW Prot_GW SW Interface Prot (Site_Specific)**	**Non_RES/Direct Contact**	**Res/Direct Contact_Direct Contact**			
MetalsSEM								
Simultaneously extracted metals (SEM)/Acid-volatile sulfide ratio (AVS)	none	-	-	-	-	-	-	-
PCBs								
Aroclor-1016 (PCB-1016)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Aroclor-1221 (PCB-1221)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Aroclor-1232 (PCB-1232)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Aroclor-1242 (PCB-1242)	mg/kg	-	1	16	4	0.32	0.039 U	0.91 U
Aroclor-1248 (PCB-1248)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Aroclor-1254 (PCB-1254)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Aroclor-1260 (PCB-1260)	mg/kg	-	1	16	4	0.1 U	0.039 U	0.91 U
Total PCBs	mg/kg	-	1	16	4	0.32	0.039 U	0.91 U
Wet								
Ammonia	mg/kg	-	15.3	-	-	420[b]	-	510[b]
Cyanide (total)	mg/kg	0.39	0.1	250	12	2.9 U	-	17[bd]
Formaldehyde	mg/kg	-	2.4	130000	41000	73[b]	-	41[b]
Sulfide	mg/kg	-	-	-	-	-	-	-
Total organic carbon (TOC)	mg/kg	-	-	-	-	-	-	-

Notes:

U	Not detected at the associated reporting limit.
J	Estimated concentration.
UJ	Not detected; associated reporting limit is estimated.

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:						BD-340-16	BD-345-16	BD-349-16	MD-333-16	MD-339-16	MD-344-16	MD-348-16
Sample ID:						W-58502-032416-SSH-1637	W-58502-032416-SSH-1634	W-58502-031716-SSH-1623	W-58502-032416-SSH-1645	W-58502-032416-SSH-1636	W-58502-032416-SSH-1633	W-58502-031716-SSH-1622
Sample Date:						3/24/2016	3/24/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016
Parameters	**Units**	**Res/Non_Res/GW SW Interface a**	**FCV b**	**HCV Drink c**	**HNV Drink d**	**WV e**						
VOAs												
1,1,1-Trichloroethane	mg/L	0.089	0.089		62	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/L	0.078	0.2	0.0032	0.18	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/L	0.33	0.73	0.012	0.11	-	-	-	-	-	-	-
1,1-Dichloroethane	mg/L	0.74	0.74		9.8	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/L	0.13	0.13		1.2	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/L	0.099	0.13		0.08	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/L			0.00024		-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.0057	0.015	0.00017	0.25	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.013	0.013		2	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/L	0.36	2	0.006	6.9	-	-	-	-	-	-	-
1,2-Dichloropropane	mg/L	0.23	0.23	0.0091	12	-	-	-	-	-	-	-
1,3-Dichlorobenzene	mg/L	0.028	0.028		0.037	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/L	0.017	0.017	0.024	1.1	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	2.2	2.2		17	-	-	-	-	-	-	-
2-Hexanone	mg/L				9.7	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L					-	-	-	-	-	-	-
Acetone	mg/L	1.7	1.7		5.6	-	-	-	-	-	-	-
Benzene	mg/L	0.2	0.2	0.012	0.019	-	-	-	-	-	-	-
Bromodichloromethane	mg/L			0.0068	0.17	-	-	-	-	-	-	-
Bromoform	mg/L			0.052	0.47	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	mg/L	0.035	0.0042		0.039	-	-	-	-	-	-	-
Carbon disulfide	mg/L				1	-	-	-	-	-	-	-
Carbon tetrachloride	mg/L	0.045	0.077	0.0047	0.018	-	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	0.025		0.47	-	-	-	-	-	-	-
Chloroethane	mg/L	1.1	1.1	0.17	500	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	mg/L	0.35	0.63		0.35	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	mg/L			0.11	3.5	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/L	0.62	0.62		0.88	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	mg/L		0.009	0.0033	0.93	-	-	-	-	-	-	-
Cyclohexane	mg/L					-	-	-	-	-	-	-
Dibromochloromethane	mg/L			0.0068	0.57	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/L				2.9	-	-	-	-	-	-	-
Ethylbenzene	mg/L	0.018	0.018	0.025	2.1	-	-	-	-	-	-	-
Isopropyl benzene	mg/L	0.028	0.028		1.7	-	-	-	-	-	-	-
Methyl acetate	mg/L					-	-	-	-	-	-	-
Methyl cyclohexane	mg/L					-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	mg/L	7.1	32	0.1	0.92	-	-	-	-	-	-	-
Methylene chloride	mg/L	1.5	1.5	0.047	1.6	-	-	-	-	-	-	-
Styrene	mg/L	0.08	0.16	0.02	4.2	-	-	-	-	-	-	-
Tetrachloroethene	mg/L	0.06	0.19	0.011	0.32	-	-	-	-	-	-	-
Toluene	mg/L	0.27	0.27		5.6	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/L	1.5	1.5		0.47	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	mg/L		0.009	0.0033	0.93	-	-	-	-	-	-	-
Trichloroethene	mg/L	0.2	0.2	0.029	0.044	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	mg/L					-	-	-	-	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/L	0.032	0.032		444	-	-	-	-	-	-	-
Vinyl chloride	mg/L	0.013	0.93	0.00025	0.083	-	-	-	-	-	-	-
Xylenes (total)	mg/L	0.041	0.049		3.8	-	-	-	-	-	-	-
VOAsBTEX												
1,1,1-Trichloroethane	mg/L	0.089	0.089		62	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.078	0.2	0.0032	0.18	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.33	0.73	0.012	0.11	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.74	0.74		9.8	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.13	0.13		1.2	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.099	0.13		0.08	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L			0.00024		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.0057	0.015	0.00017	0.25	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.013	0.013		2	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.36	2	0.006	6.9	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.23	0.23	0.0091	12	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.028	0.028		0.037	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.017	0.017	0.024	1.1	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	2.2	2.2		17	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L				9.7	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L					0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
Acetone	mg/L	1.7	1.7		5.6	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.2	0.2	0.012	0.019	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L			0.0068	0.17	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Bromoform	mg/L			0.052	0.47	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.035	0.0042		0.039	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L				1	0.005 U	0.005 U	0.005 U	-	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.045	0.077	0.0047	0.018	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.025	0.025		0.47	0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:							BD-340-16	BD-345-16	BD-349-16	MD-333-16	MD-339-16	MD-344-16	MD-348-16
Sample ID:							W-58502-032416-SSH-1637	W-58502-032416-SSH-1634	W-58502-031716-SSH-1623	W-58502-032416-SSH-1645	W-58502-032416-SSH-1636	W-58502-032416-SSH-1633	W-58502-031716-SSH-1622
Sample Date:							3/24/2016	3/24/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016
Parameters	**Units**	**Res/Non_Res/GW SW Interface**	**FCV**	**HCV Drink**	**HNV Drink**	**WV**							
VOAsBTEX (cont'd)													
Chloroethane	mg/L	1.1	1.1	0.17	500		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.35	0.63		0.35		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L			0.11	3.5		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.62	0.62		0.88		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L		0.009	0.0033	0.93		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L						0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L			0.0068	0.57		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L				2.9		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.018	0.018	0.025	2.1		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.028	0.028		1.7		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L						0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L						0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	7.1	32	0.1	0.92		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	1.5	1.5	0.047	1.6		0.005 U	0.005 U	0.005 U	-	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.08	0.16	0.02	4.2		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.06	0.19	0.011	0.32		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.27	0.27		5.6		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	1.5	1.5		0.47		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L		0.009	0.0033	0.93		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.2	0.2	0.029	0.044		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L						0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.032	0.032		444		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.013	0.93	0.00025	0.083		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.041	0.049		3.8		0.002 U	0.002 U	0.002 U	-	0.002 U	0.002 U	0.002 U
SVOAs													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L			0.006	0.99		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2,4,5-Trichlorophenol	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.005	0.005	0.041	1.9		0.0038 U	0.0042 U	0.0039 U	-	0.0042 U	0.0042 U	0.004 U
2,4-Dichlorophenol	mg/L	0.011	0.011		0.22		0.0095 U	0.01 U	0.0098 U	-	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	0.38	0.38		0.45		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2,4-Dinitrophenol	mg/L		0.019		0.055		0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
2,4-Dinitrotoluene	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2,6-Dinitrotoluene	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2-Chloronaphthalene	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2-Chlorophenol	mg/L	0.018	0.018		0.19		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2-Methylnaphthalene	mg/L	0.019	0.019		0.6		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2-Methylphenol	mg/L	0.03	0.076		1.4		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
2-Nitroaniline	mg/L						0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
2-Nitrophenol	mg/L		0.056				0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
3&4-Methylphenol	mg/L	0.03	0.025		1.4		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.0003	0.0045	0.00014	0.65		0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
3-Nitroaniline	mg/L						0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L						0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
4-Bromophenyl phenyl ether	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.0074	0.0074		6.9		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
4-Chloroaniline	mg/L			0.002	0.039		0.0095 U	0.01 U	0.0098 U	-	0.01 U	0.01 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
4-Nitroaniline	mg/L						0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
4-Nitrophenol	mg/L		0.2		0.68		0.019 U	0.021 U	0.02 U	-	0.021 U	0.021 U	0.02 U
Acenaphthene	mg/L	0.038	0.038		0.58		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Acenaphthylene	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Acetophenone	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Anthracene	mg/L				1.9		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Atrazine	mg/L	0.0073	0.0073		0.88		0.0029 U	0.0031 U	0.0029 U	-	0.0031 U	0.0031 U	0.003 U
Benzaldehyde	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Benzo(a)anthracene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Benzo(a)pyrene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Benzo(b)fluoranthene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Benzo(g,h,i)perylene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Benzo(k)fluoranthene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Biphenyl (1,1-Biphenyl)	mg/L		0.013		0.46		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
bis(2-Chloroethoxy)methane	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.001		0.00079			0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	0.025		0.014	0.12		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Butyl benzylphthalate (BBP)	mg/L	0.067	0.067		0.0069		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Caprolactam	mg/L						0.0095 U	0.01 U	0.0098 U	-	0.01 U	0.01 U	0.01 U
Carbazole	mg/L	0.01	0.004	0.019			0.0095 U	0.01 U	0.0098 U	-	0.01 U	0.01 U	0.01 U
Chrysene	mg/L						0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Dibenz(a,h)anthracene	mg/L						0.0019 U	0.0021 U	0.002 U	-	0.0021 U	0.0021 U	0.002 U
Dibenzofuran	mg/L	0.004	0.004				0.0038 U	0.0042 U	0.0039 U	-	0.0042 U	0.0042 U	0.004 U
Diethyl phthalate	mg/L	0.11	0.11		14		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Dimethyl phthalate	mg/L						0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Di-n-butylphthalate (DBP)	mg/L	0.0097	0.0097		0.64		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:								BD-340-16	BD-345-16	BD-349-16	MD-333-16	MD-339-16	MD-344-16	MD-348-16
Sample ID:								W-58502-032416-SSH-1637	W-58502-032416-SSH-1634	W-58502-031716-SSH-1623	W-58502-032416-SSH-1645	W-58502-032416-SSH-1636	W-58502-032416-SSH-1633	W-58502-031716-SSH-1622
Sample Date:								3/24/2016	3/24/2016	3/17/2016	3/24/2016	3/24/2016	3/24/2016	3/17/2016
Parameters	**Units**	**Res/Non_Res/GW SW Interface**		**FCV**	**HCV Drink**	**HNV Drink**	**WV**							
SVOAs (cont'd)														
Di-n-octyl phthalate (DnOP)	mg/L					0.24		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Fluoranthene	mg/L	0.0016		0.0016		0.018		0.00095 U*	0.001 U*	0.00098 U	-	0.001 U*	0.001 U*	0.001 U
Fluorene	mg/L	0.012		0.012		0.14		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Hexachlorobenzene	mg/L	0.0002			0.00000045	0.000046	0.0000003	0.00019 U	0.00021 U	0.0002 U	-	0.00021 U	0.00021 U	0.0002 U
Hexachlorobutadiene	mg/L	0.000053		0.001	0.00033	0.000093	0.000053	0.00095 U	0.001 U	0.00098 U	-	0.001 U	0.001 U	0.001 U
Hexachlorocyclopentadiene	mg/L					0.14		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Hexachloroethane	mg/L	0.0067		0.013	0.0053	0.006		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Indeno(1,2,3-cd)pyrene	mg/L							0.0019 U	0.0021 U	0.002 U	-	0.0021 U	0.0021 U	0.002 U
Isophorone	mg/L	1.3		1.3	0.31	4.1		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Naphthalene	mg/L	0.011		0.011		1.1		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Nitrobenzene	mg/L	0.18		0.23	0.0047	0.026		0.0029 U	0.0031 U	0.0029 U	-	0.0031 U	0.0031 U	0.003 U
N-Nitrosodi-n-propylamine	mg/L							0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
N-Nitrosodiphenylamine	mg/L							0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Pentachlorophenol	mg/L				0.0018	0.3		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Phenanthrene	mg/L	0.002		0.0017				0.0019 U	0.0021 U	0.002 U	-	0.0021 U	0.0021 U	0.002 U
Phenol	mg/L	0.45		0.45		1.1		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Pyrene	mg/L					0.015		0.0048 U	0.0052 U	0.0049 U	-	0.0052 U	0.0052 U	0.005 U
Metals														
Aluminum	mg/L							0.1	0.11	0.092	-	0.12	0.13	0.092
Antimony	mg/L	0.13		0.24		0.0017		0.002 U	0.002 U	0.002 U	-	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.01		0.15	0.01	0.01		0.005 U	0.005 U	0.005 U	-	0.005 U	0.005 U	0.005 U
Barium	mg/L	0.69	(1)			1.9		0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Beryllium	mg/L	0.0072	(1)			0.16		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.0031	(1)			0.0025		0.001 U	0.001 U	0.001 U	-	0.001 U	0.001 U	0.001 U
Calcium	mg/L							57	63	56	-	62	65	54
Chromium	mg/L	0.11	(1)(2)			0.12		0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U
Cobalt	mg/L	0.1		0.1				0.02 U	0.02 U	0.02 U	-	0.02 U	0.02 U	0.02 U
Copper	mg/L	0.013	(1)			0.47		0.004 U	0.004 U	0.004 U	-	0.004 U	0.004 U	0.004 U
Iron	mg/L							0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U
Lead	mg/L	0.029	(1)			0.014		0.003 U	0.003 U	0.003 U	-	0.003 U	0.003 U	0.003 U
Magnesium	mg/L							16	17	18	-	17	18	18
Manganese	mg/L	2.90	(1)			1.3		0.29	0.32	0.18	-	0.31	0.34	0.18
Mercury	mg/L	0.0000013				0.0000018	0.0000013	0.0002 U	0.0002 U	0.0002 U	-	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.075	(1)			2.6		0.02 U	0.02 U	0.02 U	-	0.02 U	0.02 U	0.02 U
Potassium	mg/L							12	13	13	-	13	14	13
Selenium	mg/L	0.005		0.005		0.12		0.005 U	0.005 U	0.005 U	-	0.005 U	0.005 U	0.005 U
Silver	mg/L	0.0002		0.00006		0.13		0.0002 U	0.0002 U	0.0002 U	-	0.0002 U	0.0002 U	0.0002 U
Sodium	mg/L							190	210	150	-	200	220	150
Thallium	mg/L	0.0037		0.0072		0.0012		0.002 U	0.002 U	0.002 U	-	0.002 U	0.002 U	0.002 U
Vanadium	mg/L	0.027		0.027		0.053		0.004 U	0.004 U	0.004 U	-	0.004 U	0.004 U	0.004 U
Zinc	mg/L	0.17	(1)			3.3		0.05 U	0.05 U	0.05 U	-	0.05 U	0.05 U	0.05 U
PCBs														
Aroclor-1016 (PCB-1016)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1221 (PCB-1221)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1232 (PCB-1232)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1242 (PCB-1242)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1248 (PCB-1248)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1254 (PCB-1254)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1260 (PCB-1260)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	0.000095 U	0.000095 U	0.000096 U	-	0.000095 U	0.000095 U	0.000096 U
Aroclor-1262 (PCB-1262)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	mg/L	0.0002	1 (3)		0.000000026		0.00000012	-	-	-	-	-	-	-
Wet														
Ammonia-N	mg/L							0.20 U	0.20 U	-	-	0.20 U	0.20 U	0.20 U
Biochemical oxygen demand (carbonaceous)	mg/L							6.3	5.4	-	-	6	5	2.0 U
Formaldehyde	mg/L	0.12		0.18		5		0.050 U	0.050 U	-	0.050 U	0.050 U	0.050 U	-

Notes:

U Not detected at the associated reporting limit.
J Estimated concentration.
UJ Not detected; associated reporting limit is estimated.
(1) Calculated GSI value, based on assumed value of hardness of 154.3 mg/kg (average calculated in the North Ditch - 2013).
(2) Chromium III criteria utilized since speciated data in the RFI indicated that available chromium was Chromium III.
(3) PCB TSCA Criteria.

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:		MD-350-16	SW-330-16	SW-331-16	SW-332-16	SW-338-16	SW-343-16	SW-347-16
Sample ID:		W-58502-032416-SSH-1644	W-58502-031616-SSH-1618	W-58502-031616-SSH-1619	W-58502-031616-SSH-1620	W-58502-032416-SSH-1635	W-58502-032416-SSH-1632	W-58502-031716-SSH-1621
Sample Date:		3/24/2016	3/16/2016	3/16/2016	3/16/2016	3/24/2016	3/24/2016	3/17/2016
Parameters	**Units**							
VOAs								
1,1,1-Trichloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,1,2,2-Tetrachloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,1,2-Trichloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,1-Dichloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,1-Dichloroethene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2,4-Trichlorobenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2-Dichlorobenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2-Dichloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,2-Dichloropropane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,3-Dichlorobenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
1,4-Dichlorobenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	-	0.01 U	0.01 U	0.01 U	-	-	-
2-Hexanone	mg/L	-	0.01 U	0.01 U	0.01 U	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	-	0.01 U	0.01 U	0.01 U	-	-	-
Acetone	mg/L	-	0.01 U	0.01 U	0.01 U	-	-	-
Benzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Bromodichloromethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Bromoform	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Bromomethane (Methyl bromide)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Carbon disulfide	mg/L	-	0.005 U	0.005 U	0.005 U	-	-	-
Carbon tetrachloride	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Chlorobenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Chloroethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Chloroform (Trichloromethane)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Chloromethane (Methyl chloride)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
cis-1,2-Dichloroethene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
cis-1,3-Dichloropropene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Cyclohexane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Dibromochloromethane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Dichlorodifluoromethane (CFC-12)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Ethylbenzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Isopropyl benzene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Methyl acetate	mg/L	-	0.01 U	0.01 U	0.01 U	-	-	-
Methyl cyclohexane	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Methyl tert butyl ether (MTBE)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Methylene chloride	mg/L	-	0.005 U	0.005 U	0.005 U	-	-	-
Styrene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Tetrachloroethene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Toluene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
trans-1,2-Dichloroethene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
trans-1,3-Dichloropropene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Trichloroethene	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Trichlorofluoromethane (CFC-11)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Trifluorotrichloroethane (CFC-113)	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Vinyl chloride	mg/L	-	0.001 U	0.001 U	0.001 U	-	-	-
Xylenes (total)	mg/L	-	0.002 U	0.002 U	0.002 U	-	-	-
VOAsBTEX								
1,1,1-Trichloroethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	-	-	-	-	0.001 U*	0.001 UF1	0.001 U
1,1,2-Trichloroethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	-	-	-	-	0.001 U	0.001 UF1	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	-	-	-	-	0.001 U*	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	-	-	-	-	0.001 U	0.001 UF1	0.001 U
1,2-Dichloropropane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	-	-	-	-	0.001 U	0.001 UF2	0.001 U
1,4-Dichlorobenzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	-	-	-	-	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	-	-	-	-	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	-	-	-	-	0.01 U*	0.01 U	0.01 U
Acetone	mg/L	-	-	-	-	0.01 U	0.01 U	0.01 U
Benzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	-	-	-	-	0.001 U	0.001 UF1	0.001 U
Bromomethane (Methyl bromide)	mg/L	-	-	-	-	0.001 U*	0.001 U	0.001 U
Carbon disulfide	mg/L	-	-	-	-	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:		MD-350-16	SW-330-16	SW-331-16	SW-332-16	SW-338-16	SW-343-16	SW-347-16
Sample ID:		W-58502-032416-SSH-1644	W-58502-031616-SSH-1618	W-58502-031616-SSH-1619	W-58502-031616-SSH-1620	W-58502-032416-SSH-1635	W-58502-032416-SSH-1632	W-58502-031716-SSH-1621
Sample Date:		3/24/2016	3/16/2016	3/16/2016	3/16/2016	3/24/2016	3/24/2016	3/17/2016
Parameters	**Units**							
VOAsBTEX (cont'd)								
Chloroethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 UF1
Ethylbenzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	-	-	-	-	0.01 U*	0.01 U	0.01 U
Methyl cyclohexane	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	-	-	-	-	0.005 U	0.005 UF1	0.005 U
Styrene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Toluene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	-	-	-	-	0.002 U	0.002 U	0.002 U
SVOAs								
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	-	0.0038 U	0.0038 U	0.0038 U	0.0042 U	0.0042 U	0.0038 U
2,4-Dichlorophenol	mg/L	-	0.0095 U	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0095 U
2,4-Dimethylphenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2,4-Dinitrophenol	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
2,4-Dinitrotoluene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2,6-Dinitrotoluene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2-Chloronaphthalene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2-Chlorophenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2-Methylnaphthalene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2-Methylphenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
2-Nitroaniline	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
2-Nitrophenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
3&4-Methylphenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
3-Nitroaniline	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
4,6-Dinitro-2-methylphenol	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
4-Chloroaniline	mg/L	-	0.0095 U	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0095 U
4-Chlorophenyl phenyl ether	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
4-Nitroaniline	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
4-Nitrophenol	mg/L	-	0.019 U	0.019 U	0.019 U	0.021 U	0.021 U	0.019 U
Acenaphthene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Acenaphthylene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Acetophenone	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Anthracene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Atrazine	mg/L	-	0.0029 U	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U
Benzaldehyde	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Benzo(a)anthracene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Benzo(a)pyrene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Benzo(b)fluoranthene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Benzo(g,h,i)perylene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Benzo(k)fluoranthene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Biphenyl (1,1-Biphenyl)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Butyl benzylphthalate (BBP)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Caprolactam	mg/L	-	0.0095 U	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0095 U
Carbazole	mg/L	-	0.0095 U	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0095 U
Chrysene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Dibenz(a,h)anthracene	mg/L	-	0.0019 U	0.0019 U	0.0019 U	0.0021 U	0.0021 U	0.0019 U
Dibenzofuran	mg/L	-	0.0038 U	0.0038 U	0.0038 U	0.0042 U	0.0042 U	0.0038 U
Diethyl phthalate	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Dimethyl phthalate	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Di-n-butylphthalate (DBP)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U

Table 2

Analytical Results Summary for Additional Characterization of Secondary Pond - Pond Water
Saginaw Nodular Industrial Land
Saginaw, MI

Sample Location:		**MD-350-16**	**SW-330-16**	**SW-331-16**	**SW-332-16**	**SW-338-16**	**SW-343-16**	**SW-347-16**
Sample ID:		**W-58502-032416-SSH-1644**	**W-58502-031616-SSH-1618**	**W-58502-031616-SSH-1619**	**W-58502-031616-SSH-1620**	**W-58502-032416-SSH-1635**	**W-58502-032416-SSH-1632**	**W-58502-031716-SSH-1621**
Sample Date:		**3/24/2016**	**3/16/2016**	**3/16/2016**	**3/16/2016**	**3/24/2016**	**3/24/2016**	**3/17/2016**
Parameters	**Units**							
SVOAs (cont'd)								
Di-n-octyl phthalate (DnOP)	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Fluoranthene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U*	0.001 U*	0.00095 U
Fluorene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Hexachlorobenzene	mg/L	-	0.00019 U	0.00019 U	0.00019 U	0.00021 U	0.00021 U	0.00019 U
Hexachlorobutadiene	mg/L	-	0.00095 U	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00095 U
Hexachlorocyclopentadiene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Hexachloroethane	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	-	0.0019 U	0.0019 U	0.0019 U	0.0021 U	0.0021 U	0.0019 U
Isophorone	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Naphthalene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Nitrobenzene	mg/L	-	0.0029 U	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Pentachlorophenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Phenanthrene	mg/L	-	0.0019 U	0.0019 U	0.0019 U	0.0021 U	0.0021 U	0.0019 U
Phenol	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Pyrene	mg/L	-	0.0048 U	0.0048 U	0.0048 U	0.0052 U	0.0052 U	0.0048 U
Metals								
Aluminum	mg/L	-	0.19	0.1	0.14	0.1	0.1	0.078
Antimony	mg/L	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	-	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Barium	mg/L	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beryllium	mg/L	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L	-	55	53	52	62	67	54
Chromium	mg/L	-	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	mg/L	-	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	mg/L	-	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Iron	mg/L	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Lead	mg/L	-	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
Magnesium	mg/L	-	18	18	18	17	18	18
Manganese	mg/L	-	0.13	0.13	0.13	0.31	0.34	0.17
Mercury	mg/L	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	-	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Potassium	mg/L	-	12	12	12	13	15	12
Selenium	mg/L	-	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Sodium	mg/L	-	150	150	150	200	220	150
Thallium	mg/L	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium	mg/L	-	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Zinc	mg/L	-	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PCBs								
Aroclor-1016 (PCB-1016)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	-	0.000095 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000095 U
Aroclor-1262 (PCB-1262)	mg/L	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	mg/L	-	-	-	-	-	-	-
Wet								
Ammonia-N	mg/L	-	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	-
Biochemical oxygen demand (carbonaceous)	mg/L	-	2.0 U	2.0 U	2.0 U	5.6	5.9	-
Formaldehyde	mg/L	0.050 U	-	-	-	0.050 U	0.050 U	-

Notes:

U	Not detected at the associated reporting limit.
J	Estimated concentration.
UJ	Not detected; associated reporting limit is estimated.
(1)	Calculated GSI value, based on assumed value of hardness of 154.3 r
(2)	Chromium III criteria utilized since speciated data in the RFI indicated t
(3)	PCB TSCA Criteria.

Attachment C
Attachment 7 – Outfall 21
Lowering Correspondence and Approval

Revitalizing Auto Communities
Environmental Response Trust

June 13, 2016

Mr. Keith Noble
Michigan Department of Environmental Quality
Saginaw Bay District Office
401 Ketchum Street, Suite B
Bay City, MI 48708

Re: RACER NPDES Permit No. MI0059042
Outfall modification

Dear Keith:

In response to your request for a better method of installation to ensure the security of the berm we have prepared a memo that describes the construction sequence to install the modified outfall with full confidence the berm integrity will not be compromised. Further, we have proposed after the first section of pipe is placed that soils will be packed around the pond side and the area behind that will be pumped dry before the remaining portion is backfilled and compacted.

We will also coordinate with GM to ensure this work does not interfere with GM's existing leachate discharge line.

The drawing showing the location of the revised outfall is attached.

Please let us know if you have any further questions or require further information.

Sincerely,

Grant Trigger
Michigan Cleanup Manager

Memorandum

To:	Keith Noble, MDEQ	Ref. No.:	058502-T02
	J.E.P.		
From:	John-eric Pardys/wg/20	Date:	June 13, 2016
cc:	Grant Trigger, Dave Favero, Michael Tomka		
Re:	**Lowering of Outfall 21**		

The following memorandum has been prepared by GHD on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust to summarize the work necessary to implement required remedial activities and to investigate proposed wetland mitigation and floodplain compensation opportunities at RACER's Nodular Industrial Land, Saginaw MI. Based on recent sediment sampling data of the Secondary Pond, additional assessment of the nature/composition of the sediment and alternatives to address metals and PCB contamination is required. To complete the assessment, it is necessary to modify (lower 4 to 6 feet) the existing NPDES permitted outfall (Outfall 21) from the Secondary Pond.

Figure 1 presents a plan and profile drawing of the proposed lowering of Outfall 21. Construction sequencing for the proposed lowering will include:

1. Completing utility locates. At a minimum there is a leachate line located along the north edge of the Secondary Pond (per GM drawings).
2. Assessing the material used in the construction of the Secondary Pond and the slope of the banks. The rest of the construction sequencing assumes the banks/berms of the Secondary Pond were constructed of clay.
3. Installing the lowered discharge pipe at a wide part of the Secondary Pond berm to maintain a secure berm during installation of the lowered outfall pipe. The revised outfall location will discharge around the same location as the existing discharge.
4. Removing concrete debris from the edge of pond and staging for use after the lowered discharge pipe is installed.
5. Using a narrow bucket (3 feet wide), excavate trench on the pond side of the berm (wet side) for placement of 1-foot diameter ductile iron pipe. The excavation will extend to the middle of the berm to maintain a secure berm to hold back the water. Material excavated will be staged nearby in order to be reused as backfill. Note: keep trench box on-Site in the event difficulties arise with the sides of the excavation collapsing.
6. Placing a 1-foot diameter ductile iron pipe, once trench has been excavated to the desired elevation. The inlet of the pipe will be installed with a sealed but removable elbow and with 1-foot sealed but

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removable sections to allow for water to be drawn from the surface of the pond. The outlet end will be installed with a gate valve which will be closed. A riser will be required to be installed to operate the valve at ground surface. A road grade maintenance box will be required to be installed over the riser to protect the riser from vehicle traffic. A small section of pipe will be installed on the downstream end of the gate valve for ease of installation of the downstream pipe when the gate valve is uncovered again. Ensure intake pipe is filled with water to avoid buoyancy issues.

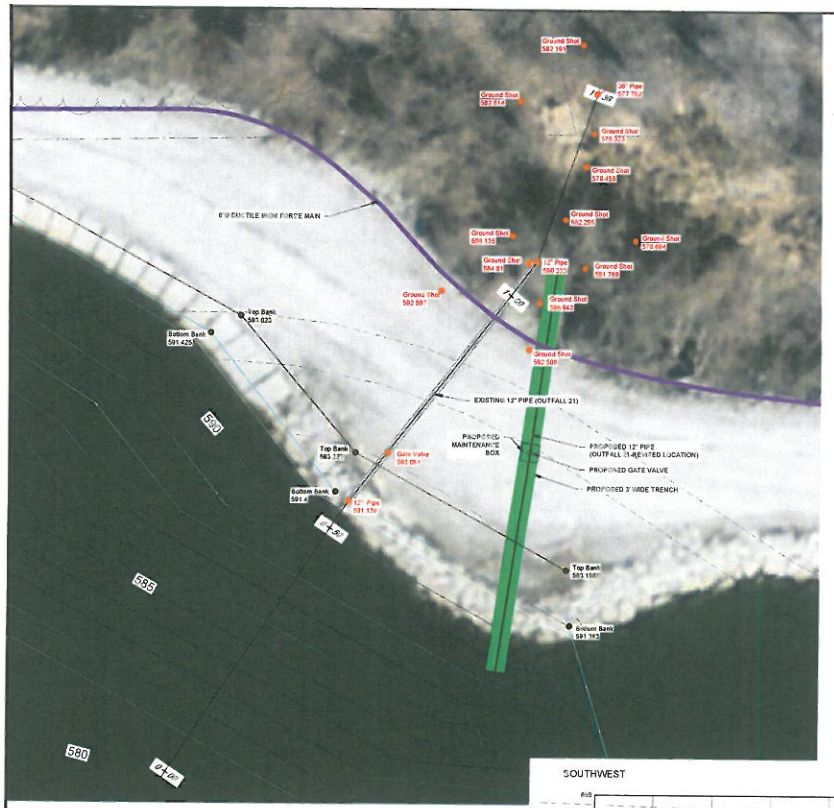
7. Backfilling the 1-foot diameter ductile iron pipe starting at the pond edge with the excavated clay material previously excavated. The material will be mounded at the pond edge and compacted using the excavator bucket. The concrete debris previously removed from edge of the pond will be re-used to provide additional stabilization of the bank. Once sufficient material has been placed at the water's edge, water above the valve will be pumped out discharged back into the pond. The area above the valve will then be backfilled and compacted with clay (in dryer conditions) up to the existing grade.

8. Using narrow bucket (3 feet wide) to excavate trench on the north edge of the berm (dry side) for placement of the remaining 1-foot diameter ductile iron pipe. The excavation will extend to the middle of the berm where the valve will be uncovered. Material excavated will be staged nearby in order to be reused as backfill. Note: keep trench box on-Site in the event difficulties arise with the sides of the excavation collapsing.

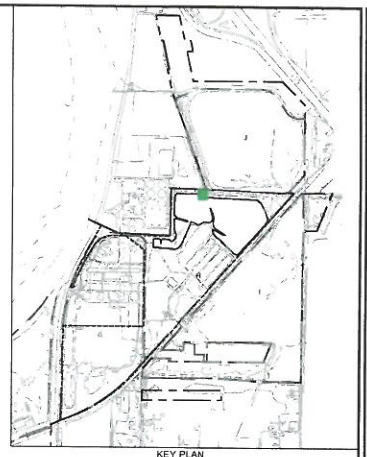
9. Installing the 1-foot ductile iron pipe on the downstream end of the valve.

10. Backfilling and compacting the excavation with the previously excavated material up to grade.

The tentative schedule for completion of the work is sometime the next two weeks.



PLAN



KEY PLAN
SCALE: 1" = 2,000'

NO	Revision	Date	Initial

LEGEND

Ground Shot 582.506	LOCATION SURVEYED OCTOBER 2016 (FT AMSL)
Top Bank 583.158	TOP BANK ELEVATION (FT AMSL)
Bottom Bank 581.363	BOTTOM BANK ELEVATION (FT AMSL)

NOTES
- POND ELEVATION APPROX. 591.9 AMSL (JUNE 7, 2016)
- 100-YEAR FLOODPLAIN ELEVATION AT THIS LOCATION ON THE SAGINAW RIVER IS 594.5 FEET (NAVD88)

SOURCE
GHD SURVEY, OCTOBER 2015

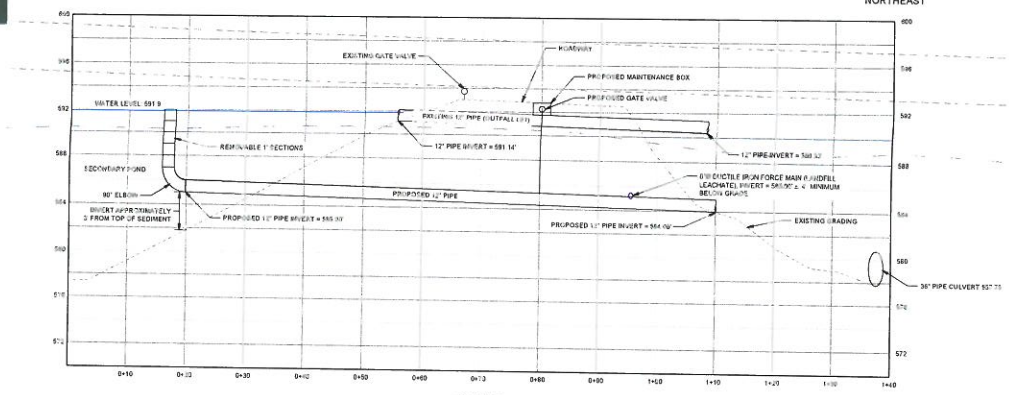
SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY

Approved

DRAWING STATUS

Status	Date	Initial

SOUTHWEST NORTHEAST



PROFILE
SCALE: HORZ. 1" = 10'
VERT. 1" = 5'

RACER TRUST
SAGINAW NODULAR INDUSTRIAL LAND
SAGINAW, MICHIGAN

OUTFALL 2 PROFILE

GHD

Source Reference:
\\GHD2-T02\C\D-TRIGON\JOM\MA001

Project Manager: MT	Reviewed By: JEP	Date: JUNE 2016	
Scale: AS SHOWN	Project No: 58502-T02	Report No: MEMO020	Drawing No: figure 1

58502-T02\MEMO\GHGN MA001 JUN 17, 2016

STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENTAL QUALITY

SAGINAW BAY DISTRICT OFFICE

RICK SNYDER

GOVERNOR

KEITH CREAGH

DIRECTOR

June 15, 2016

Mr. Grant Trigger
Michigan Cleanup Manager
RACER Trust
2930 Ecorse Road
Ypsilanti, MI 48198

RECEIVED JUN 30 2016

Dear Mr. Trigger:

SUBJECT: National Pollutant Discharge Elimination System (NPDES) Permit MI0059042
Proposal to lower the discharge pipe at outfall 021

The Department of Environmental Quality, Water Resources Division received your memo that describes the construction sequence to install the modified outfall pipe at outfall 021 on June 13, 2016.

As expressed in our phone conversations and emails there were concerns about the lowering of the discharge pipe at outfall 021, specifically the stirring up of the contaminated sediments and the structural integrity of the pond berm during construction. The proposed construction sequence to address the berm integrity appears to be acceptable, but please take all precautions to ensure the integrity of the berm is maintained during construction and restored completely after construction.

To address our concerns regarding the potential for the stirring up of the contaminated sediments, the reduced monitoring for NPDES permit MI0059402 will be revoked. Daily monitoring of the discharge according to the permit requirements will be necessary. The reduced monitoring revocation letter is attached.

If you have any questions regarding this authorization, please contact Mr. Keith Noble of this office at 989-385-4242.

Sincerely,

Charles E. Bauer

Charles Bauer
Saginaw Bay District Supervisor

cc: Mr. Mike Tomka, mtomka@craworld.com
Mr. John-Eric Pardys, Conestoga Rovers & Associates, jpardys@craworld.com
Mr. Dave Favero, Racer, dfavero@racertrust.org
Ms. Christine Alexander, DEQ, Permits Section (electronic)
Mr. Jeffery Jones, DEQ, PCS (electronic)

RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
SAGINAW BAY DISTRICT OFFICE

KEITH CREAGH
DIRECTOR

June 15, 2016

Mr. Grant Trigger
Michigan Cleanup Manager
RACER Trust
2930 Ecorse Road
Ypsilanti, MI 48198

Dear Mr. Trigger:

SUBJECT: National Pollutant Discharge Elimination System (NPDES) Permit MI0059042
Reduced Monitoring Revocation

There are concerns that the proposed lowering of the water levels in the Nodular ponds 4-6 feet below the bottom of the current discharge pipe may stir up sediments which could be discharged through the new lowered discharge pipe at outfall 021A.

In a letter sent on January 28, 2015, the Saginaw Bay District Supervisor granted the request for reduced monitoring of the discharges from the current discharge pipe at outfall 021A. The reduced monitoring became effective March 1, 2015. This reduced monitoring was based on the discharge through the current discharge pipe located near the surface of the pond. Lowering the pond an additional 4-6 feet below the level of the current discharge pipe would change the conditions for which reduced monitoring was granted. Since the water level will be lowered below the bottom of the current discharge pipe at outfall 021A and a discharge pipe will be installed at a lower water level, the approval for reduced monitoring is revoked per the permit requirements in MI0059042, Part I, Section A, 3.

The monitoring frequencies for outfall 021A revert back to the monitoring frequencies listed in MI0059042, Part I, Section A, 1.

If you have any questions regarding this authorization, please contact Mr. Keith Noble of this office at 989-385-4242.

Sincerely,

Charles E. Bauer

Charles Bauer
Saginaw Bay District Supervisor

cc: Mr. Mike Tomka, mtomka@craworld.com
Mr. John-Eric Pardys, Conestoga Rovers & Associates, jpardys@craworld.com
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