



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Scott J. Nally, Director

March 4, 2013

**RE: MIAMI EAST LOCAL SCHOOLS
 WWTP INSPECTION
 NPDES PERMIT 1PT00053*FD
 MIAMI COUNTY**

Dr. Todd Rappold, Superintendent
 Miami East Local Schools
 3825 State Route 589
 Casstown, Ohio 45312

Dear Dr. Rappold:

On February 28th I met with Mr. Dan Ward to conduct an inspection of the wastewater treatment plant serving the campus of Miami East Local Schools. The inspection was done in preparation for the renewal of the National Pollutant Discharge Elimination System (NPDES) permit expiring May 31st. I appreciate Mr. Ward accommodating me on the same day I contacted him.

A review of your Discharge Monitoring Reports (DMRs) since the previous inspection revealed the following reported violations:

Summary of Limit Violations					
	Date	Parameter	Limit Type	Limit	Reported Value
2009	July	Ammonia Nitrogen	Mo. Avg. (mg/l)	1.0	1.3
	July 15-21		Weekly Avg. (mg/l)	1.5	2.18
	September 8-14	Ammonia Nitrogen	Weekly Avg. (Kg/day)	0.1	0.11961
			Weekly Avg. (mg/l)	1.5	3.95
	October 1-14	CBOD ₅	Weekly Avg. (mg/l)	15	23
2010	May	Total Suspended Solids	Mo. Avg. (mg/l)	12	21.7
	May 15-21		Weekly Avg. (mg/l)	18	64
2011	June 15-21	CBOD ₅	Weekly Avg. (mg/l)	15	16

These violations were addressed at the time they occurred and do not require any additional response. Thanks to you and Mr. Ward for your efforts to maintain compliance since the minor violation in June 2011.

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The wastewater treatment plant appeared to be in very good condition and performing well. Observations that necessitate your attention are as follows:

- The sand filters should be re-leveled to ensure uniform dispersion of water over the surface of the filter;
- Accumulated surface scum behind the influent baffle of the clarifier should be removed to the sludge holding tank as soon as practical; and
- The pump rate of the sand filter dosing pumps should be verified. This should be done by calculating the volume of water in the dosing chamber before and after a pump cycle. The pump rate of each pump should be checked. Please let me know the results of your investigation and how the current pump rate compares to the pump rate you have been using.

Please provide a written response to these inspection findings by April 1, 2013.

If you have any questions about this letter or the inspection form, please contact me at (937) 285-6095.

Sincerely,



Matt Walbridge
Environmental Specialist
Division of Surface Water

MW\bp



Environmental
Protection Agency

Southwest District Office

NPDES Compliance Inspection Report
Semi-Public Sewage Disposal System

Section A: National Data System Coding						
Permit Number	NPDES Number	Inspection Date	Inspection Type	Inspector	Facility Type	
1PT00053*FD	OH0072745	2-28-13	C	S	2	
Section B: Facility Info						
Name and Location of Facility Inspected			Entry Time	Permit Effective Date		
Miami East Schools 3825 North State Route 589 Casstown, OH 45312			1:00 PM	6-1-08		
			Exit Time		Permit Expiration Date	
			1:45 PM	5-31-13		
Name(s) and Title(s) of On-Site Representatives			Phone Number(s)			
Mr. Daniel J. Ward – Plant Manager			(937) 603-4637			
Name and Address of Operator of Record			Phone Number(s)			
Mr. Daniel J. Ward			(937) 603-4637			
Name, Address and Title of Responsible Official			Phone Number			
Dr. Todd Rappold - Superintendent Miami East Local Schools 3825 N State Route 589 Casstown, OH 45312			(937) 335-7505			
Ohio EPA Inspector			Ohio EPA Reviewer			
						
Matt Walbridge		Date	Martyn Burt		Date	
Division of Surface Water			Environmental Supervisor			
Southwest District Office			Division of Surface Water			
			Southwest District Office			

Average Daily Design Flow:	25,000 Gallons/Day
Plant Serves:	~ 1,300 students/staff
Average Daily Flow: (Period of Review):	Approximately 6,000 gpd
Method of flow monitoring:	Elapsed Run-Time Meter on Dosing Pump
Type of alarms for plant:	High water level
Comments:	

Pretreatment

Type of Pretreatment: **Trash Trap**
 Does the Trash Trap need pumped: **Not Determined**
 Maintenance of pretreatment components is: **Not Evaluated**

Comments/Status:

**Flow equalization tank is utilized very well.
 Weekend flows are an average of pump run time meter readings from Friday to Monday.**

**Secondary Treatment
(Aeration)**

Color of sludge: **Dark Brown**
 Quality of Sludge: **Heavy**
 Foam: **None present**
 Odor: **No objectionable odor present**

	Yes	No		Yes	No
Aeration is taking place	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Plant is septic	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Blowers are operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Blowers are on a timer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skimmers are operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Plant is flooded	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diffusers are operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Grating is present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sludge return is operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Maintenance of aerating equipment is...**Excellent**

Comments/Status:

All tanks are covered with insulating foam installed under the grates. This causes a fair amount of sludge build-up on the pipes and valves (and the foam insulation itself). Skimmers were returning a fair amount of clear water.

Secondary Treatment (Settling)

Clarity: **Clear**
 Condition of Overflow Weir: **Clean**
 Weir is level: **Yes**
 Effluent in weir: **Clear**
 Clarifier walls need scraped: **Unknown**

Overall maintenance of settling components is: **Excellent**

Comments/Status:

Flexible air hoses are used for the skimmer and sludge return airlifts. Only minor amounts of floating scum beyond the influent scum baffle. Significant amount of scum behind the influent scum baffle – should be removed sooner than later. Effluent weir looked very clean.

Tertiary Treatment

	Yes	No		Yes	No
Surface sand Filters: Slow	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Subsurface	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Distribution box operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Beds alternated	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are filters ponding/flooding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Beds raked	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sand filters overgrown	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chlorination present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
UV present	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Dechlorination present	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Overall maintenance of components is: **Good**

Comments/Status:

I believe the sand needs to be re-graded to provide a uniformly level surface; there was some evidence of channeling to the side wall on the west filter.

Chlorination/de-chlorination was not occurring (out of season). An outdoor household thermometer is used in the disinfection chamber for temperature monitoring. Temperature of effluent likely decreases before being discharged to the stream.

Sludge Handling/Storage Disposal

Hauler name: **Mike's Sanitation**
 Disposal Site: **Mike's Sanitation in New Bremen, Ohio**
 Sludge wasted from: **Sludge Holding Tank**
 How often is sludge wasted: **Approx. once per year**
 Sludge drying beds: **No** Sludge holding tank: **Yes**

Overall maintenance of components is: **Good**

Comments/Status:

2012 was the first year they used Mike's Sanitation. Sludge is typically wasted to the holding tank on the weekends.

Plant Discharge

Discharge point is a: **Stream**
 Name of discharge point: **Middle Branch Lost Creek**
 Discharge is visible: **Yes** Quality of Effluent: **Clear**

Comments/Status:

Plant discharges to a storm sewer catch basin that receives discharge from retention pond for the school campus. The combined flow discharges to the creek through a large plastic culvert.

Other Observations

Comments/Status:

All treatment components appeared to be well-maintained.

I suggested that they verify the pump rate of the dosing pumps used to calculate the discharge volume.

The operator collects effluent samples on a Tuesday, transports them in a cooler to his home and then to TCA North Regional on Wednesday where they are stored in the lab refrigerator until the analytical lab comes by on Wednesday to pick them up. A chain of custody is used and it looks good.

Fecal Coliform samples are collected on Wednesday mornings on his way to work so as to meet the 6-hour hold time. With Test America shutting down its Dayton facility and Belmont not picking up until the afternoon (beyond the six-hour hold time for fecal coliform) he'll need to make new arrangements.

An operator log was provided for review at the time of inspection. Monthly logs are sent to the school office for record keeping. Operator is there for about 15 minutes every day of the week and on Saturdays once a month. A check sheet is used to go over the plant. The record is very thorough and includes notes and observations.

EFFLUENT LIMIT VIOLATIONS

(Period of Review: April 1, 2009 through January 2013)

Summary of Limit Violations

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