

**Environmental  
Protection Agency**

**Governor  
Lt. Governor  
Director**

October 4, 2012

Thomas Hopper, Mayor  
Galena WWTP  
79 West Columbus Street  
Galena, OH 43021

Re: **Galena WWTP**  
NPDES Permit 4PB00110/ OH0214171  
Compliance Evaluation Inspection  
**Delaware County**  
**Notice of Violation**

Dear Mr. Hopper:

This correspondence serves as Notice of Violation for Significant Non-Compliance with NPDES permit limits at the Village of Galena Wastewater Treatment Plant in Delaware County.

On September 18, 2012, a Compliance Evaluation Inspection was conducted at the plant to evaluate the status of efforts to return to compliance with effluent limits for phosphorus and to discuss the consequences of being on the SNC list. Present for the inspection were Jason Watts, contract wastewater treatment plant operator, representing the Village of Galena and myself of the Ohio EPA, Central District Office, Division of Surface Water.

This facility had been in Significant Non-Compliance since June 2012 for exceedances of effluent limits for phosphorus. In order to be removed from the SNC list it will be necessary to maintain compliance with all phosphorus effluent limits for three successive months. Please be advised that facility will be prioritized for enforcement action if it fails to achieve compliance with phosphorus limits and remains on the SNC list.

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.ohio.gov](mailto:mike.sapp@epa.ohio.gov).

Sincerely



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

c: File Copy  
Jason Watts w/attachments (899 Wallace Drive Delaware OH 43015)  
ec: Michael Sapp

MS/slw Galena12

**Central District Office**  
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**NPDES Compliance Inspection Report**

SECTION 2: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PB00106	OH0114171	CEI	S	Public
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
9/18/2012	12:50 PM	1:40 PM	Yes	Yes

SECTION 3: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Galena WWT 188 Harrison Street Galena, Ohio 43021	5/1/2011
	Permit Expiration Date
	4/30/2016
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Jason Watts, Contract Operator	(740) 513-9943
Name and Title of Responsible Official	Phone Number
Thomas Hopper, Mayor	(740) 965-2484

SECTION 3: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
U	NPDES Compliance	Significant Non-compliance with phosphorus limits
S	Operations & Maintenance	
S	Facility Site Review	
S	Collection System	
S	Flow Measurement	
S	Receiving Waters	
S	Laboratory	

Comments:

Signatures	
	
Michael Sapp, Inspector Compliance & Enforcement Division of Surface Water Central District Office	Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water Central District Office
Date: 10/11/12	Date: 10/12/12

**SECTION D: PERMIT VERIFICATION**

- (a) Correct name and mailing address of permittee ..... Y
- (b) Correct name and location of receiving waters ..... Y
- (c) Products and production rates conform with permit application ..... Y
- (d) Flows and loadings conform with NPDES permit ..... Y\*
- (e) Treatment processes are as described in permit application ..... Y
- (f) New treatment process added since last inspection ..... N\*
- (g) Notification given to State of new, different or increased discharges ..... NA
- (h) All discharges are permitted ..... Y
- (i) Number and location of discharge points are as described in permit ..... Y

Comments:

**SECTION E: COMPLIANCE**

- (a) Any significant violations since the last inspection ..... Y\*
- (b) Permittee is taking actions to resolve violations ..... Y\*
- (c) Permittee has a compliance schedule ..... N
- (d) Permittee is meeting compliance schedule ..... NA

Comments:

**SECTION F: OPERATION AND MAINTENANCE**

- (a) Standby power available ..... N\*  
If yes, what type?
- (b) Adequate alarm system available for power or equipment failures ..... Y\*
- (c) All treatment units in service other than backup units ..... Y
- (d) Wastewater Treatment Works classification ..... I
- (e) Operator of Record holds unexpired license of class required by Permit .. Y  
Class held: Class III
- (f) Copy of certificate of Operator of Record displayed on-site ..... N
- (g) Minimum operator staffing requirements fulfilled ..... Y\*
- (h) Routine and preventative maintenance scheduled and performed ..... Y
- (i) Any major equipment breakdown since last inspection ..... N
- (j) Operation and maintenance manual provided and maintained ..... Y
- (k) Any plant bypasses since last inspection ..... N
- (l) Regulatory agency notified of bypasses ..... NA  
By MOR  and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic or organic overloads since last inspection ..... Y\*

Comments:

**SECTION G: RECORD KEEPING**

- a) Log book provided ..... Y
- b) Format of log book (i.e. computer log, hard bound book)  
bound book  
Log book(s) kept onsite in an area protected from weather..... Y
- c) Log book contains the following:
  - i) Identification of treatment works ..... Y
  - ii) Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7 ..... Y
  - iii) Daily record of operation and maintenance activities (including preventative maintenance, repairs and requests for repairs) ..... Y
  - iv) Laboratory results (unless documented on bench sheets) ..... Y
  - v) Identification of person making log entries ..... Y
- d) Has the Operator of Record submitted written notification to the permittee, Ohio EPA and any applicable local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred?.... Y

Comments:

**SECTION H: COLLECTION SYSTEM**

- a) Percent combined system: ..... 0%
- b) Any collection system overflows since last inspection ..... N  
CSO  SSO
- c) Regulatory agency notified of overflows ..... NA
- d) CSO O&M plan provided and implemented..... NA
- e) CSOs monitored and reported in accordance with permit ..... NA
- f) Portable pumps are used to relieve system..... N
- g) Lift station alarms provided and maintained ..... Y\*
- h) Lift stations equipped with permanent standby power or equivalent ..... N\*
- i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... N
- j) Any complaints received since last inspection of basement flooding ..... N
- k) Are any portions of the sewer system at or near capacity ..... N
- l) Are operations changed during high-flow events?..... Y\*

Comments:

**SECTION I: SLUDGE MANAGEMENT**

- a) Sludge management plan (SMP) last audited by Ohio EPA:  
Audit Date: unknown
- b) Sludge adequately disposed ..... Y  
Method
- c) If sludge is incinerated, where is ash disposed of ..... N
- d) Is sludge disposal contracted ..... N  
Name:
- e) Has amount of sludge generated changed significantly ..... N
- f) Adequate sludge storage provided at plant ..... Y\*
- g) Records kept in accordance with State and Federal law ..... Y
- h) Any complaints received (as yes) regarding sludge ..... N
- i) Is sludge adequately processed (digestion, pathogen control) ..... Y

Comments:

**SECTION J: SELF-MONITORING PROGRAM**

- a) Primary flow measuring device operated and maintained ..... Y\*  
Type of device: ultrasonic Device location: effluent weir
- b) Calibration frequency adequate ..... Y\*  
Date of last calibration: annual calibration
- c) Secondary instruments operated and maintained ..... Y
- d) Flow measurements equipment adequate to handle full range of flows .... Y
- e) Actual flow discharged is measured ..... Y
- f) Flow measuring equipment inspection frequency: weekly
- g) Sampling location(s) are as specified by permit ..... Y\*
- h) Parameters and sampling frequency agree with permit ..... Y
- i) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e. continuous monitoring instrumentation, calibration and maintenance records) ..... Y

Comments:

**SECTION K: Laboratory**

- a) EPA applicable analytical testing procedures used (40 CFR 136.3) ..... Y
- b) If alternate procedures are used, are they properly approved? ..... NA
- c) Analysis performed more frequently ..... N  
     If yes, are results recorded in permittee's report? ..... NA
- d) Commercial laboratory used:  
     Name: MASI  
     Parameters analyzed: all parameters except DO, pH and temperature
- e) Quality assurance manual provided and maintained ..... Y
- f) Calibration and maintenance of instruments is satisfactory? ..... Y
- g) Results of test U.S. EPA quality assurance ..... NA  
     Date:

Comments:

**SECTION L: EFFLUENT/RECEIVING WATER OBSERVATIONS**

Outfall Number	Outfall sign in place	Oil Sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	Yes	No	No	No	No	No	Clear	

Comments:

**SECTION M: MULTIMEDIA OBSERVATIONS**

- a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- b) Do you notice staining or discoloration of soils, pavement or rocks ..... N
- c) Do you notice distressed (unhealthy, discolored, dead) vegetation..... N
- d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- e) Do you notice any unusual odors or strong chemical smells..... N
- f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities ..... N

If any of the above are observed, ask the following questions:

- 1) What is the cause of the condition?
- 2) Is the observed condition or source a waste product?
- 3) Where is the suspected contaminant normally disposed?
- 4) Is this disposal permitted?
- 5) How long has the condition existed and when did it begin?

Comments:

**ADDITIONAL INFORMATION**  
**Galena Wastewater Treatment Plant**  
**4PB00106 – OH0114171**

**General**

The Galena Wastewater Treatment Plant has a design treatment capacity of 75,000 gpd with a direct discharge to Big Walnut Creek. WWT stream processes provided at the facility include a trash trap, flow equalization basin, conventional activated sludge, secondary clarification, fixed media clarification and chemical addition for nutrient removal, tertiary sand filtration, ultraviolet disinfection, and post aeration. Solids handling consists of aerobic digestion, thickening and hauling to another POTW for disposal.

**Section D - Permit Verification**

- (d.) The average daily flow at outfall 001, for the time period between January 2011 – August 2012, was approximately 55,000 gpd. The peak daily flow during this period was 194,000 gpd which occurred in February 2011.
- (f.) No new treatment processes have been installed; however, the plant recently installed timers on the aeration blowers. A sludge dewatering roll-off was also installed since the last inspection.

**Section E. - Compliance Schedule Violations**

- (a.) Several NPDES permit violations have been reported since the last inspection was performed in February 2011. These violations are included in the attached table. The frequency and magnitude of phosphorus violations has resulted in the placement of this facility on the Significant Non-Compliance List.
- (b.) The facility modified the chemical feed system from aluminum sulfate to sodium aluminate in July 2012 to help facilities compliance with phosphorus limits. The new chemical is not expected to affect the pH like aluminum sulfate which should help to maintain higher alkalinity levels.

**Section F. - Operation and Maintenance**

- (a.) The plant is not currently equipped with back-up power. Galena recently applied for a grant through OPWC to purchase a generator but was not successfully funded.
- (b.) The plant installed a new SCADA system as part of the recent electrical upgrades.

- (g.) Jason Watts is at the plant five days a week.
- (m.) The plant operator indicated that the influent ammonia concentrations (42 mg/L average) are higher than what might be expected from domestic sewage.

#### Section H. Collection System

- (g.) There are 4 lift stations in the collection system served by the Galena plant. All of the lift stations are equipped with audible/visual alarms and autodialers.
- (h.) None of the four lift stations are equipped with permanent back-up power.
- (l.) During extremely high flow events (rain events in excess of 2") the previous operator would shut-off the aeration blowers to retain solids in the plant.

#### Section I. - Sludge Management

- (f.) The amount of sewage sludge generated at the plant has not changed since the last inspection. Liquid sludge is hauled to the City of Delaware for further processing and disposal. The facility will begin hauling dewatered sludge cake directly to the landfill now that the dewatering dumpster has been placed into operation.

#### Section J. - Self Monitoring Program

- (a.) Effluent flows are measured with an ultrasonic unit and v-notch weir. Influent flows are not measured.
- (b.) Periodic internal calibrations of the effluent flow meter are performed using a depth measurement on the weir and a calibrated chart for the weir.
- (g.) The effluent sampler collects time-weighted composite samples. Sample aliquots are collected once every hour. Please be advised that the current NPDES permit requires that a flow weighted composite sample be analyzed. The operator will evaluate changing over to a flow weighted composite sample.

#### Section K. - Laboratory

- (d.) MASI Labs performs analyses for all permitted parameters except dissolved oxygen, temperature and pH. Calibration was satisfactory for both the pH and dissolved oxygen meters.

## SUMMARY OF FINDINGS AND COMMENTS Olentangy Environmental Control Center

1. At the time of the inspection, the following general observations were made regarding the operation and maintenance practices of the plant:
  - The trash trap is generally pumped out twice a year, it was pumped most recently in May 2012.
  - The plant operator performs 30-minute settleability tests twice a week to dictate wasting. In general, 2000 gallons are wasted twice a week.
  - The fixed media clarifiers are hosed down once a week.
  - The operator recently fixed the decant tube in the digester so he can waste thickened sludge to the dewatering roll off.
  - The effluent weirs on the clarifiers appeared to have excessive algae growth. I would recommend that these be scraped and cleaned periodically to maintain proper hydraulics in the clarifier and to preclude solids carryover to downstream units.
  - The operator utilizes a Hach test kit to perform internal checks for phosphorus.
  - The aeration blowers are on for four hours followed by a two hour off cycle. Supplemental alkalinity is no longer being added at the plant.
  
2. This facility had been in Significant Non-Compliance since June 2012 for exceedances of phosphorus limits. In order to be removed from the SNC list it will be necessary to maintain compliance with all phosphorus effluent limits for three successive months. At the time of the inspection, the plant operator was confident that the recent switch to sodium aluminate will facilitate consistent compliance with phosphorus limits. Please be advised that facility will be prioritized for enforcement action if it fails to achieve compliance with phosphorus limits and remains on the SNC list.

## Compliance Data for Galena WTP between 1/1/2011 to 8/30/2012

### Summary

Permit Effluent Limit Violations: 23

Permit Effluent Code Violations: 0

Permit Effluent Frequency Violations: \* 27

Compliance Schedule Violations: 0

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	4.5	5.1	2/1/2011
February 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	1.28	1.58289	2/1/2011
April 2011	001	CBOD 5 day	7D Qty	4.26	5.38327	4/1/2011
May 2011	001	E. coli	7D Conc	284	850.	5/8/2011
May 2011	001	E. coli	7D Conc	284	700.	5/15/2011
May 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	0.43	.52338	5/22/2011
June 2011	001	Nitrogen, Ammonia (NH3)	30D Conc	1.0	9.825	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	20.8	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	30D Qty	0.28	1.26031	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	0.43	3.04087	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	18.9	6/8/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	0.43	1.99149	6/8/2011
May 2012	001	Phosphorus, Total (P)	30D Conc	1.0	3.08	5/1/2012
May 2012	001	Phosphorus, Total (P)	30D Qty	0.28	.74125	5/1/2012
May 2012	001	Phosphorus, Total (P)	7D Conc	1.5	3.08	5/6/2012
May 2012	001	Phosphorus, Total (P)	7D Qty	0.43	.74125	5/8/2012
June 2012	001	Phosphorus, Total (P)	30D Conc	1.0	3.08	6/1/2012
June 2012	001	Phosphorus, Total (P)	7D Conc	1.5	2.5	6/1/2012
June 2012	001	Phosphorus, Total (P)	30D Qty	0.28	.34173	6/1/2012
June 2012	001	Phosphorus, Total (P)	7D Conc	1.5	3.54	6/15/2012
June 2012	001	pH	1D Conc	6.5	6.42	6/25/2012
July 2012	001	pH	1D Conc	6.5	6.38	7/13/2012
July 2012	001	pH	1D Conc	6.5	6.26	7/30/2012
August 2012	001	Phosphorus, Total (P)	7D Conc	1.5	3.08	8/8/2012

Flow Data for Galena WWTP between 1/1/2011 and 9/30/2012

	Date	Flows (MGD)
Ten Highest Flows	2/26/2011	0.194
	2/25/2011	0.178
	4/6/2011	0.158
	2/28/2011	0.155
	5/24/2011	0.148
	12/21/2011	0.142
	7/25/2011	0.138
	2/22/2011	0.136
	3/2/2011	0.130
	3/9/2012	0.130
	<b>Average Flow Rate</b>	<b>0.055</b>