



**Environmental  
Protection Agency**

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

March 23, 2012

Ms. Lori Lytle, Superintendent  
Benjamin Logan School District  
44740 County Road 26  
Bellefontaine, Ohio 43311

**RE: Benjamin Logan School District Reconnaissance Inspection/Notice of Violation.**

Dear Ms. Lytle:

On March 8, 2012, Joe Reynolds of the Ohio EPA Southwest District Office conducted a Reconnaissance Inspection at the Benjamin Logan schools' wastewater treatment plant, 4626 County Road 26, Bellefontaine, Ohio.

The inspection was conducted as part of the National Pollutant Discharge Elimination System (NPDES) permit renewal process for the school. The findings from the inspection are included in the attached report. The report includes two items that require a response. Please provide a written response by the dates noted.

If you have any questions regarding the report, please contact Mr. Joe Reynolds at (937) 285-6097.

Sincerely,

Martyn Burt  
Compliance Supervisor  
Division of Surface Water

MB/ca

Enclosure

cc: Dan Defibaugh, Benjamin Logan School District



State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

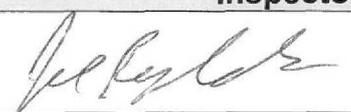
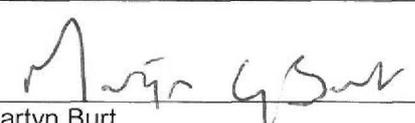
Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PZ00023*DD	OH0108944	3/08/2012	R	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Benjamin Logan School District 4740 County Road 26 Bellefontaine, Ohio 43311	9:30AM	6/1/2007
	Exit Time	Permit Expiration Date
	12:00PM	5/31/2012
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Dan Defibaugh, Bldg. & grounds Supervisor	(937) 593 - 9211 (ext. 1011)	
Name, Address and Title of Responsible Official	Phone Number	
Benjamin Logan School District 4626 County Road 26 Bellefontaine, Ohio 43311	(937) 593 - 9211	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
M	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	N	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
M	Collection System				

**Section D: Summary of Findings (Attach additional sheets if necessary)**

See attached report.

Inspector	Reviewer
 Joe Reynolds Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
3/23/12 Date	3/23/12 Date

## Benjamin Logan School Inspection Findings

On March 8, 2012 a Reconnaissance inspection was conducted at the Benjamin Logan School District waste water treatment plant. The system is located at 4740 County Road 26, Bellefontaine. The inspection was conducted as part of the National Pollutant Discharge Elimination System (NPDES) permit renewal process for the school.

NPDES permit number 1PZ00023\*DD was issued to the school on April 18, 2007. This permit expires on May 31, 2012. An NPDES permit renewal application was not submitted 6 months prior to its expiration.

As part of the NPDES permit renewal a schedule will be added to allow time for the school to meet new Escherichia Coli limits.

The schools treatment system consist of a trash trap, two parallel aeration systems, two clarifiers, fixed media filters, effluent holding tank, slow surface sand filters, and a chlorination / dechlorination / post aeration tank. There are four drying beds available for sludge dewatering.

The Operator of Record, Dan Defibaugh has enacted several operational changes that have improved plant performance significantly. Mr. Defibaugh uses a centrifuge to determine solids concentrations in the various treatment units. This information is used as part of his solids return / wasting schedule. Additionally, Mr. Defibaugh is using an ammonia test kit to determine ammonia levels in the various treatment units. This information also is used as part of the solids management at the plant.

Recent upgrades to the system include: the replacement of both pumps in the lift station (including the guide rails and hoist chains), the installation of a new blower on both of the plants, and replacement of the sand in both slow surface sand filters. The sand change caused some suspended solids violations in January of this year. The old sand was placed on the ground by the filters. New grates were added to certain locations of both plants.

Infiltration and inflow (I/I), and weekend sports events have contributed to peak flows. The collection system was televised and some cracked pipe was identified and replaced. No cross connections were found. All of the manholes have been repaired. Additional TV is scheduled. Mr. Defibaugh has been able to eliminate violations associated with peak flows through a proactive solids control program.

## Benjamin Logan School Inspection Findings (cont.)

The school uses four sludge drying beds to dewater waste solids. A new portable polymer feed system is being used to improve drying bed solids concentrations. Drying bed solids are placed in a dumpster for disposal at a solid waste landfill. Trash trap solids and liquid sludge is being hauled to the Indian Lake WWTP. As part of the NPDES renewal a new sludge station 588 will be added to the permit. This station can be used to document when sludge is disposed at another permitted entities facility.

A back-up power supply has been identified at J. D. Generator out of Columbus. They will be able to provide back-up power within one half an hour. An electrical hook-up for the generator will be installed this summer.

Mr. Defibaugh plans on replacing the aeration air lines this summer. He plans on installing them above ground. The existing lines will be abandoned in place. I told him that because this is a like for like replacement no Permit to Install will be required. He will send a letter to document the change out when it is completed.

In accordance with Ohio Revised Code 3745-7-09, "Recordkeeping requirements and responsibilities of a certified operator", Mr. Defibaugh has begun to keep an operator's log book. As part of the daily log the time spent at the plant should be documented (sign in and out). All entries should be initialed.

The school now has a new Superintendent Ms. Lori Lytle.

From April, 2010 through December, 2011 Benjamin Logan Schools reported the following effluent violations: CBOD5 (9 violations), ammonia (20 violations), pH (1 violation), and suspended solids (4 violations). After implementing the new operational oversight practices in the summer of 2011 there were no effluent violations from June through December 2011.

All flow from the elementary, middle, and high school travel by gravity to a trash trap located at the head of the treatment plant. The trash trap is approximately 15,000 gallons.

From the trash trap flow enters the main plant lift station. The lift station pumps influent to a splitter box which divides flow between the two aeration plants. The splitter box also returns a percentage of flow to a common equalization tank.

## Plant Inspection

The newer aeration tank had some uneven mixing. New distribution and diffuser piping is needed. The blower was operating at the time of the inspection. The mixed liquor was chocolate brown. The same observations were noted on the older plant.

There were a few grease particles on the surface of the clarifiers. The effluent weir on the newer plant needs level adjustment. The effluent from both final clarifiers appeared clear (no pin floc solids leaving the tanks)

The effluent from the newer plant goes to an up flow filter. There were some fine solids on the top of part of the filter. The filter was relatively clean, no solids growth. In the summer the filter is flushed once per month. From the filter flows enter the holding tank where it combines with flow from the old plant prior to pumping to the sand filters.

One of two tertiary sand filters was on line. The filter on line had recently been dosed. The filter will reportedly drain in approximately 4 minutes. Some minor solids were noted on the surface.

From the tertiary sand filters flow enters the chlorination / dechlorination / post aeration tank. The chlorination / dechlorination tanks are flow though at this time of year. Chlorine season does not begin until May first. The post aeration is run year round.

The treatment system discharges to an unnamed tributary of Mill Creek. The final effluent was clear. There were no visible solids in the creek.

## Items Requiring a Response

1. A brief summary report detailing the infiltration and inflow work planned for the summer of 2012 must be submitted to me by no later than April 30, 2012."
2. The old sand from the tertiary sand filters needs to be disposed at an approved solid waste landfill.