



January 13, 2017

Reference No. 058502

Mr. Nate Nemani  
U.S. Environmental Protection Agency, Region 5  
Waste Management Division  
77 West Jackson Blvd., LU 9J  
Chicago, IL 60604 3590

**Transmitted via E mail**

Dear Mr. Nemani:

**Re: Fourth Quarter 2016 Progress Report  
Performance Based Administrative Order on Consent  
RCRA Corrective Action  
Saginaw Nodular Iron, 2100 Veterans Memorial Parkway, Saginaw, MI  
U.S. EPA ID No. MID 041 793 340**

In accordance with the Performance-Based Administrative Order on Consent (Docket No. RCRA-05-2011-0023) between the U.S. Environmental Protection Agency Region 5 (U.S. EPA) and Revitalizing Auto Communities Environmental Response Trust (RACER), please find the attached progress report for the fourth quarter of 2016 (October 1, 2016 through December 31, 2016).

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

Yours truly,

GHD

A handwritten signature in black ink, appearing to read 'J. Pardys', with a stylized flourish at the end.

John-Eric Pardys, P.Eng.

JEP/kf/34

Encl. Attachment A – Fourth Quarter 2016 Progress Report

cc: Rick Parson, MDEQ (via e-mail)  
Saginaw Public Library (Public Information Repository)  
David Favero, RACER (via e-mail)  
Michael Tomka, GHD (via e-mail)

Attachment A  
Fourth Quarter 2016 Progress Report  
Performance-Based Administrative  
Order on Consent  
Former Saginaw Nodular Iron, Saginaw, MI  
October 1, 2016 to December 31, 2016

## **Attachment A**

### **Work Performed this Quarter**

The following work was performed during the fourth quarter of 2016 at the Nodular facility:

- Participated in Site update meeting with U.S. EPA on October 13, 2016.
- Prepared and submitted the third quarter progress report for 2016 on October 14, 2016.
- Prepared and submitted secondary pond sediment and surface water sample results to U.S. EPA on October 14, 2016.
- Received MDEQ floodplain permit on October 27, 2016 for the proposed removal of approximately 40,000 cubic yards of clay from the Nodular Site for the work being conducted at the RACER Malleable Industrial Land Site.
- Finalized and submitted 2017 budget request to U.S. EPA and MDEQ.
- Conducted annual EI sampling event the week of November 7, 2016.
- Prepared and submitted modification (addition of new outfall 24) to the NPDES renewal application on December 22, 2016.
- Prepared and submitted Stormwater Pollution Prevention Plan (SWPPP) annual review form on December 23, 2016.
- Continued development of draft interim measures work plan for the removal of PCB-impacted sediment.
- Began preparation of a request for proposal to evaluate stabilizing secondary pond sediments.
- Revised the SWPPP.
- Submitted monthly electronic discharge monitoring reports for the NPDES permit. There were multiple discharge events in September from Outfall 021A (Secondary Pond) that were posted in October 2016. There were some limited exceedances of discharge limits which were identified to MDEQ.
- Completed periodic inspections for SWPPP and collected level measurements of secondary pond and North Ditch.

### **Data Available During this Quarter**

- NPDES discharge sampling data was posted by October 20, 2016 for the discharges in September 2016. A copy of the electronic discharge monitoring reports is provided in Attachment A.1.
- Annual EI monitoring results to be submitted under separate cover.

### **Problems Encountered**

None.

### **Summary of Problem Resolution**

None.

## Estimated Percent Complete and Information Summary for Selected Activities

Task	Estimated % Complete
1. IU G – FORMER NODULAR IRON PLANT OM&M	
<u>Annual EI Sampling (5-years completed to date by RACER, 2-years completed by MLC, and 3-years completed by GMC)</u> (Estimated percent complete assumes the EI monitoring program is replaced with a revised groundwater monitoring program upon approval of the CMS by U.S. EPA, anticipated to occur in 2017)	83%
<ul style="list-style-type: none"> <li>2011 EI sampling was completed in November 2011 and reporting was submitted to U.S. EPA April 18, 2012.</li> <li>2012 EI sampling was completed in November 2012 and reporting was submitted to U.S. EPA March 11, 2013.</li> <li>2013 EI Sampling was completed in November 2013 and reporting was submitted to U.S. EPA February 13, 2014.</li> <li>2014 EI sampling was completed in November 2014 and reporting was submitted to U.S. EPA February 10, 2015.</li> <li>2015 EI sampling was completed in November 2015 and reporting was submitted to U.S. EPA February 10, 2016.</li> <li>2016 EI sampling was completed in November 2016 and reporting will be submitted to U.S. EPA in Q1-2017.</li> </ul>	
<u>Additional delineation of impacts in soil</u>	75%
<ul style="list-style-type: none"> <li>Work plan for additional delineation of manganese and PCB impacts in soil in the south portion of IU G submitted to U.S. EPA on February 27, 2015 and approved by U.S. EPA on March 2, 2015.</li> <li>Additional delineation of manganese and PCB impacts was completed during March and April 2015. A summary of the investigation was submitted to U.S. EPA on May 8, 2015.</li> <li>Work plan for additional delineation of PCB impacts in soil above 10 mg/kg in the south portion of IU G submitted to U.S. EPA on July 15, 2015 and approved by U.S. EPA on July 30, 2015.</li> <li>Additional delineation of PCB impacts above 10 mg/kg was completed in August 2015. A summary of the investigation is being prepared.</li> <li>Review available data to evaluate if additional delineation is necessary for impacted soil at the overall Site.</li> </ul>	
<u>Ammonia concentrations above MDEQ Groundwater Surface Water Interface Criteria</u>	85%
<ul style="list-style-type: none"> <li>Ammonia in groundwater evaluation was submitted to U.S. EPA on April 6, 2015 and to MDEQ on April 8, 2015.</li> </ul>	

Task	Estimated % Complete
2. IU H – WWTP CLOSURE	
<u>Secondary Pond</u>	40%
<ul style="list-style-type: none"> <li>• Characterization Study on Secondary Pond completed in June of 2011.</li> <li>• Emergency overflow for secondary pond installed on March 13, 2012. The emergency overflow was lowered approximately 6 feet on June 23, 2016.</li> <li>• DEQ issued NPDES permit for the Site on August 24, 2012.</li> <li>• MDEQ modified NPDES sampling requirements with most of the requested changes in RACER's January 8, 2015 request. As a result of the lowering of the emergency overflow, the modification to the NPDES sampling requirements were rescinded.</li> <li>• Additional Characterization Study on Secondary Pond and Lagoon 5 was completed in March 2016, May 2016 and August 2016. A summary of the investigation is being prepared.</li> <li>• NPDES renewal application was prepared and submitted April 2, 2016. Comments on the application were received and responded to on July 12 and 29, 2016. A modification to the application (addition of new outfall through the eastern portion of the northern Secondary Pond berm, referred to as outfall 24) was submitted December 22, 2016.</li> <li>• Review available sediment data to evaluate if additional delineation is necessary and to evaluate remedial alternatives.</li> <li>• Discharge of water under NPDES permit to facilitate evaluation of impacted sediments and in preparation for expected work in the Secondary Pond. RACER will evaluate and provide a proposal to U.S. EPA and MDEQ regarding the need for further sampling or other action.</li> <li>• Obtain approval for interim measure work plan for the removal of PCB-impacted sediment from the secondary pond.</li> </ul>	
<u>Primary Basins</u>	100%
<ul style="list-style-type: none"> <li>• Work plan for stabilizing primary settling basins submitted to U.S. EPA on July 31, 2012 and Work Plan approved by U.S. EPA on September 18, 2012.</li> <li>• Primary settling basin stabilization work was completed June 20, 2013. A construction completion report was submitted to U.S. EPA on September 4, 2013.</li> </ul>	
<u>North Ditch</u>	45%
<ul style="list-style-type: none"> <li>• Sampling and Analysis Plan for the North Ditch submitted to U.S. EPA on April 26, 2013 and was approved by U.S. EPA on July 8, 2013.</li> <li>• North Ditch Investigation and additional monitoring completed the week of July 15, 2013. The results of the investigation were submitted to U.S. EPA on October 23, 2013.</li> <li>• Stabilization Alternative Evaluation and Recommendation for the North</li> </ul>	

Task	Estimated % Complete
<p>Ditch was submitted to U.S. EPA on February 26, 2014.</p> <ul style="list-style-type: none"> <li>Obtain necessary permits/agreements to perform work <ul style="list-style-type: none"> <li>Joint permit was received on August 19, 2015.</li> <li>Floodplain permit application was prepared and submitted to the City of Saginaw on May 4, 2015.</li> <li>Other permits needed include: County of Saginaw soil erosion and sedimentation control permit.</li> <li>Other agreements: access from adjacent property owners.</li> </ul> </li> <li>Implement approved plan (pending).</li> </ul>	
3. IU I- AREA CLOSURE	
<ul style="list-style-type: none"> <li>Review available data to evaluate if additional characterization is necessary for impacted soil.</li> </ul>	75%
<u>Classified Sand Pile</u>	
<ul style="list-style-type: none"> <li>Removed all classified sand pile as part of the primary basin stabilization work.</li> </ul>	100%
4. IU I – STAGING AREA OM&M	NA
<ul style="list-style-type: none"> <li>No activities proposed or pending at this time.</li> </ul>	
5. OTHER – RCRA CORRECTIVE ACTION REPORTING AND OTHER RELATED REPORTING	
<u>Administrative Order on Consent</u>	100%
<ul style="list-style-type: none"> <li>Signed by U.S. EPA and effective September 29, 2011.</li> </ul>	
<u>Budget Process</u>	On-going
<ul style="list-style-type: none"> <li>U.S. EPA approved the 2012 EA Budget Authorization Request on December 22, 2011.</li> <li>U.S. EPA approved the 2012 Annual EA Budget Amendment No. 1 on September 19, 2012.</li> <li>U.S. EPA approved the 2013 EA Budget Authorization Request on January 3, 2013.</li> <li>U.S. EPA approved the 2014 EA Budget Authorization Request on November 22, 2013</li> <li>U.S. EPA approved the 2015 EA Budget Authorization Request on November 20, 2014</li> <li>U.S. EPA approved the 2015 Annual EA Budget Amendment No. 1 on March 20, 2015</li> <li>U.S. EPA approved the 2016 EA Budget Authorization Request on November 20, 2015.</li> </ul>	

Task	Estimated % Complete
<ul style="list-style-type: none"> <li>U.S. EPA approved the 2016 Annual EA Budget Amendment No. 1 on April 28, 2016.</li> <li>U.S. EPA approved the 2017 EA Budget Authorization Request on December 7, 2016.</li> </ul>	
RCRA Corrective Action Reporting	60%
<ul style="list-style-type: none"> <li>Submitted CCR documentation to U.S. EPA on November 18, 2011.</li> <li>Submitted Supplemental RFI Report on September 28, 2012.</li> <li>Submitted Draft Corrective Measures Proposal to U.S. EPA on April 1, 2013</li> <li>Submit revised Corrective Measures Proposal – TBD.</li> <li>Submitted Summary of WMU status to U.S. EPA on January 22, 2015 and to MDEQ on January 26, 2015. MDEQ approved the closure of Nodular Iron Oil House RCRA Hazardous Waste Area in a letter dated May 8, 2016.</li> <li>Prepared response to comments from U.S. EPA on the Supplemental RFI and CMP – To be determined (TBD).</li> <li>Prepare and Record Declaration of Restrictive Covenant – TBD.</li> <li>Prepare Corrective Measures Implementation Plan – TBD.</li> <li>Prepare Final Remedy Construction Completion Report – TBD.</li> <li>Prepare Request for RCRA Corrective Action Complete with Controls – TBD.</li> </ul>	
Other Related Reporting	
<ul style="list-style-type: none"> <li>Submit monthly DMRs.</li> </ul>	On-going

#### Summary of Contacts with Interested Parties

- There are periodic discussions with local representatives regarding the status of remediation at the Site and potential redevelopment possibilities and options. A potential buyer for a portion of the Site continues discussion with MDEQ with respect to wetland mitigation and flood plain compensation for possible development work to be completed in the portion of the Site being considered for purchase.

#### Projected Work for Next Reporting Period

- Finalize interim measures work plan for remediating PCB-impacted sediments in the Secondary Pond and review with U.S. EPA.
- Submit a draft preliminary ecological risk assessment for the Secondary Pond and review with U.S. EPA.
- Submit reporting for annual EI sampling event.
- Evaluate the appropriate time to work with adjacent property owners to obtain needed authorizations to complete the North Ditch work and prepare bid documents.
- Evaluate when to complete review of existing data to evaluate if additional delineation is necessary of impacted soil at the Site.

- Prepare responses to or meet with U.S. EPA to discuss any comments received on submittals, including previously submitted Supplemental RFI Report and Draft CMP.
- Evaluate the appropriate time to update and submit a revised CMP.
- Coordinate with potential buyer from environmental perspective as necessary.
- Complete periodic Site inspections per the SWPPP and measure water levels in the Secondary Pond. Perform discharge event from secondary pond, if necessary, and complete any necessary monitoring required by the NPDES permit for Outfalls 021A (secondary pond) and 022A (North Ditch).



Attachment A-1  
MiWaters  
DMR September 2016 Discharge Summary

☐ No Discharge

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Parameter	Flow 50050	Total Suspended Solids 00530	Carbonaceous Biochemical Oxygen Demand (CBOD5) 80082	Ammonia Nitrogen (as N) 00610	Outfall Observation 84130	pH 00400	pH 00400	Dissolved Oxygen 00300	Turbidity 00070
Stage	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)
Limit	(Report) MGD	70 mg/L	7.2 mg/L	2.5 mg/L	(Report) yes/no	6.5 SU	9.0 SU	6.0 mg/L	160 NTU
Stat Base	Maximum Daily	Maximum Daily	Maximum Daily	Maximum Daily	Yes/No	Minimum Daily	Maximum Daily	Minimum Daily	Maximum Daily
9/1/2016	3	9	4.6	0.2	yes	7.06	7.06	9.44	13.8
9/2/2016	3	9	7.6	0.2	yes	6.75	6.75	6.92	14
9/3/2016	3	7	5.4	0.2	yes	7.94	7.94	9.15	14
9/4/2016	3	10	4.8	0.2	yes	7.99	7.99	8.86	14.3
9/5/2016	3	6	5.3	0.2	yes	7.27	7.27	7.24	14.8
9/6/2016	3	12	6.5	0.2	yes	6.84	6.84	9.12	18.4
9/7/2016	3	6	8.3	0.29	yes	7.02	7.02	7.05	14.1
9/8/2016	3	7	3.1	0.52	yes	7.04	7.04	7.30	12.3
9/9/2016	3	8	7.6	0.58	yes	7.17	7.17	7.49	12.3
9/10/2016	3	6	8.4	0.72	yes	6.85	6.85	8.23	17.8
9/11/2016	3	11	6.9	1.1	yes	6.96	6.96	8.09	24.6
9/12/2016	1.63	12	7.9	1	yes	8.2	8.2	8.09	*G
9/13/2016									
9/14/2016									

Parameter	Flow 50050	Total Suspended Solids 00530	Carbonaceous Biochemical Oxygen Demand (CBOD5) 80082	Ammonia Nitrogen (as N) 00610	Outfall Observation 84130	pH 00400	pH 00400	Dissolved Oxygen 00300	Turbidity 00070
Stage	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)
Limit	(Report) MGD	70 mg/L	7.2 mg/L	2.5 mg/L	(Report) yes/no	6.5 SU	9.0 SU	6.0 mg/L	160 NTU
Stat Base	Maximum Daily	Maximum Daily	Maximum Daily	Maximum Daily	Yes/No	Minimum Daily	Maximum Daily	Minimum Daily	Maximum Daily
9/15/2016									
9/16/2016									
9/17/2016									
9/18/2016									
9/19/2016									
9/20/2016									
9/21/2016									
9/22/2016									

9/23/2016									
9/24/2016									
9/25/2016									
9/26/2016									
9/27/2016									
9/28/2016									
9/29/2016									
9/30/2016									

General Report Comments

☐ No Discharge

Parameter	Quantity or Loading		Units	Quality or Concentration		Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	2.89	3.00	****	****	****	Weekly when Discharging	Recorded Daily Flow
	Permit Requirement	(Report) Maximum Monthly Average	(Report) Maximum Daily	****	****	****	Weekly when Discharging	Recorded Daily Flow
Total Suspended Solids 00530 Final Effluent (1)	Sample Measurement	****	****	****	8.58	12	Weekly when Discharging	3-Portion Composite
	Permit Requirement	****	****	****	35 Maximum Monthly Average	70 Maximum Daily	Weekly when Discharging	3-Portion Composite
Carbonaceous Biochemical Oxygen Demand (CBOD5) 80082 Final Effluent (1)	Sample Measurement	****	****	****	****	8.4	Daily when Discharging	Grab
	Permit Requirement	****	****	****	****	7.2 Maximum Daily	Daily when Discharging	Grab
Ammonia Nitrogen (as N) 00610 Final Effluent (1)	Sample Measurement	****	****	****	****	1.1	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	****	2.5 Maximum Daily	Weekly when Discharging	Grab
Outfall Observation 84130 Final Effluent (1)	Sample Measurement	yes	****	****	****	****	Weekly when Discharging	Visual
	Permit Requirement	(Report) Yes/No	****	****	****	****	Weekly when Discharging	Visual
pH 00400 Parameter Final Effluent (1)	Sample Measurement	****	****	6.75	****	8.2	Daily when Discharging	Grab
		Quantity or Loading	Units		Quality or Concentration	SU Units	Sample Freq	Sample Type

	Permit Requirement	***	***	6.5 Minimum Daily	***	9.0 Maximum Daily	Daily when Discharging	Grab
Dissolved Oxygen 00300 Final Effluent (1)	Sample Measurement	***	***	6.92	***	***	Daily when Discharging	Grab
	Permit Requirement	***	***	6.0 Minimum Daily	***	***	Daily when Discharging	Grab
Turbidity 00070 Final Effluent (1)	Sample Measurement	***	***	***	15.49	24.6	Weekly when Discharging	Grab
	Permit Requirement	***	***	***	80 Maximum Monthly Average	160 Maximum Daily	Weekly when Discharging	Grab

General Report Comments