



**Environmental
Protection Agency**

Ted Strickland, Governor
Leo Fisher, Lt. Governor
Chris Korleski, Director

June 16, 2010

Joel McGuire, Mayor
City of Harrison
300 George Street
Harrison, Ohio 45030

RE: Compliance Evaluation Inspection
Harrison WWTP
NPDES Permit 1PC00002*ID

Dear Mayor McGuire:

On May 28, 2010, I met with Jim Leslie and Gene Allen to conduct a compliance evaluation inspection at the Harrison Wastewater Treatment Plant. A copy of my inspection report is attached. The summary of comments section of the report lists required responses to the inspection findings.

Effluent quality continues to be a problem at this wastewater treatment plant. Currently the treatment plant is being served by a part-time class III operator, Mr. James Leslie. Due to the continuing effluent limit violations, Ohio EPA may consider a permit modification to require a full time operator in accordance with the staffing requirements under OAC 3745-7-04. We will discuss this possible measure in our legal discussions concerning the pending enforcement action.

A response is required concerning the items listed in the summary of comments within two weeks from receipt of this letter. If you have any questions regarding the inspection or the report, please call me at (937) 285-6101.

Sincerely,

Mary Osika
Environmental Specialist
Division of Surface Water

Enclosure

cc: Jim Leslie, Harrison Utilities Director

Summary of Findings/ Comments

The effluent quality has been rated as unsatisfactory due to violations of the NPDES permit limits. During the review period of June 1, 2009 to May 31, 2010, there were six permit limit excursions reported by the facility at outfall 001 to the Whitewater River. The violations are described below.

<u>Parameter</u>	<u>Date</u>	<u>Permit Limit</u>	<u>Value Reported</u>
Oil & Grease	July 2, 2009	10 mg/l	103 mg/l
Oil & Grease	August 26, 2009	10 mg/l	10.7 mg/l
Nitrogen, Ammonia	Month of January, 2010	3.0 mg/l	4.96 mg/l
Nitrogen, Ammonia	Week of January 1, 2010	4.5 mg/l	4.73 mg/l
Nitrogen, Ammonia	Week of January 8, 2010	4.5 mg/l	13.2 mg/l
Total Suspended Solids	week of April 22, 2010	18 mg/l	22.66 mg/l

The effluent violations above were attributed to: unknown reasons (Oil & Grease violations), decanting of sludge digesters (Nitrogen, Ammonia violations) and plant upset caused by filamentous nocardia growth (TSS).

Nocardia growth is associated with warmer temperatures, grease, oil and fats present in the wastewater. The influent CBOD5 for April 7, 2010 showed an influent concentration of 500 mg/l. The highly concentrated wastewater indicates a discharge from an industrial user.

It appears that more work is needed in the pretreatment program at Harrison to prevent the periodic issues from industrial waste. This compliance problem is pending resolution in the proposed Director's Findings and Orders sent to the City of Harrison on June 3, 2009.

Harrison is required to address the General Lab Criteria comments in the attached report. This includes the need to update the Quality Assurance Manual with comprehensive written Standard Operating Procedures for all analysis performed onsite. The lab itself was not given a rating due to our new program of reviewing general lab criteria. We will expect Harrison to be fully in compliance with the Standard Methods for the lab criteria in the next compliance evaluation inspection next year.

Harrison does not have a continuous temperature monitor for the final effluent at outfall 001. Harrison is currently taking grab temperature readings. This is not in compliance with the requirements in the NPDES permit.

Items requiring a Response within two weeks:

Update on addressing the lab issues and status of effluent temperature monitoring equipment.



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
1PC00002*ID	OH0021440	5/28/2010	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Harrison WWTP 10999 Campbell Road Harrison, Ohio	9:00 am	August 1, 2008
	Exit Time	Permit Expiration Date
	12:30 pm	January 31, 2013
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Jim Leslie, Director of Utilities, Operator of Record Gene Allen, Operator	(513) 367-3725	
Name, Address and Title of Responsible Official	Phone Number	
Joel McGuire, Mayor City of Harrison 300 George Street Harrison, Ohio 45030	(937) 367-2111	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
See attached sheet.	
Inspector	Reviewer
 Date: 6/16/2010 Mary Osika Environmental Specialist Division of Surface Water Southwest District Office	 Date: 6/17/10 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Permit #: 1PC00002
NPDES #: OH0021440

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) Flows and loadings conform with NPDES permit..... Y
- (c) Treatment processes are as described in permit application... Y
- (d) All discharges are permitted..... Y
- (e) Number and location of discharge points are as described
in permit..... Y
- (f) Storm water discharges properly permitted..... Y

Comments/Status:

(b) Average Flow rate for the past year has been 1.02 MGD. WWTP design is 2.3 MGD.
(e) For future reference, a change will be needed to the downstream sampling station in a year or so after
Whitewater Processing build's their treatment system and discharges downstream from Harrison WWTP.

Section F: Compliance

- (a) Any significant violations since the last inspection..... Y
- (b) Appropriate Non-compliance notification of violations..... Y
- (c) Permittee is taking actions to resolve violations..... Y
- (d) Permittee has a compliance schedule..... Y
- (e) Compliance schedule contained in...NPDES Permit Compliance Schedule
- (f) Permittee is in compliance with schedule..... Y
- (g) Has biomonitoring shown toxicity in discharge since last inspection. Y

Comments/Status:

(a) see attached summary for list of permit limit violations during the review period.
(g) April 19-20, 2010 whole effluent toxicity tests conducted by Ohio EPA and City of Harrison showed
toxicity to C. dubia water fleas.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed Y
- i. What does the back-up power source operate.....

everything

ii. How often is the generator tested under load.....

1/week, every Tuesday

(b) Which components have an alarm system available for power or equipment failures.....

All treatment, pumps, etc on SCADA that will activate a dialer and phone the plant personnel

- (c) All treatment units in service other than backup units..... Y
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.)..... Y
- (e) Any major equipment breakdown since last inspection..... Y
- (f) Operation and maintenance manual provided and maintained..... Y
- (g) Any plant bypasses since last inspection..... N
- (h) Any plant upsets since last inspection..... Y

Comments/Status:

(c) one clarifier is undergoing installation of weir covers to prevent algae growth. One ditch is off line because it is not needed.

(d) right now they are on calendar, but should be on SIMS by end of the year.

(e) two (2) influent pumps were replaced.

(h) April's 2-week filamentous problem is considered a plant upset.

Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... Y
- (b) Operator of Record holds unexpired license of class required by Permit..... Y
- (c) Copy of certificate of Operator of Record displayed on-site..... Y
- (d) Has the Operator of Record submitted an ORC Notification form.. Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7.... N
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met..... N/A
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)
hard bound
- (i) Log book kept onsite (in an area protected from weather)..... Y
- (j) 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

Permit # : 1PC00002
NPDES #: OH0021440

- iii. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)..... Y
- iv. Laboratory results (unless documented on bench sheets)... N
- v. Identification of person making entries..... Y
- (k) Has the Operator of Record submitted written notifications 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..... Y

Comments/Status:

(a)-Class III
(e) Jim Leslie spends 20 hrs per week at Harrison WWTP. Part II, item A of the NPDES permit defers minimum operator staffing requirements as required in OAC 3745-7-04 (C) (1) until the permit is renewed or modified. City will need to plan for a full time Operator of Record by January 2013 unless there is a need to modify the permit to require a full time class III operator due to effluent violations.
(j) iii, iv. - There are separate log books for maintenance and laboratory bench sheets.

Section G: Operation & Maintenance cont

Collection System:

- (a) Are there pump stations in the collection system..... Y
 - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent.....all 5
 - ii. How many pump stations have telemetered alarms.....1
 - iii. How many pump stations have operable alarms.....all 5
- (b) Any chronic collection system overflows since last inspection..... N
- (c) Regulatory agency notified of all overflows..... Y
- (d) CSOs in the collection system....If so, what is the LCTP status..... N/A
- (e) How are CSOs monitored (chalk, block, level sensor, etc.)..... N/A
- (f) Portable pumps available for collection system maintenance..... N/A
- (g) RDII Program established and active..... N/A
- (h) Any WIB complaint received since last inspection..... N/A
- (i) Is there a WIB response plan..... N/A
- (j) Is any portion of the collection system at or near dry weather Capacity..... N

Comments/Status:

Section H: Sludge Management

- (a) Method of Sludge Disposal... Land Application
 Haul to Another NPDES Permittee
 Haul to a Mixed Solid Waste Landfill*

* Sludge hauled to Rumpke Landfill (monitoring station 586)

- (b) Has amount of sludge generated changed significantly since the last inspection..... N
 (c) How much sludge storage is provided at the plant.....
 sufficient storage, not using pad, Sludge removed daily M - F.
 (d) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06)..... Y
 (e) Any complaints received in last year regarding sludge..... N
 (f) 5/8" screen at headworks for facilities that land apply sludge..... Y
 (g) Are sludge application sites inspected to verify compliance with NPDES permit..... N/A

Comments/Status:

Facility was inspected by Jacob Howdyshell, DSW, in September 2009.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):
 ultrasonic level sensor on effluent
 (b) Flow meter calibrated annually Y
 (Date of last calibration: Dec 2009)
 (c) 24-hour recording instruments operated and maintained..... Y
 (d) Flow measurement equipment adequate to handle full range of flows..... Y
 (e) All discharged flow is measured..... Y

Comments/Status:

The calibration sticker located on the flow meter indicator (outside) was not legible (weathered).

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
 (see GLC page)
 (d) Monitoring records (i.e., flow, pH, DO) maintained for a minimum

Permit #: 1PC00002
NPDES #: OH0021440

of three years including all original strip chart recordings
(i.e, continuous monitoring instrumentation, calibration and
maintenance records)..... Y

Comments/Status:

The composite sampler for outfall 001 – refrigerator must have thermometer held in water bath. Must follow same lab criteria as lab refrigerator.

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N
- (b) Do SOP's include the following if applicable:
 - Title
 - Scope and Application
 - Summary
 - Sample Handling and Preservation
 - Interferences
 - Apparatus and Materials
 - Reagents
 - Procedure
 - Calculations
 - Quality Control
 - Maintenance
 - Corrective Action
 - Reference (Parent Method)

Note: Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy. "Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... Y
- (e) Analyses being performed more frequently than required by permit. Y
- (f) If (e) is yes, are results in permittee's self-monitoring report..... Y
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y
(see score from GLC page)
- (h) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: Metals, O&G, Phosphorus

Lab name: MASI, (EnviroScience – biomonitoring)

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling..... Y

Permit #: 1PC00002
NPDES #: OH0021440

Date: Study 29 -- October 2009

(b) Were any parameters "Unsatisfactory"..... Y

(c) Reasons for "Unsatisfactory" parameters.....

(b) one test for EnviroScience needed mitigation, Harrison Lab and Belmont were 100% acceptable.

Comments/Status:

(a) (b) see General Lab Criteria inspection form and summary of comments.

Section J: Effluent/Receiving Water Observations

Outfall # 001

Outfall Description: clear

Receiving Stream: Whitewater River

Receiving Stream Description: River slightly high and turbid due to recent rains.

Comments/Status:

outfall sign observed, good condition

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: