



October 14, 2016

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: Third 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 third quarter of 2016 (July 1, 2016 through September 30, 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', is written over a light blue circular stamp.

John-Eric Pardys, P.Eng.

JEP/kf/32

Encl. Attachment A – Third 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
Third Quarter 2016 Progress Report
Performance-Based Administrative
Order on Consent
Former Saginaw Nodular Iron, Saginaw, MI
July 1, 2016 to September 30, 2016

Attachment A

Work Performed this Quarter

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

- Prepared and submitted responses to MDEQ comments on the April 2, 2016 original NPDES renewal application on July 12 and 29, 2016.
- Prepared and submitted the second quarter progress report for 2016 on July 15, 2016.
- Prepared and submitted memorandum summarizing the transformer pad excavation verification sampling results associated with the WWTP demolition on July 22, 2016.
- Prepared and submitted floodplain permit application to the MDEQ on August 8, 2016 to support 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.
- Completed additional delineation of PCBs in sediments in the Secondary Pond the week of August 15, 2016.
- Discharged water via gravity from the Secondary Ponds through the NPDES permitted outfall. On August 24, 2016 a pump was installed to continue dewatering the secondary pond through the NPDES permitted outfall. Discharges through the NPDES outfall were stopped on September 12, 2016.
- As part of the work being conducted in the secondary pond, a new outfall pipe with valve was installed in the east portion of the secondary pond and a pipe with valve was installed between Lagoon 5 and the Secondary Pond.
- Preparation and submittal of memorandum to MDEQ documenting the proposed pumping set-up for discharge through the NPDES permitted outfall on August 26, 2016.
- Continued evaluation of existing data to determine if further investigation is necessary to support selection of corrective measures.
- Prepared draft secondary pond remedial cost estimates.
- Prepared internal draft interim measures work plan for the removal of PCB-impacted sediment.
- Prepared internal draft 2017 budget request.
- Submitted monthly electronic discharge monitoring reports for the NPDES permit. There were multiple discharge events from Outfall 021A (Secondary Pond) and Outfall 022A (North Ditch) during this reporting period. 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 July 20, 2016 for the discharges in June 2016, by August 20, 2016 for the discharges in July 2016 and by September 20, 2016 for the discharges in August 2016. A copy of the electronic discharge monitoring reports is provided in Attachment A.1.

The discharge sampling data collected in September will be posted by October 20, 2016 and will be included in the next quarterly report.

- Data from additional characterization from the Secondary Pond and Lagoon 5 characterization will be provided under separate cover.
- Data from additional delineation of PCBs in sediment will be provided under a 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 CMP by U.S. EPA, anticipated to occur in 2017)	83%
<ul style="list-style-type: none">• 2011 EI sampling was completed in November 2011 and reporting was submitted to U.S. EPA April 18, 2012.• 2012 EI sampling was completed in November 2012 and reporting was submitted to U.S. EPA March 11, 2013.• 2013 EI Sampling was completed in November 2013 and reporting was submitted to U.S. EPA February 13, 2014.• 2014 EI sampling was completed in November 2014 and reporting was submitted to U.S. EPA February 10, 2015.• 2015 EI sampling was completed in November 2015 and reporting was submitted to U.S. EPA February 10, 2016.	
<u>Additional delineation of impacts in soil</u>	
<ul style="list-style-type: none">• 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.• 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.• 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.• Additional delineation of PCB impacts above 10 mg/kg was completed in August 2015. A summary of the investigation is being prepared.• Review available data to evaluate if additional delineation is necessary for impacted soil at the overall Site.	
<u>Ammonia concentrations above MDEQ Groundwater Surface Water Interface Criteria</u>	
<ul style="list-style-type: none">• Ammonia in groundwater evaluation was submitted to U.S. EPA on April 6, 2015 and to MDEQ on April 8, 2015.	

Task	Estimated % Complete
2. IU H – WWTP CLOSURE	
<u>Secondary Pond</u>	40%
<ul style="list-style-type: none"> • Characterization Study on Secondary Pond completed in June of 2011. • Emergency overflow for secondary pond installed on March 13, 2012. The emergency overflow was lowered approximately 6 feet on June 23, 2016. • DEQ issued NPDES permit for the Site on August 24, 2012. • 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. • 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. • 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. • Review available sediment data to evaluate if additional delineation is necessary and to evaluate remedial alternatives. • 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. • Obtain approval for interim measure work plan for the removal of PCB-impacted sediment from the secondary pond. 	
<u>Primary Basins</u>	100%
<ul style="list-style-type: none"> • 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. • Primary settling basin stabilization work was completed June 20, 2013. A construction completion report was submitted to U.S. EPA on September 4, 2013. 	
<u>North Ditch</u>	45%
<ul style="list-style-type: none"> • 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. • 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. • Stabilization Alternative Evaluation and Recommendation for the North Ditch was submitted to U.S. EPA on February 26, 2014. 	

Task	Estimated % Complete
<ul style="list-style-type: none"> • Obtain necessary permits/agreements to perform work <ul style="list-style-type: none"> – Joint permit was received on August 19, 2015. – Floodplain permit application was prepared and submitted to the City of Saginaw on May 4, 2015. – Other permits needed include: County of Saginaw soil erosion and sedimentation control permit. – Other agreements: access from adjacent property owners. • Implement approved plan (pending). 	
3. IU I- AREA CLOSURE	
<ul style="list-style-type: none"> • Review available data to evaluate if additional characterization is necessary for impacted soil. 	75%
<u>Classified Sand Pile</u>	
<ul style="list-style-type: none"> • Removed all classified sand pile as part of the primary basin stabilization work. 	100%
4. IU I – STAGING AREA OM&M	NA
<ul style="list-style-type: none"> • No activities proposed or pending at this time. 	
5. OTHER – RCRA CORRECTIVE ACTION REPORTING AND OTHER RELATED REPORTING	
<u>Budget Process</u>	On-going
<ul style="list-style-type: none"> • U.S. EPA approved the 2012 EA Budget Authorization Request on December 22, 2011. • U.S. EPA approved the 2012 Annual EA Budget Amendment No. 1 on September 19, 2012. • U.S. EPA approved the 2013 EA Budget Authorization Request on January 3, 2013. • U.S. EPA approved the 2014 EA Budget Authorization Request on November 22, 2013 • U.S. EPA approved the 2015 EA Budget Authorization Request on November 20, 2014 • U.S. EPA approved the 2015 Annual EA Budget Amendment No. 1 on March 20, 2015 • U.S. EPA approved the 2016 EA Budget Authorization Request on November 20, 2015. • U.S. EPA approved the 2016 Annual EA Budget Amendment No. 1 on April 28, 2016. 	

Task	Estimated % Complete
RCRA Corrective Action Reporting	60%
<ul style="list-style-type: none"> • Submitted CCR documentation to U.S. EPA on November 18, 2011. • Submitted Supplemental RFI Report on September 28, 2012. • Submitted Draft Corrective Measures Proposal to U.S. EPA on April 1, 2013 • Submit revised Corrective Measures Proposal – TBD. • 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. • Prepared response to comments from U.S. EPA on the Supplemental RFI and CMP – To be determined (TBD). • Prepare Declaration of Restrictive Covenant – TBD. • Prepare Corrective Measures Implementation Plan – TBD. • Prepare Final Remedy Construction Completion Report – TBD. 	

Other Related Reporting

- Submit monthly DMRs.

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. Discussions with a potential buyer for a portion of the Site and with MDEQ and U.S. EPA with respect to possible flood plain compensation for work to be completed in the portion of the Site being considered for purchase are on-going.

Projected Work for Next Reporting Period

- Prepare memorandum summarizing the results of the additional characterization of the Secondary Pond and Lagoon 5 and provide a proposal for further sampling if appropriate.
- Prepare an interim measures work plan for and possibly remove PCB-impacted sediments.
- Prepare preliminary ecological risk assessment for the secondary pond.
- Conduct annual EI sampling event.
- Finalize budget estimate request for 2017
- Update SWPPP to incorporate recent work completed at the Site.
- Evaluate the appropriate time to work with adjacent property owners as appropriate 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 the 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 inspections per the SWPPP and level measurements of 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 June, July, and August 2016 Discharge
Summary

MiWaters - DMR Detail for June 2016 - Summary Outfall 21

No Discharge

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	<input type="text" value="1.03"/>	<input type="text" value="1.8"/>	****	****	****	****	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	****	****	****	<input type="text" value="4"/>	<input type="text" value="4"/>	****	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	****	****	****	****	<input type="text" value="2"/>	****	Daily when Discharging	Grab
	Permit Requirement	****	****	****	****	7.2 Maximum Daily	****	Daily when Discharging	Grab
Ammonia Nitrogen (as N) 00610 Final Effluent (1)	Sample Measurement	****	****	****	****	<input type="text" value="0.2"/>	****	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	****	2.5 Maximum Daily	****	Weekly when Discharging	Grab
Outfall Observation 84130 Final Effluent (1)	Sample Measurement	<input type="text" value="yes"/>	****	****	****	****	****	Weekly when Discharging	Visual
	Permit Requirement	(Report) Yes/No	****	****	****	****	****	Weekly when Discharging	Visual
pH 00400 Final Effluent (1) Parameter	Sample Measurement	****	****	<input type="text" value="7.09"/>	****	<input type="text" value="7.98"/>	****	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	***	***	7.07	***	***	Daily when Discharging	Grab
	Permit Requirement	***	***	6.0 Minimum Daily	***	***	Daily when Discharging	Grab
Turbidity 00070 Final Effluent (1)	Sample Measurement	***	***	***	4.91	8.14	Weekly when Discharging	Grab
	Permit Requirement	***	***	***	80 Maximum Monthly Average	160 Maximum Daily	Weekly when Discharging	Grab

General Report Comments

MiWaters - DMR Detail for June 2016 - Daily Outfall 21

No Discharge

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
6/1/2016									
6/2/2016									
6/3/2016									
6/4/2016									
6/5/2016									
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
6/10/2016									
6/11/2016									
6/12/2016									
6/13/2016									
6/14/2016									
6/15/2016									
6/16/2016									
6/17/2016									
6/18/2016									
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
6/19/2016									
6/20/2016									
6/21/2016	0.54	4	2	0.2	yes	7.98	7.98	7.91	6.77
6/22/2016	0.36	4	2	0.2	yes	7.22	7.22	7.8	8.14
6/23/2016	0.36	4	2	0.2	yes	7.09	7.09	7.07	6.69
6/24/2016									
6/25/2016									
6/26/2016									

6/27/2016	1.62	4		2		0.2		yes	7.33	7.33	7.07	3.91
6/28/2016	1.8	4		2		0.2		yes	7.27	7.27	7.46	3.49
6/29/2016	1.62	4		2		0.2		yes	7.91	7.91	7.54	2.71
6/30/2016	0.9	4		2		0.2		yes	7.55	7.55	7.32	2.68

General Report Comments

MiWaters - DMR Detail for July 2016 - Summary Outfall 21

No Discharge

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	<input type="text" value="1.85"/>	<input type="text" value="2.82"/>	MGD	****	****	****	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	****	****	****	<input type="text" value="4.06"/>	<input type="text" value="5"/>	mg/L	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	****	****	****	****	<input type="text" value="7.6"/>	mg/L	Daily when Discharging	Grab
	Permit Requirement	****	****	****	****	7.2 Maximum Daily		Daily when Discharging	Grab
Ammonia Nitrogen (as N) 00610 Final Effluent (1)	Sample Measurement	****	****	****	****	<input type="text" value="0.23"/>	mg/L	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	****	2.5 Maximum Daily		Weekly when Discharging	Grab
Outfall Observation 84130 Final Effluent (1)	Sample Measurement	<input type="text" value="yes"/>	****	****	****	****	****	Weekly when Discharging	Visual
	Permit Requirement	(Report) Yes/No	****	yes/no	****	****	****	Discharging Weekly when Discharging	Visual
pH 00400 Final Effluent (1) Parameter	Sample Measurement	****	****	<input type="text" value="6.85"/>	****	<input type="text" value="8.89"/>	SU	Daily when Discharging	Grab
		Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq

	Permit Requirement	***	***	6.5 Minimum Daily	***	9.0 Maximum Daily	Daily when Discharging	Grab
Dissolved Oxygen 00300 Final Effluent (1)	Sample Measurement	***	***	6.63	***	***	Daily when Discharging	Grab
	Permit Requirement	***	***	6.0 Minimum Daily	***	***	Daily when Discharging	Grab
Turbidity 00070 Final Effluent (1)	Sample Measurement	***	***	***	4.01	7.27	Weekly when Discharging	Grab
	Permit Requirement	***	***	***	80 Maximum Monthly Average	160 Maximum Daily	Weekly when Discharging	Grab

General Report Comments

MiWaters - DMR Detail for July 2016 - Daily Outfall 21

No Discharge

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
7/1/2016	0.65	4	2.4	0.2	yes	8.89	8.89	13.22	3.32
7/2/2016									
7/3/2016									
7/4/2016									
7/5/2016	1.54	4	2	0.2	yes	7.84	7.84	7.83	2.92
7/6/2016	1.88	4	2	0.2	yes	*A	*A	*A	2.64
7/7/2016	2.01	4	2	0.2	yes	8.81	8.81	6.63	2.51
7/8/2016	2.01	5	2	0.2	yes	8.76	8.76	6.71	3.13
7/9/2016									
7/10/2016									
7/11/2016									
7/12/2016	2.4	4	2	0.2	yes	7.66	7.66	7.63	3.51
7/13/2016	1.86	4	7.6	0.2	yes	7.12	7.12	7.2	3.11
7/14/2016	2.82	4	2	0.2	yes	6.95	6.95	7.14	3.84
7/15/2016	1.41	4	2	0.2	yes	7.26	7.26	7.47	4.09
7/16/2016									
7/17/2016									

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
7/18/2016									
7/19/2016	0.91	4	2.8	0.2	yes	7.15	7.15	7.01	4.11
7/20/2016	2.59	4	2	0.2	yes	6.85	6.85	7.85	3.88
7/21/2016	2.17	4	2	0.2	yes	8.49	8.49	7.63	3.7
7/22/2016									
7/23/2016									
7/24/2016									
7/25/2016									

7/26/2016	1.69	4	2	0.23	yes	8.29	8.29	7.39	3.92
7/27/2016	2.6	4	2	0.2	yes	7.95	7.95	7.88	4.99
7/28/2016	1.93	4	2.7	0.2	yes	8.2	8.2	7.03	7.16
7/29/2016	1.09	4	2	0.2	yes	7.29	7.29	7.21	7.27
7/30/2016									
7/31/2016									

General Report Comments

MiWaters - DMR Detail for August 2016 - Summary Outfall 21

No Discharge

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	<input type="text" value="1.1"/>	<input type="text" value="3"/>	MGD	****	****	****	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	****	****	****	<input type="text" value="5.83"/>	<input type="text" value="11"/>	mg/L	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	****	****	****	****	<input type="text" value="9.1"/>	mg/L	Daily when Discharging	Grab
	Permit Requirement	****	****	****	****	7.2 Maximum Daily		Daily when Discharging	Grab
Ammonia Nitrogen (as N) 00610 Final Effluent (1)	Sample Measurement	****	****	****	****	<input type="text" value="0.23"/>	mg/L	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	****	2.5 Maximum Daily		Weekly when Discharging	Grab
Outfall Observation 84130 Final Effluent (1)	Sample Measurement	<input type="text" value="yes"/>	****	****	****	****	****	Weekly when Discharging	Visual
	Permit Requirement	(Report) Yes/No	****	yes/no	****	****	****	Discharging Weekly when Discharging	Visual
pH 00400 Final Effluent (1) Parameter	Sample Measurement	****	****	<input type="text" value="7.09"/>	****	<input type="text" value="8.8"/>	SU	Daily when Discharging	Grab
		Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq

	Permit Requirement	***	***	6.5 Minimum Daily	***	9.0 Maximum Daily	Daily when Discharging	Grab
Dissolved Oxygen 00300 Final Effluent (1)	Sample Measurement	***	***	6.28	***	***	Daily when Discharging	Grab
	Permit Requirement	***	***	6.0 Minimum Daily	***	***	Daily when Discharging	Grab
Turbidity 00070 Final Effluent (1)	Sample Measurement	***	***	***	9.87	19.9	Weekly when Discharging	Grab
	Permit Requirement	***	***	***	80 Maximum Monthly Average	160 Maximum Daily	Weekly when Discharging	Grab

General Report Comments

MiWaters - DMR Detail for August 2016 - Daily Outfall 21

No Discharge

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
8/1/2016									
8/2/2016	1.21	5	3.1	0.2	yes	7.49	7.49	7.57	6.91
8/3/2016	0.73	4	2	0.2	yes	7.89	7.89	8.58	6.65
8/4/2016	0.73	4	2	0.2	yes	8.57	8.57	8.47	8.01
8/5/2016	0.6	4	2	0.2	yes	7.90	7.9	8.8	8.12
8/6/2016									
8/7/2016									
8/8/2016									
8/9/2016	0.6	5	2	0.2	yes	7.09	7.09	6.95	6.56
8/10/2016	0.48	4	2	0.2	yes	7.18	7.18	7.88	4.43
8/11/2016	0.5	4	2	0.2	yes	8.29	8.29	8.43	8.12
8/12/2016									
8/13/2016									
8/14/2016									
8/15/2016									
8/16/2016	1.23	4	2.3	0.2	yes	8.8	8.8	*A	*G
8/17/2016	1.01	4	2.4	0.2	yes	7.48	7.48	6.28	7.05
8/18/2016	0.85	4	3.6	0.23	yes	7.71	7.71	6.84	8.12
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
8/19/2016	0.73	4	*C	0.2	yes	8.6	8.6	8.1	7.88
8/20/2016									
8/21/2016									
8/22/2016									
8/23/2016									
8/24/2016	1.06	6	5.8	0.2	yes	8.37	8.37	9.19	12.4
8/25/2016	1.19	5	3.9	0.2	yes	8.74	8.74	9.35	9.76
8/26/2016	1.28	10	5.2	0.2	yes	7.99	7.99	8.81	16.70

8/27/2016	1.31	10	5.9	0.2		yes	7.19	7.19	8.66	11.7
8/28/2016	1.5	8	7.2	0.2		yes	7.88	7.88	8.96	15
8/29/2016	1.78	11	8.3	0.2		yes	7.87	7.87	8.77	14.5
8/30/2016										
8/31/2016	3.0	9	9.1	0.2		yes	7.45	7.45	8.79	19.9

General Report Comments

MiWaters - DMR Detail for August 2016 - Summary Outfall 22

No Discharge


Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type
Flow 50050 Final Effluent (1)	Sample Measurement	<input type="text" value="0.58"/>	<input type="text" value="0.58"/>	MGD	****	****	****	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	****	****	****	<input type="text" value="4"/>	<input type="text" value="4"/>	mg/L	Weekly when Discharging	3-Portion Composite
	Permit Requirement	****	****	****	35 Maximum Monthly Average	70 Maximum Daily		Weekly when Discharging	3-Portion Composite
pH 00400 Final Effluent (1)	Sample Measurement	****	****	****	<input type="text" value="7.6"/>	<input type="text" value="7.6"/>	SU	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	6.5 Minimum Daily	9.0 Maximum Daily		Weekly when Discharging	Grab
Turbidity 00070 Final Effluent (1)	Sample Measurement	****	****	****	<input type="text" value="*G"/>	<input type="text" value="*G"/>	NTU	Weekly when Discharging	Grab
	Permit Requirement	****	****	****	80 Maximum Monthly Average	160 Maximum Daily		Weekly when Discharging	Grab

General Report Comments

MiWaters - DMR Detail for August 2016 - Daily Outfall 22

No Discharge

Parameter	Flow 50050	Total Suspended Solids 00530	pH 00400	pH 00400	Turbidity 00070
Stage	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)
Limit	(Report) MGD	70 mg/L	6.5 SU	9.0 SU	160 NTU
Stat Base	Maximum Daily	Maximum Daily	Minimum Daily	Maximum Daily	Maximum Daily
8/1/2016					
8/2/2016					
8/3/2016					
8/4/2016					
8/5/2016					
8/6/2016					
8/7/2016					
8/8/2016					
8/9/2016					
8/10/2016					
8/11/2016					
8/12/2016					
8/13/2016					
8/14/2016					

Parameter	Flow 50050	Total Suspended Solids 00530	pH 00400	pH 00400	Turbidity 00070
Stage	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)	Final Effluent (1)
Limit	(Report) MGD	70 mg/L	6.5 SU	9.0 SU	160 NTU
Stat Base	Maximum Daily	Maximum Daily	Minimum Daily	Maximum Daily	Maximum Daily
8/15/2016					
8/16/2016	0.58	4 	7.6	7.6	*G
8/17/2016					
8/18/2016					
8/19/2016					
8/20/2016					
8/21/2016					
8/22/2016					
8/23/2016					
8/24/2016					
8/25/2016					
8/26/2016					
8/27/2016					
8/28/2016					
8/29/2016					
8/30/2016					
8/31/2016					