



State of Ohio Environmental Protection Agency

Northwest District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Richland County
City of Mansfield WWTP
NPDES Permit

November 7, 2008

Angelo Klousiadis, Utility Director
City of Mansfield
30 North Diamond Street
Mansfield, Ohio 44902

Dear Mr. Klousiadis,

On October 9, 2008, Walter Ariss completed a compliance inspection of the wastewater treatment facilities serving the City of Mansfield. Mr. Marc Morgan, Plant Manager, was present for a tour of the facilities and to provide information on plant operations and maintenance. The inspection included completion of a checklist designed to evaluate the major areas of the treatment plant.

All major treatment units were in operation at the time of the inspection. The bypass to the EQ basin was not active and all flow was going directly to the wastewater treatment plant. A clear effluent was being discharged from the final clarifiers.

During the inspection we discussed the condition of the paint on the piping within the plant. In the pipe galleries after the primary clarifiers and after the aeration tanks the paint on the piping is in extremely poor condition. In several areas the paint has completely chipped off and bare metal is exposed. This condition exposes the metal to a highly corrosive environment due to the nature of raw and partially treated sewage and associated gases as well as a humid environment. This can cause excessive rusting of the pipes and in extreme prolonged cases, pipe failure. Mr. Morgan has found it difficult to assign plant staff to perform painting due to several factors. It should be a priority of on site staff as well as management to complete painting when environmental conditions allow.

There were several individual pieces of equipment that were out of service during the inspection. One of the Return Activated Sludge (RAS) pumps serving the first two secondary clarifiers was out of service. Mr. Morgan indicated that the impeller on the pump had failed due to excessive wear. The pump in question is original equipment to the treatment plant. The pump had been out for approximately 12 weeks and would take another 6 weeks to repair. There are two more RAS pumps at this location that are the same age as the pump that is out of service. We recommend that at least two additional impellers be purchased and on hand in case these pumps also fail.

The floating cover anaerobic digester was also out of service. The digester cover has been leaking for a period of at least one and a half years. Consultants have been on site and evaluated the condition of the cover. Mr. Morgan indicated that the cover will need to be replaced. The replacement of the cover should be a priority item for future upgrades at the treatment plant.

During the inspection we toured the Park Avenue lift station on the Rocky Fork. At the time of the inspection all five of the pumps were in operation. During previous inspections Mr. Morgan indicated difficulty with purchasing replacement parts for these pumps. Several of the pumps had been running at a fraction of the design flow of 7 MGD. The pumps are very old and manufacturers no longer make replacement parts. All replacements must be custom fabricated. While Mr. Morgan was able to find a product that can restore the pump housing for a period of time, possible long range plans for replacement

Mr. Angelo Klousiadis
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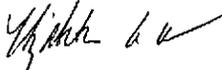
of the pumps within the station should be considered. It was also noted that the mechanical bar screen at the station was not in service. Repairs should be made to the screen as soon as possible. The manually cleaned bar screen is located in the wet well and can not be accessed during wet weather when the majority of debris would need to be removed. Operator safety is also a concern with the location of the manually cleaned bar screen.

The recently renewed NPDES permit for the discharge from the treatment plant contains a compliance schedule for several projects. One of the first milestones is to submit a Closure and Post Closure Plan for the sludge disposal area. This report was to have been submitted by November 1, 2008. As of the date of this letter our office has yet to receive the required plan. Another item is to construct a sign at the outfall 002 discharge pipe on the Rocky Fork of the Mohican. Our office has approved a draft drawing of the sign. The sign should be in place by December 1, 2008.

A review of your discharge monitoring reports submitted for May through September 2008 revealed several violations of the limits contained in your NPDES permit. A printout of these **violations** is included in the attached spreadsheet. During the above time period, the EQ basin overflowed on 7 days.

In summary, the treatment plant appeared to be operating correctly at the time of the inspection, however the City has several items that need attention. The completed inspection report is enclosed for your review. If you have any questions, please contact Walter Ariss at 419-373-3070.

Yours truly,



Elizabeth A. Wick, P.E.
District Engineer
Division of Surface Water

WA/lb

Enclosed

pc: NWDO-DSW file w/enclosure
Jim DeSanto, City Engineer, City of Mansfield
Marc Morgan, City of Mansfield WWTP w/enclosure



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Northwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
OH0026328	2PE00001	10/09/08	C	S	I

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Mansfield WWTP 385 South Illinois Avenue Mansfield, OH 44905	10:00	8/1/2008
	Exit Time	Permit Expiration Date
	12:30	6/30/2012
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Marc Morgan, Plant Manager	419-589-2830	
Name, Address and Title of Responsible Official	Phone Number	
Angelo Klousiadis, Utility Director	419-755-9702	

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

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

Inspector	Reviewer
Walter Ariss Date	<i>Elizabeth A. Wick</i> Date
Walter Ariss Division of Surface Water Northwest District Office	Elizabeth A. Wick, P.E. Water Quality Engineer Division of Surface Water Northwest District Office

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

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

Comments/Status:

Section F: Compliance Schedules/Violations

- (a) Any significant violations since the last inspection..... N
- (b) Permittee is taking actions to resolve violations..... N/A
- (c) Permittee has a compliance schedule..... Y
- (d) Compliance schedule contained in NPDES permit
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:

November 1, 2008, written closure and post closure plan for sludge disposal area due

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed Y
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... N
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... IV
- (e) Operator of Record holds unexpired license of class required by permit..... Y
 Class: IV
- (f) Copy of certificate of Operator of Record displayed on-site..... N
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... Y
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... Y
- (j) Operation and maintenance manual provided and maintained..... Y
- (k) Any plant bypasses since last inspection..... N
- (l) Regulatory agency notified of bypasses..... N/A
 On MORs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... Y

Record Keeping:

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

computer maintenance log, paper work request sheets
- (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
- (d) Has the operator of record submitted written notification 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..... N/A

Section G: Operation & Maintenance (cont)

Collection System:

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... Y
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... Y
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... N
- (g) Lift station alarms provided and maintained..... Y
- (h) Are 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 Y
- (k) Are any portions of the sewer system at or near capacity..... N

Comments/Status:

Treatment Works

- a) generator runs storm screws, clarifiers and blowers, chlorine. Not WAS or RAS pumps
- c) one RAS pump out for last 12 weeks: should be in service in the next 6 weeks, one belt press out: needs new hydraulic motor, gas holding digester still out of service.
- g) One class IV, three class III, two class II, one class I
- i) RAS pump out of service, one belt press out

Collection system

- g) treatment plant staff in charge of all lift stations, all have either radio or dialer alarms
- h) Park Ave and four smaller stations have backup, still waiting to add backup generator at Lexview.

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: 3/20/2004 Approval #: Not submitted N/A
- (b) Sludge management plan current..... N
- (c) Sludge adequately disposed..... Y
(Method: Landfill)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name: Allied Waste Noble Road Landfill, Santek Crawford Co. Landfill)
- (f) Has amount of sludge generated changed significantly since
last inspection..... N
- (g) Adequate sludge storage provided at plant..... N
- (h) Land application sites monitored and inspected per SMP..... N/A
- (i) Records kept in accordance with State and Federal law..... Y
- (j) Any complaints received in last year regarding sludge..... N
- (k) Is sludge adequately processed (digestion, pathogen control)..... Y

Comments/Status:

Gas holder out of service. Methane gas mixing out of service, using recirculation pumps.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir Weir
Calculated from influent Other (Specify: magmeters)
- (b) Calibration frequency adequate Y
(Date of last calibration: once every two years)
- (c) Secondary instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range
of flows..... Y
- (e) Actual flow discharged is measured..... N
- (f) Flow measuring equipment inspection frequency
 Daily Weekly monthly other

Comments/Status:

Flows measured by adding and subtracting recycle and waste stream flows from influent.

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
- (d) Sample collection procedures are adequate..... Y
 - (i) Samples refrigerated during compositing..... Y
 - (ii) Proper preservation techniques used..... Y
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y
- (e) 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
- (f) Adequate records maintained of sampling date, time, location, etc.. Y

Laboratory:

General

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (b) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (c) Analyses being performed more frequently than required by permit. N
- (d) If (c) is yes, are results in permittee's self-monitoring report..... N/A
- (e) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: Metals, Pretreatment

Lab name: Alloway and Ginosko

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... Y
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y
- (h) Adequate records maintained..... Y
- (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory

Date: September 2007

Comments/Status:

b. Hexavalent chromium samples now being sent to commercial lab for analysis.

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	none	none	none	none	none	none	none

Comments/Status:

Section K: 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/Status:

F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

RATING CODES: S = Satisfactory; U = Unsatisfactory; M = Marginal; IN = In Operation; OUT = Out of Operation

CONDITION OR APPEARANCE		RATING	COMMENTS
General	Grounds	S	
	Buildings	S	
	Potable Water Supply Protection	S	
	Safety Features	S	
	Bypasses	Out	
	Stormwater Overflows	Out	
	Alternate Power Source	Out	
	EQ Basin	IN	draining basin back into plant
Preliminary	Maintenance of Collection Systems	M	
	Pump Station	IN	Park Avenue at Rocky Fork
	Ventilation	S	
	Bar Screen	IN	2 automatic, 1 manual
	Disposal of Screenings	S	Landfill
	Comminutor	-	
	Grit Chamber	IN	
	Disposal of Grit	S	Landfill
	EQ grit chamber	Out	
	Disposal of grease	S	Landfill
Primary	Settling Tanks	IN	2 tanks
	Scum Removal	IN	
	Sludge Removal	IN	2 pumps
	Effluent	S	
Sludge Disposal	Digesters	IN	4 anaerobic
	Temperature and pH	S	
	Gas Production	S	Used to run blowers, gas holder out of service
	Heating Equipment	IN	
	Sludge Pumps	IN	2 WAS pumps, 5 RAS pumps, and 1 dilution pump, One RAS pump out
	Drying Beds	-	
	Vacuum Filter	-	
	Disposal of Sludge	S	Noble Road and Crawford County Landfill
	Belt Filter Press	IN	1 press out of service for repairs - new hydraulic pump
Other	Flow Meter and Recorder	IN	
	Records	S	
	Lab Controls	S	
	Chemical Treatment	OUT	Polymer addition to sludge prior to filter press
Secondary-Tertiary List items as	Aeration tanks	IN	8 tanks
	Final clarifiers	IN	4 tanks
	Blowers	IN	4 units, one engine down for repairs
	Rotary screen	IN	2 online, 1 spare available
Disinfection	Effluent	S	Clear
	Disinfection System	IN	Still working on repairs for EQ Overflow dosing
	Effective Dosage		
	Contact Time		
	Contact Tank	IN	
	Dechlorination	IN	Sulfur Dioxide (Sodium Bisulfate for bypass flow)

Get New Data

Mansfield WWTP NPDES permit limit violations 5/1/08 through 9/30/08

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2PE00001*ID	June 2008	602	00530	Total Suspended Solids	30D Conc	30	46.	6/1/2008
2PE00001*ID	June 2008	602	00530	Total Suspended Solids	7D Conc	45	46.	6/1/2008
2PE00001*ID	June 2008	602	80082	CBOD 5 day	30D Conc	25	28.	6/1/2008
2PE00001*JD	September 2008	001	61942	pH, Minimum	1D Conc	6.5	4.93	9/14/2008
2PE00001*JD	September 2008	001	61942	pH, Minimum	1D Conc	6.5	5.6	9/15/2008
2PE00001*JD	September 2008	001	00550	Oil and Grease, Total	1D Conc	10	14.	9/25/2008