



John D. Kasich, Governor
Mary Taylor, Lt. Governor
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Certified Mail 91 7108 2133 3932 1837 9581

August 15, 2013

Mr. Steve Mazzi, Superintendent
Big Walnut Schools
70 Walnut Street
Galena, OH 43021

NOTICE OF VIOLATION

**Re: Hylen Souders Elementary School
NPDES Permit 4PT00125/ OH0136255
Semi-Public CEI
Delaware County**

Dear Mr. Mazzi:

This correspondence serves as **Notice of Violation** for Significant Non-Compliance with the permit limits contained in the NPDES permit issued to the Hylen Souders Elementary School in Delaware County, Ohio.

On August 13, 2013, a Compliance Evaluation Inspection was conducted at the wastewater treatment plant serving the Hylen Souders School. Present for the inspection were Eric Britenstine, contract wastewater treatment plant operator representing the school and myself of the Ohio EPA, Central District Office, Division of Surface Water. The purpose of the inspection was to evaluate the operation and maintenance of the facility and to discuss the plan for returning this facility to compliance.

Findings:

1. **Significant Non-Compliance** - The plant is currently in Significant Non-compliance (SNC) for violations of the suspended solids and E. coli limits contained in the effective NPDES permit. A facility is placed in SNC when limits for conventional parameters are exceeded by 40% in any two months in a six month period. In order to be removed from the SNC list, the permittee must comply with all suspended solids and E. coli limits for three consecutive months. Failure to comply with the terms of conditions of the NPDES and to resolve the violations that led to the placement of this facility in SNC may result in escalated enforcement which can include a monetary penalty.

2. **Sand Filters** - The tertiary sand filters had significant weed growth, primarily moss on the south filter, and a moderate accumulation of solids. These units should be maintained in a weed-free condition since these materials can contribute solids to the effluent as they break down. The operator agreed to have the filters cleaned as soon as possible and maintain them in a weed free condition to resolve suspended solids violations. If this is unsuccessful, he'll explore the possibility of adding additional sand to the filters to improve filtration.

3. **E. coli Violations** – The operator recently modified the flow through the UV unit to increase the detention time and improve compliance with E. coli limits.

Please refer to the Summary of Findings and Comments section of this report for additional information regarding the inspection.

If you have any questions or comments concerning the enclosed inspection report, please contact me at (614) 728-3848 or e-mail at mike.sapp@epa.state.oh.us.

Sincerely



Michael Sapp
Compliance and Enforcement Unit
Division of Surface Water
Central District Office

c: File Copy
Eric Britenstine

ec: Michael Sapp

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PT00125	OH0166255	CEI	S	Semi-Public
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
8/13/2013	9:00 AM	9:25 AM	Yes	Yes

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Hulen Souders Elementary School 4121 Miller Paul Road Harlem Township, Delaware County	8/1/2012
	Permit Expiration Date
	7/31/2017
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Eric Britenstine, Class III Contract Operator	(614) 207-9030
Name and Title of Responsible Official	Phone Number
Steve Mazzi, Superintendent	(740) 965-3200

SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
S	NPDES Compliance	
M	Operations & Maintenance	Improved maintenance required on sand filters
S	Facility Site Review	
S	Collection System	
S	Flow Measurement	
U	Receiving Waters	SNC for E. coli and suspended solids violations
S	Laboratory	

Comments:

Signatures	
 8/27/13	 8/27/13
Michael Sapp, Inspector Compliance & Enforcement Division of Surface Water District Office	Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water District Office

Method of flow monitoring:	Hour meters on tertiary dosing pumps
Type of alarms for plant:	Audible and visual alarms

SECTION D: PRELIMINARY TREATMENT

Type of Preliminary Treatment? Trash Trap			
		Yes	No
Does the unit require pumping or cleaning?		X	<input type="checkbox"/>
Maintenance of preliminary treatment is satisfactory?		X	<input type="checkbox"/>

Comments/Status:

SECTION E: AERATION

Color of MLSS?	Dark Brown			
	Yes	No		
Aeration is taking place	X	<input type="checkbox"/>	Plant is septic	<input type="checkbox"/> X
Blowers are operational	X	<input type="checkbox"/>	Blowers are on a timer	X <input type="checkbox"/>
Skimmers are operational	X	<input type="checkbox"/>	Plant is flooded	<input type="checkbox"/> X
Diffusers are operational	X	<input type="checkbox"/>	Grating is present	X <input type="checkbox"/>
Sludge return is operational	X	<input type="checkbox"/>	Foam present?	<input type="checkbox"/> X
Overall maintenance satisfactory?				X <input type="checkbox"/>

Maintenance of aerating equipment is satisfactory

Comments/Status:

SECTION F: CLARIFIERS

Clarity of water topping weir	Clear			
	Yes	No		
Weir is clean?	X	<input type="checkbox"/>		
Weir is in good condition (i.e., level, free of corrosion, etc.)?	X	<input type="checkbox"/>		
Is effluent present in weir channel?	X	<input type="checkbox"/>		
Is the sludge blanket visible?	<input type="checkbox"/>	X		
Do the clarifier walls need scraping?	<input type="checkbox"/>	X		
Is sludge settling properly?	X	<input type="checkbox"/>		
Overall maintenance of the clarifier is satisfactory?	X	<input type="checkbox"/>		

Comments/Status:

SECTION G: TERTIARY TREATMENT

	Yes	No		Yes	No
Surface sand filters:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Subsurface/Upflow	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Distribution box operational	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
UV present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dechlorination present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Overall maintenance satisfactory?				<input type="checkbox"/>	<input checked="" type="checkbox"/>

Frequency of cleaning: Improved maintenance of sand filters required.
 Fixed media upkeep: fixed media clarification not provided at this facility

Comments/Status:

SECTION H: SLUDGE HANDING / STORAGE DISPOSAL

Sludge is periodically wasted from what component?	Facility does not waste sludge	
Sludge disposal contractor?	No	
Sludge disposal location?	None	
	Yes	No
Does the WWTP have sludge drying beds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the WWTP have a sludge holding tank?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the maintenance on the sludge handling unit adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments/Status:

The plant struggles to maintain adequate solids inventories so no sludge is wasted from plant.

SECTION I: RECORD KEEPING / OPERATOR OF RECORD

	Yes	No
Operator of Record holds unexpired license of class required by Permit?	X	
Has the Operator of Record submitted an ORC Notification form?	X	
Copy of certificate of Operator of Record displayed on-site?*		X
If a Staffing Reduction plan has been approved, are the stipulations of the plan being met?		NA
Operator of Record log book provided?	X	
Minimum operator staffing requirements fulfilled (OAC 3745-7)?	X	
Log book kept onsite (in an area protected from weather)?	X	
Log book contains the following:		
Identification of treatment works	X	
Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7	X	
Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)	X	
Laboratory results (unless documented on bench sheets)	X	
Identification of person making entries	X	
Has the Operator of Record submitted written notifications to the permittee, Ohio EPA and, if applicable, any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred		X
Logbook Format - Unbound folder	Computer log	Bound book

Comments/Status:

The logbook should consist of a bound book so that entries are entered in a sequential manner and can't be added or manipulated subsequent to the original entry.

SECTION J: PLANT DISCHARGE

Discharge point is:	1-2 miles south of the plant
Discharge is visible:	No
Name of discharge point:	Pumped discharge to Duncan Run
Marker present:	Yes
Quality of effluent:	Clear
Contract laboratory:	Advanced Analytical

Comments/Status

Compliance Data for Hylen Souders Elementary School between 6/1/2011 to 7/1/2013

Summary

Permit Effluent Limit Violations: 15
 Permit Effluent Code Violations: 0
 Permit Effluent Frequency Violations: 30
 Compliance Schedule Violations: 0

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2012	001	Nitrogen, Ammonia (NH3)	30D Conc	3.0	3.32	1/1/2012
August 2012	001	E. coli	30D Conc	161	180.	8/1/2012
October 2012	001	E. coli	30D Conc	161	210.	10/1/2012
January 2013	001	Total Suspended Solids	30D Conc	12	14.	1/1/2013
February 2013	001	Total Suspended Solids	30D Conc	12	15.	2/1/2013
February 2013	001	Nitrogen, Ammonia (NH3)	30D Conc	3.0	8.23	2/1/2013
February 2013	001	Nitrogen, Ammonia (NH3)	30D Qty	0.14	.21615	2/1/2013
February 2013	001	Nitrogen, Ammonia (NH3)	7D Conc	4.5	8.23	2/22/2013
February 2013	001	Nitrogen, Ammonia (NH3)	7D Qty	0.20	.21615	2/22/2013
May 2013	001	Total Suspended Solids	30D Conc	12	22.	5/1/2013
May 2013	001	Nitrogen, Ammonia (NH3)	30D Conc	1.0	1.21	5/1/2013
May 2013	001	E. coli	30D Conc	161	1100.	5/1/2013
June 2013	001	Total Suspended Solids	30D Conc	12	17.	6/1/2013
June 2013	001	E. coli	30D Conc	161	380.	6/1/2013
June 2013	001	E. coli	7D Conc	362	380.	6/22/2013

Frequency Violations						
Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
June 2011	001	Color, Severity	1/Day	1	0	6/2/2011
June 2011	001	Odor, Severity	1/Day	1	0	6/2/2011
June 2011	001	Turbidity, Severity	1/Day	1	0	6/2/2011
June 2011	001	Color, Severity	1/Day	1	0	6/7/2011
June 2011	001	Odor, Severity	1/Day	1	0	6/7/2011
June 2011	001	Turbidity, Severity	1/Day	1	0	6/7/2011
June 2011	001	Turbidity, Severity	1/Day	1	0	6/9/2011
June 2011	001	Color, Severity	1/Day	1	0	6/16/2011
June 2011	001	Odor, Severity	1/Day	1	0	6/16/2011
June 2011	001	Turbidity, Severity	1/Day	1	0	6/16/2011

November 2011	001	Fecal Coliform	1/Month	1	0	11/1/2011
November 2011	001	Chlorine, Total Residu	1/2Weeks	1	0	11/1/2011
November 2011	001	Chlorine, Total Residu	1/2Weeks	1	0	11/15/2011
April 2012	001	Color, Severity	1/Day	1	0	4/19/2012
April 2012	001	Odor, Severity	1/Day	1	0	4/19/2012
April 2012	001	Turbidity, Severity	1/Day	1	0	4/19/2012
May 2012	001	Color, Severity	1/Day	1	0	5/1/2012
May 2012	001	Odor, Severity	1/Day	1	0	5/1/2012
May 2012	001	Turbidity, Severity	1/Day	1	0	5/1/2012
May 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	5/1/2012
May 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	5/15/2012
May 2012	001	Color, Severity	1/Day	1	0	5/29/2012
May 2012	001	Odor, Severity	1/Day	1	0	5/29/2012
May 2012	001	Turbidity, Severity	1/Day	1	0	5/29/2012
June 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	6/1/2012
June 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	6/15/2012
July 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	7/1/2012
July 2012	001	Chlorine, Total Residu	1/2Weeks	1	0	7/15/2012
June 2013	001	Water Temperature	1/Week	1	0	6/22/2013
June 2013	001	Dissolved Oxygen	1/Week	1	0	6/22/2013

Flow Data for Hylen Souders Elementary School between 6/1/2011 and 7/1/2013

	Date	Flows (GPD)
Ten Highest Flows	12/5/2011	14745
	1/30/2013	12410
	10/19/2011	10925
	10/20/2011	10925
	11/19/2012	9341
	11/20/2012	9341
	11/28/2011	9157
	11/29/2011	9157
	1/16/2012	8457
	1/17/2012	8457
Average Flow Rate		2403

ADDITIONAL INFORMATION

Helen Souders WWTP
4PT000125 – OH0136255

General

The wastewater treatment plant serving the Helen Souders Elementary School has a design treatment capacity of 12,000 gpd with discharge to Duncan Run. Wet stream process provided at the facility include a trash trap, extended aeration, clarification, tertiary dosing tank, tertiary sand filtration, and ultraviolet disinfection. Plant effluent is pumped south to Duncan Run through a pump station and force main. Solids removed from the sand filters are disposed of in a dumpster.

1. Since the previous inspection was performed in June 2011 the plant operator installed time elapsed meters on the tertiary dosing pumps for flow estimation. The average daily flow is 2403 gpd. Peak flows as high as 14,745 gpd are experienced during heavy rain events. The operator suspects that the vitrified clay line from the school to the plant is the primary source of infiltration.
2. The trash trap is now being pumped out once a year.
3. Both aeration blowers were functional at the time of the inspection; however, the operator indicated that one blower is not sufficient to operate both return activated sludge lines. During the previous inspection, we discussed shutting off the skimmer to see if enough additional air could be recovered to operate both returns. The operator agreed to explore this possibility and only operate the skimmer when he is present at the plant.
4. Eric Britenstine indicated that no sludge has been hauled or wasted since he took over operation of the plant. In fact, the operator has attempted to build solids inventories in the plant by adding commercially available seed with limited success. In February 2013, the operator hauled approximately 2000 gallons of MLSS from the Croton WWTP which has helped to maintain solids inventories through the summer. The operator attributed the improved compliance with ammonia limits to the seeding performed in February 2013.
5. The waste activated sludge line to the sludge holding tank was clogged and capped-off which impaired the operator's ability to waste sludge. This line should be unclogged and remain functional at all times.
6. At the time of the inspection, the tertiary sand filters had significant weed growth, primarily moss on the south filter, and a moderate accumulation of solids. These units should be maintained in a weed-free condition since these materials can contribute solids to the effluent as the break down. The operator agreed to have the filters cleaned as soon as possible and maintain them in a weed free condition to resolve suspended solids violations. If this is unsuccessful, he'll explore the

possibility of adding additional sand to the filters to improve filtration.

7. Eric Britenstine, a class III operator, is the operator of record for this facility. Eric has been the operator of record since June 2009 and he visits the plant three times a week.
8. The operator mistakenly analyzed effluent samples for fecal coliform instead of E. coli in July 2013. The operator slowed the flow through the ultraviolet disinfection unit to improve the detention time and improve compliance with E. coli limits.
9. Please be advised that Part III-12 of your effective NPDES permit requires that you submit an email or a letter of explanation outlining the actions you have taken or are taking to correct certain instances of non-compliance. Please ensure that you provide an explanation for the all future violations and a description of the corrective actions taken or proposed to resolve future violations.
10. The operator logbook consisted of a folder with loose leafed sheets. The sheets appeared to contain all of the required documentation but the logbook should consist of a bound book so that entries are entered in a sequential manner and can't be added or manipulated subsequent to the original entry.

