



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

November 15, 2012

Sandy Ackerman, Mayor
Edison WWTP
321 Hill Street
Edison, OH 43320

Re: **Edison WWTP**
NPDES Permit 4PA00000/ OH0101761
Compliance Evaluation Inspection
Morrow County

Dear Mayor Ackerman:

On November 1, 2012, a Compliance Evaluation Inspection was conducted at the Edison WWTP. Present for the inspection were Wes Craft, contract operator with McGhees Technical Services representing the Village of Edison and myself of the Ohio EPA, Central District Office, Division of Surface Water.

The purpose of the inspection was to evaluate compliance with the terms and conditions of your NPDES permit and to evaluate the operation and maintenance of the plant. The inspection raised several concerns which must be addressed in the following areas:

Outfall Signage - In accordance with Part II. O. (page 10) of the effective NPDES permit a sign identifying the location of the outfall 001 discharge to Whetstone Creek was required to be installed no later than November 1, 2008. Please have the sign installed no later than 30 days following the receipt of this correspondence.

Reporting Stream Flows at Outfall 801 – Stream flows at outfall 801 are being reported incorrectly. The facility has been reporting effluent weir overflow elevations instead of stream flows. Please resubmit the flow data for Outfall 801 for April 2012 and any other months in which the data is determined to be incorrect.

Please refer to the Summary of Findings and Comments section of this report for more details on these concerns.

Sandy Ackerman, Mayor
Edison WWTP
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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.

Sincerely

A handwritten signature in black ink, appearing to read "Michael Sapp", written in a cursive style.

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

ec: Mike Sapp

MS/nsm Edison WWTP

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PA00000	OH0101761	CEI	S	Public
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
11/1/2012	9:30 AM		No	No

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Edison WWTP County Road 9 Edison, Ohio 43320	7/1/2008
	Permit Expiration Date
	6/30/2013
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Wes Craft, Contract Operator	(419) 565-8974
Name and Title of Responsible Official	Phone Number
Sandy Ackerman, Mayor	(419) 946-7645

SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
M	NPDES Compliance	Absence of outfall signage
S	Operations & Maintenance	
S	Facility Site Review	
S	Collection System	
S	Flow Measurement	
S	Receiving Waters	
S	Laboratory	

Comments:

Signatures	
 11/0/12	 11/9/12
Mike Sapp, Inspector Date Compliance & Enforcement Division of Surface Water Central District Office	Erin Sherer, Reviewer Date Compliance & Enforcement Supervisor Division of Surface Water Central District Office

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 Y
- (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 N*
- (b) Permittee is taking actions to resolve violations NA
- (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 NA
- (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: III
- (f) Copy of certificate of Operator of Record displayed on-site NA
- (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 N

Comments:

SECTION G: RECORD KEEPING

- a) Log book provided..... Y
- b) Format of log book (i.e. computer log, hard bound book)
book
- c) Log book(s) kept onsite in an area protected from weather..... Y
- d) 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 request for repairs) Y
 - iv) Laboratory results (unless documented on bench sheets)..... Y
 - v) Identification of person making log entries Y
- e) 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..... Y
CSO SSO
- c) Regulatory agency notified of overflows Y
- 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 Y*
- i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... Y
- 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?..... N

Comments:

SECTION I: SLUDGE MANAGEMENT

- a) Sludge management plan (SMP) last audited by Ohio EPA:
Audit Date: no audits performed since installation *
- b) Sludge adequately disposed NA
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 NA
- g) Records kept in accordance with State and Federal law NA
- h) Any complaints received last year regarding sludge N
- i) Is sludge adequately processed (digestion, pathogen control)..... NA

Comments:

SECTION J: SELF-MONITORING PROGRAM

- a) Primary flow measuring device operated and maintained Y*
Type of device: weir Device location: weir box downstream of storage lagoon
- b) Calibration frequency adequate Y
Date of last calibration: October 2012 (twice a year when discharging)
- 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 Y
- 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) N
- b) If alternate procedures are used, are they properly approved? NA
- c) Analysis performed more frequency N/A
 If yes, are results recorded in permittee's report? N/A
- d) Commercial laboratory used:
 Name: MASI
 Parameters analyzed: TSS, Ammonia, CBOD₅
- e) Quality assurance manual provided and maintained Y
- f) Calibration and maintenance of instruments is satisfactory? NE
- g) Results of last 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	No	No	No	No	Slight	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 floors 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
Edison Wastewater Treatment Plant
4PA00000 - OH0101761

General

The Edison WWTP has a design average treatment capacity of 70,000 gpd. Wet stream processes provided at the facility include an 8.06 million gallon facultative treatment lagoon, a 12.6 million gallon storage lagoon, two rock filters for polishing and post aeration. The system is designed as a controlled discharge system whereby the volume of discharge is regulated by the volume of stream flow available for dilution in Whetstone Creek.

Section D. - Permit Verification

- (d.) Influent flows are estimated based on daily readings taken from the time elapsed meters on the pumps at the Boundry St. pump station. The average influent flow is approximately 40,000 gpd.
- (f.) No new unit processes have been added since the plant was constructed; however, the protocol for monitoring stream flow has been modified. The plant operator monitors the depth of flow at two locations in the stream and calculates an average depth. From this depth, a flow in cfs is obtained from a chart in the operation and maintenance (O&M) manual. The maximum allowable daily discharge flow is also provided from charts on the O&M based on the volume of flow in the stream. This procedure was implemented due to the condition and improper installation of the original stream gauge. The original gauge consisted of a chain on a gate that was not installed at the proper location at the outfall.

Section E. - Compliance Schedule Violations

- (a.) No NPDES permit violations have been reported since the last inspection was performed in April 2008.

Section F. - Operation and Maintenance

- (a.) The treatment plant has no mechanical equipment that requires a power supply. Treatment is provided by a facultative lagoon. Flow through the plant is controlled by gravity and the water depth in the treatment lagoon is controlled by a valve box located between the treatment and storage cells.
- (d.) Contract operations are provided at the plant on 2 days/ month for approximately 3-4 hours per day. The plant is staffed daily by the contract operator during periods of discharge. Village personnel visit the plant on a daily basis to provide general oversight, landscape maintenance and recording of run times at the plant pump station.

- (e.) Wes Craft, who holds a Class III license, is currently functioning as the contract operator for the plant. The effective permit requires a Class I operator.
- (k.) The plant is equipped with an emergency overflow pipe from the storage lagoon to the rock filters. No bypasses or overflows from this station have been reported since the plant was brought on-line. Internal bypasses also exist from the influent valve box to the storage lagoon and an emergency overflow from the treatment lagoon to the storage lagoon.

Section H. Collection System

- (g.) The collection system consists of 18,728 l.f of 8-inch diameter gravity sewer that conveys the wastewater to the Boundry Street pump station. The High Street pump station and one smaller pump station both discharge to the Boundry Street pump station via a 4-inch diameter force main. The Boundry Street pump station conveys wastewater to the treatment plant via a 6164 l.f. 6-inch diameter force main. Both pump stations are equipped with audible and visual alarms.
- (h.) The Village owns and operates a portable generator to provide standby power to the two pump stations in the event of a power outage. Overflows from the lift station have been reduced significantly since the floats were replaced with a bell/diaphragm level control system. Since the previous inspection in April 2008, only one overflow flow event was report from the Boundry Street pump station; this event occurred on February 28, 2011.

Section I. - Sludge Management

- (a.) A sludge management plan has not been developed for this facility. It is anticipated that solids will not have to be removed from the treatment lagoon for the next 15-20 years.

Section J. - Self Monitoring Program

- (a.) Effluent flows reported at outfall 001 are measured using water depth gauges in the storage lagoon and at a v-notch weir on the effluent control structure. Influent flows are estimated based on daily readings taken from the flow meter at the Boundry Street pump station.

SUMMARY OF FINDINGS AND COMMENTS
Edison Wastewater Treatment Plant
4PA00000*BD – OH010761

1. Influent flow readings taken from the Boundry Street pump station indicated that the average daily flow to the plant is approximately 40,000 gpd. Peak flows during recent wet weather events were as high as 119,000 gpd.
2. The plant operator maintains a minimum 5 foot water depth in the treatment lagoon at all times.
3. Discharges from the storage lagoon typically occur before the water depth in the lagoon exceeds 9.5 feet. The plant discharge observed at the time of the inspection began on November 1, 2012. It is anticipated that the discharge will cease when the gauge depth reaches 2.5'.
4. Both the inlet to the treatment cell and the outlet from the storage lagoon are submerged. The discharge line from the storage lagoon sits two feet off the bottom of the lagoon. A screen was installed on this line to prevent blockage from animals.
5. The weir between the treatment cell and the storage cell is raised when discharging to limit the amount of flow between cells as much as possible. The water level in the treatment lagoon is generally kept at a fixed elevation whereas the level in the storage lagoon fluctuates depending on seasonal discharge events and evaporation.
6. The landscape maintenance practices employed around the lagoons and along the banks were very effective in controlling tree and weed growth.
7. Groundwater monitoring data is collected from one upgradient well and two downgradient wells twice per year in June and December. **Please remember to submit all groundwater monitoring data collected from this facility to Ohio EPA, Central District Office, Division of Surface Water on an annual basis following the December sampling event. No groundwater monitoring data has been submitted for this facility since November 2008**
8. The composite sample is typically collected 2-3 days after the discharge is initiated. Wes Craft indicated the first flush from the storage lagoon is not representative of the discharge due to debris in the discharge piping and rock filters.
9. The Village recently hired a contractor to televise the sewer system to identify possible sources of inflow and infiltration. **Please briefly summarize the results of this work and identify any additional work the Village has**

planned to eliminate //I. future actions the Village ha

10. A sign is required that identifies the location of the permitted outfall to the unnamed tributary to Whetstone Creek. Please have this sign posted within the next 30 days and provide documentation to this office once it is installed. The sign must comply with the following requirements:
 - The marker shall consist, at a minimum, of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height.
 - The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible.
11. At the time of the inspection, a low volume discharge was observed at Outfall 001. Wes Craft attributed this to groundwater that had infiltrated into the joints of the outfall piping. Please consider collecting effluent samples at the effluent manhole or sump in the rock filters to ensure that the sampling data is not diluted or influenced by the presence of groundwater.
12. Stream flows at outfall 801 were reported incorrectly for the month of April 2012. The facility reported effluent weir overflow elevations instead of stream flows. Please resubmit the flow data for Outfall 801 for April 2012 and any other months in which the data is determined to be incorrect.

Wes Craft described the current means of estimating stream flow which consisted of taking two depth measurements from the deepest part of the channel and comparing that with a chart prepared many years ago when the plant was built. This practice appeared somewhat dangerous to the operator and of questionable accuracy given the dynamic nature of stream channels. I would recommend that you begin utilizing stream flow readings taken from a USGS gauging station just upstream from Mt. Gilead on Whetstone Creek. These readings might be somewhat lower than readings taken just upstream of the Edison outfall since they do not include stormwater and wastewater discharges from the Village of Mt. Gilead. These readings can be found on-line at the following web site;

<http://waterdata.usgs.gov/usa/nwis/uv?03223425>

Please be advised that Part II. N. (page 10) of your effective NPDES permit provides stream flow conditions allowable for a discharge.

Flow Data for Edison WWTP between 4/1/2008 and 10/1/2012

	Date	Flows (MGD)
Ten Highest Flows	4/2/2008	1.800
	4/1/2008	1.700
	4/3/2008	1.590
	4/1/2011	1.300
	4/3/2011	1.300
	4/6/2011	1.250
	11/9/2011	1.250
	11/10/2011	1.250
	4/2/2012	1.150
	4/2/2010	1.100
Average Flow Rate		0.623