



Environmental  
Protection Agency

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

May 23, 2011

Mr. Stanley Mounts, Superintendent  
Benjamin Logan School District  
4626 County Road 26  
Bellefontaine, Ohio 43311

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

Dear Mr. Mounts:

On May 17, 2011, Joe Reynolds, Ohio EPA Southwest District Office conducted a Reconnaissance Inspection at the Benjamin Logan schools waste water treatment plant, 4626 County Road 26, Bellefontaine.

The inspection was conducted as part of a review of the schools compliance status with respect to its National Pollutant Discharge Elimination System (NPDES) permit. The findings from the inspection are included in the attached report. The report includes a summary of final effluent violations. Required notification of the violations has been provided. There are five 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

Enclosure

CC: Dan Defibaugh, Benjamin Logan School District



State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

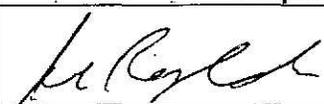
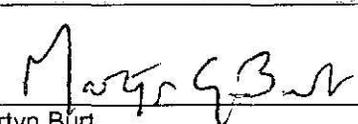
Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PZ00023*DD	OH0108944	5/17/2011	R	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Benjamin Logan School District 4626 County Road 26 Bellefontaine, Ohio 43311	10:00AM	6/1/2007
	Exit Time	Permit Expiration Date
	12:20PM	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)					
S	Permit	S	Flow Measurement	N	Pretreatment
M	Records/Reports	N	Laboratory	N	Compliance Schedule
M	Operations & Maintenance	U	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
 Date: 5/23/2011	 Date: 5/23/2011
Joe Reynolds Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

## Benjamin Logan School Inspection Findings

An inspection of the waste water treatment plant at Benjamin Logan Schools was conducted on May 6, 2011. The inspection was conducted as part of the compliance review 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 will need to be submitted 6 months prior to its expiration.

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.

Some treatment issues at the plant have included flow surges due to infiltration and flow (storm and ground water that enters the system), aeration blower failures, lift station pump failures, a transformer failure on the old plant, and clogging of the sand in the tertiary sand filters.

In response to these treatment issues, the school replaced both pumps in the lift station this year (including the guide rails and hoist chains). A new blower was installed on the old plant (20 years old) and a second blower is on-site awaiting favorable weather for installation. All three blowers on the newer plant (15 years old) are scheduled for replacement this year. The sand in the tertiary filters is 20 years old. It is scheduled for replacement this summer.

Infiltration and inflow (I/I) into the system has impacted plant flows. Dry weather flows are around 15,000 to 17,000 gpd. Flows will double during wet weather. Saturated ground (due to heavy rain this spring) has helped to identify sources of I/I. Three manholes have been identified as major sources of I/I. When wet weather flows subside all three manholes will be replaced. Collection system repairs will begin this summer when school lets out.

An Operator of Record form will need to be completed and returned to this office by the plant operator. A copy of the form was provided during the inspection.

## Benjamin Logan School Inspection Findings (cont.)

In accordance with Ohio Revised Code 3745-7-09, "Recordkeeping requirements and responsibilities of a certified operator", an operator's log book must be maintained on-site at the plant.

During the inspection a question was raised concerning the minimum staffing requirements for the plant when the Operator of Record is on vacation, etc. At a minimum the plant must be staffed 3 days per week for a total of 1.5 hours per week. A back-up Class I operator must oversee plant operations when the Operator of Record is on vacation, etc.

Trash trap solids are being hauled to the Indian Lake WWTP. Drying bed solids are placed in a dumpster for disposal at a solid waste landfill.

From January 1, 2010 through March 31, 2011 Benjamin Logan Schools reported the following effluent violations: CBOD5 (8 violations), ammonia (12 violations), pH (1 violation), and suspended solids (4 violations). The frequency and type of violations were enough to place the school in significant non-compliance.

### Plant Inspection

All flow from the elementary, middle and high schools flow 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.

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 and return was thin. The same observations were noted on the older plant.

Both clarifiers had minimal solids in them. A few clumps of solids were noted on the clarifier surface. The effluent appeared clear (no pin floc solids leaving the tanks).

## Plant Inspection (cont.)

The effluent from the newer plant goes to an up flow filter. There have been problems with algae growth on this filter. The filter was relatively clear of growth the day of the inspection. From the filter flows enter the holding tank where it combines with flow from the old plant prior to pumping to the sand filters.

The tertiary sand filters were relatively clean, minor areas of solids. There were a few areas of ponded water. The filters were drained.

From the tertiary sand filters flow enters the chlorination / dechlorination / post aeration tank. All units were in service at the time of the inspection.

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

There currently is no source of back-up power available for the plant. The addition of a power inlet which would allow for connection to a portable generator was discussed.

## Items Requiring a Response

1. A brief summary report detailing the infiltration and inflow work completed this summer must be submitted by no later than August 1, 2011.
2. A complete operator of record form must be submitted to this office by no later than June 17, 2011.
3. In accordance with ORC 3745-7-09, an operator log book will need to be maintained on-site. Written verification as to the initiation of this record keeping must be provided by June 17, 2011.
4. Written verification as to the completion of the blower replacement and all aeration distribution system work must be provided by no later than August 1, 2011.
5. A source of back-up power must be available for periods when the school is without power. A brief report detailing how this requirement will be met must be submitted to this office by August 1, 2011.

