



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PT0001620091106

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JACKSON, JOSHUA 2009/11/06

Monroe Elementary School
Corresp.



State of Ohio Environmental Protection Agency

Southwest District Office

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Dayton, Ohio 45402

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

November 5, 2009

New Richmond Exempted Village Schools
Attn: Mr. Tom Durbin, Supt.
212 Market Street
New Richmond, OH 45157

**RE: Monroe Elementary School WWTW/Compliance Evaluation Inspection
NPDES Permit No. OH0040517/OEPA PERMIT NO. 1PT00016*AD**

Dear Mr. Durbin:

On November 4, 2009, I conducted an NPDES Compliance Evaluation Inspection at the Monroe Elementary School wastewater treatment works (WWTW). Mssrs. Rob Stropes and Glen Beyer, who represented the facility, were present during the inspection. The contract operator of record, Dennis Feichtner (NWI), was also present.

Please pay special attention to the "items requiring correction" (bold type) located throughout the inspection report, for there are multiple items that require action on the part of Monroe Elementary School, such as:

- **Needed policy change for the district bus washing practices**
- **Installation of an additional treatment unit**
- **Splitting effluent samples with another wastewater laboratory**
- **Needed training for school custodial/maintenance personnel due to upcoming minimal staffing level requirements**

Thank you and your staff for the time extended during the inspection process. If you have any questions, please feel free to contact me by phone at (937) 285-6029 or by e-mail at joshua.jackson@epa.state.oh.us.

Respectfully,

Joshua Jackson
Environmental Specialist II
Division of Surface Water

Cc: Glen Beyer, New Richmond Exempted Village Schools (with report)
Rob Stropes, New Richmond Exempted Village Schools (with report)
Hank Henke, National Wastewater Industries (with report)

Enclosures

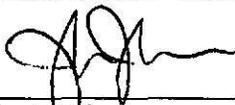
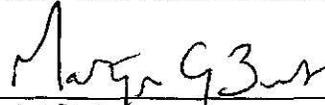


State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report
Semi-Public Sewage Disposal Inspection Form

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PT00016*AD	OH0040517	11/4/2009	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Monroe Elementary Schools 2117 Laurel Lindale Road Clermont County, Monroe Township	9:30 a.m.	10/1/2006
	Exit Time	Permit Expiration Date
	11:00 a.m.	9/30/2011
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Rob Stropes, Monroe Elem. Head Custodian Glen Beyer, District Maintenance	513-553-3183	
Name(s), Address and Title(s) of Operator of Record	Phone Number(s)	
Dennis Feichtner, Class III Wastewater	513-367-5969	
Name, Address and Title of Responsible Official	Phone Number	
New Richmond Exempted Village Schools Attn: Mr. Tom Durbin, Supt. 212 Market Street New Richmond, OH 45157	513-553-2616	

Ohio EPA Inspector	Ohio EPA Reviewer
 Joshua Jackson Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
11-5-09 Date	11/5/09 Date

stropes_r@nrschools.org

Average Daily Design Flow:	9,600 Gallons/Day
Plant Serves:	460 Students, Bus Garage (~35 employees)
Average Daily Flow (Period of Review):	3,300 Gallons/Day (March - September 2009)
Method of flow monitoring:	Elapsed Time Meter (sand filter dosing pumps)
Type of alarms for plant:	High Water Alarm for dosing pump wet well

Pretreatment

Type of Pretreatment: **Trash Trap**
 Does the Trash Trap need pumped: **Yes**
 Maintenance of pretreatment components is: **Fair**

Comments/Status:

Trash Trap was last pumped in April according to staff (although there was no documentation in the operator's log book. The trash trap should be pumped at least 4 times throughout the course of the school year. This should be scheduled and documented in the log book.

Secondary Treatment (Aeration)

Color of sludge: **Black**
 Quality of Sludge: **Thin**
 Foam: **Light (white)**
 Odor: **Slight**

	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 type="checkbox"/>	<input checked="" type="checkbox"/>
Sludge return is operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Maintenance of aerating equipment is...**Fair**

Comments/Status:

Mixed liquor return was clear. The aeration basin was a very dark color but not septic. There was a small amount of white foam on the surface.

Secondary Treatment (Settling)

Clarity: **Cloudy**

Permit # 1PT00016*AD
 NPDES# OH0040517

Condition of Weir: **Excessive Algae/Solids Build Up**
 Weir is level: **Yes**
 Effluent in weir: **Light Solids**
 Clarifier walls need scraped: **Yes**

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

Comments/Status:

The clarifier was turbid even at the surface. It was apparent there was not good settling.

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 type="checkbox"/>	<input checked="" type="checkbox"/>
Sand filters overgrown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chlorination present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
UV present	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Dechlorination present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Overall maintenance of components is: **Fair**

Comments/Status:

Both sand filters were overgrown with weeds.

Sludge Handling/Storage/Disposal

Hauler name: **NWI**
 Sludge wasted from: **Sludge holding tank**
 Sludge drying beds: **No** Sludge holding tank: **Yes**

Overall maintenance of components is: **Fair**

Comments/Status:

Sludge not wasted since April 2009.

Plant Discharge

Discharge point is a: **Ditch**
 Name of discharge point: **Unnamed trib of Boat Run**
 Discharge is visible: **Yes** Quality of Effluent: **Clear**

Comments/Status:

Inspection Findings
(Items for Correction in Bold Type)

EFFLUENT LIMIT VIOLATIONS
(Period of Review: March 2009 – September 2009)

7D = Weekly 30D = Monthly 1D = Daily
Conc. = Concentration (mg/l) Qty. = Quantity (Kg/Day)

Reporting Period	Parameter	Limit Type	Limit	Reported Value
June 2009	Chlorine, Total Residu	1D Conc	0.019	.34
July 2009	Chlorine, Total Residu	1D Conc	0.019	.17
August 2009	Chlorine, Total Residu	1D Conc	0.019	.18

Please be advised that failure to comply with the effluent limitations or to satisfy the monitoring or reporting requirements of your NPDES Permit may be cause for enforcement action pursuant to the Ohio Revised Code Chapter 6111.

At the time of the inspection, the mixed liquor in the aeration basin was black in color with a noticeable amount of white foam. The mixed liquor return was practically clear, indicating a poor settling sludge. Plant maintenance personnel have inspected the plant on days where the entire aeration basin is covered with white foam. Personnel also indicated that the conditions in the aeration tank have persisted for several months.

Bus Washing

During the inspection, it was noted that the bus garage has a washing bay. School district personnel indicated that they wash all 35 buses approximately once per week. On a sunny day, they could wash as many as 10 buses. All of the wash water goes through a sediment trap and then an oil/water separator before being pumped to the wastewater plant. This quantity of wash water is having an effect on wastewater plant.

The school district must drastically reduce the amount of daily bus washing. To start with, the maximum amount of buses washed in one day should be two. At this rate, all the buses would be washed once within a month. The school district should change the bus washing policy immediately and post signs indicating the changes (in the bus garage) so that all personnel are aware.

Once the washing policy is changed, the wastewater treatment plant should be seeded with healthy mixed liquor from a municipal wastewater

treatment works. The school district shall notify Ohio EPA once these two items are completed.

Laboratory Testing

From the appearance of the aeration basin on the day of the inspection and the fact that personnel have observed these conditions for several months, Ohio EPA is surprised that this facility reported effluent data from the WWTW that is mainly in compliance (with exception of chlorine residual) with the NPDES limitations.

For quality assurance purposes, the Monroe Elementary School personnel should run effluent samples to another laboratory (or split samples) for two months to validate this data. Ohio EPA is also requiring that the current laboratory provide 6 months worth of bench sheets to Ohio EPA Southwest District Office no later than December 15, 2009.

Dechlorination

The NPDES permit for the WWTW has a chlorine residual limitation that has been exceeded during the period of review. Currently, the WWTW has a chlorination unit for disinfection but there is no unit to remove the chlorine residual from the treated wastewater. The Monroe Elementary School must complete the following schedule by the associated dates:

- 1. Contract with a professional engineer, licensed in the State of Ohio, to prepare detailed plans for the installation of a dechlorination system or an ultraviolet disinfection system (would take the place of chlorination/dechlorination) for the WWTW by no later than December 15, 2009.**
- 2. Submit approvable detailed plans to Ohio EPA Southwest District Office for the installation of a dechlorination system or an ultraviolet disinfection system by no later than February 1, 2010.**
- 3. Complete the installation of the dechlorination system or ultraviolet disinfection system by no later than April 20th, 2010.**

**Please note that installation of a tablet dechlorinator will probably have less up-front cost, when compared to ultraviolet disinfection. However, UV disinfection removes the need for chemicals on-site and has proven to be more consistent in terms of permit compliance.*

Re-rating the WWTW

During the inspection I explained to Mr. Rob Stropes that the current NPDES permit requires a Class I certified wastewater operator to be the "Operator of Record" for the WWTW (Dennis Feichtner of National Wastewater Industries serves as contract "Operator of Record"). However, the new operator certification rules would allow a lower rating of "Class A" for this facility when the NPDES permit is renewed in September of 2011.

When the NPDES permit is renewed and the WWTW re-classified as Class A, the operator certification rules also require minimum staffing levels of 2 days/week for a total of 1 hour for the operator of record. Currently, Mr. Feichtner only visits the WWTW once/month because these requirements are not in effect. As you can imagine, contracting with an operator to comply with the increased staffing requirements would be much more cost prohibitive when compared to a qualified person(s) on the district custodial/maintenance staff fulfilling these duties. The district should consider allowing Mr. Stropes and/or Mr. Beyer time to acquire their Class A license in preparation for the NPDES renewal requirements in 2011.