



**Environmental
Protection Agency**

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



1PC0000420080710

WARREN MASON WWTP NO 2

ZIMMERMAN, MICH 2008/07/10



State of Ohio Environmental Protection Agency

Southwest District Office

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

July 10, 2008

Mayor and Council
City of Mason
6000 Mason-Montgomery Road
Mason, Ohio 45040

**Re: Mason Water Reclamation Facility
NPDES Permit No. 1PC00004*HD; OH0020494
NPDES Compliance Inspection**

Ladies and Gentlemen:

On May 30, 2008, I conducted a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection at the above referenced facility. Keith Collins, Utilities Superintendent, Bob Beyer, Pretreatment Coordinator/ Plant Operator, and Ed Smith, operations foreman, represented the City during the inspection. The purpose of the inspection was to evaluate the operation and performance of the wastewater treatment system and to determine compliance with the NPDES permit.

As indicated on the attached NPDES Compliance Inspection Report, all areas evaluated during the inspection received a satisfactory rating. The City has been operating its wastewater treatment system in an acceptable manner. The City is generally in compliance with the terms and conditions of the NPDES permit. Review of the monthly Discharge Monitoring Reports submitted electronically by the City indicates several effluent limitation violations have occurred since the new plant began operating in May, 2006. These are discussed in the attached report.

Two items require follow-up action by the City. First, the sludge management plan should be updated to reflect the current Class A sludge processing operations. Second, the location for sampling Muddy Creek downstream from the final outfall should be moved farther downstream to provide additional mixing of the effluent with stream water. This was discussed with Bob Beyer, and we agreed that the new park bridge would be an acceptable sampling location. Please provide a written response identifying the actions you intend to take to address these items.

If you have any questions, don't hesitate to contact me at (937) 285-6102.

Sincerely,

Michael W. Zimmermann
Division of Surface Water

Copy: Keith Collins and Bob Beyer, City of Mason





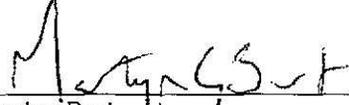
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PC00004*HD	OH0020494	05/30/2008	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Mason Water Reclamation Facility 3200 Mason-Morrow-Millgrove Road Mason, Ohio 45040 (mailing address is the same)	10:15 am	11/1/2005
	Exit Time	Permit Expiration Date
	1:00 pm	1/31/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Keith Collins, Utilities Superintendent	(513) 229-8570	
Bob Beyer, Pretreatment Coordinator, Class III Operator	(513) 229-8570	
Name, Address and Title of Responsible Official	Phone Number	
Keith Collins, Utilities Superintendent	(513) 229-8570	

Section C: Areas Evaluated During Inspection					
(S = 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
N	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
<p>On May 10, 2006 the City of Mason began operating the new Water Reclamation Facility located at 3200 Masoon-Morrow-Millgrove Road. They operated the old plant until June 5, 2006, at which time it was shut down.</p> <p>The location of the downstream sampling station in Muddy Creek (station 1PC00004901) was investigated during the inspection. The present location is approximately 60 yards downstream from the final outfall. Ohio EPA is recommending the location be moved approximately 50 yards farther downstream to the new bridge connecting the plant property to the park.</p>	
Inspector	Reviewer
 Michael W. Zimmerman Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
Date 7-10-08	Date 7/10/08

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..... Y
- (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/Status:

(f) new WWTP went on-line in May 2006

Section E: Permit Verification

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

Comments/Status:

*Final effluent limitation violations with new plant:
-Phos, T – July (one weekly) and October, 2006 (monthly avg. and two weekly)
-NH₃-N – August, 2006 (D.O. control unit was not working)
-pH – June 18, 2007 (6.4 su reported)*

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..... Y
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... III
- (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..... Y
- (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..... N
- (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..... N

Record Keeping:

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

<i>Plant log book in kept in lab. The lab has its own log book. Log book in the solids handling bldg. Use operator rotation sheets.</i>

- (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..... Y

Section G: Operation & Maintenance (con't)

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/A
- (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:

- carousel system – two oxidation ditches; No. 1 off-line (not needed), No. 2 operating
- Carousel System Ace Controller – controls the D.O. conc. in the aerobic and anaerobic zones
- final clarifiers have automatic traveling brushes; approx. once/month, operator puts powdered chlorine on the weirs to keep them clean
- effluent from clarifiers looked good
- UV disinfection – Trojan UV 3000 Plus
- cascade/ step aeration at final effluent tank with D.O. and pH probes and meters (D.O. reading during inspection was 9.08 mg/l)
- the old plant EQ basin has been demolished, therefore no bypasses can occur there

Collection System:

- SSOs are usually the result of storm events
- 8 lift stations in the collection system
- Heritage lift station overloaded- caused back-ups
- contracted with LJB Consultants to do an I/I study – 25 flow monitoring devices were installed in the collection system in April, 2008
- Mason has also smoke- tested the entire system and is televising the system

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: 10/21/1991 Approval #: 05-258 PW Not submitted N/A
- (b) Sludge management plan current..... N
- (c) Sludge adequately disposed..... Y
(Method: *Class A sludge, no land application*)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... N
(Name:)
- (f) Has amount of sludge generated changed significantly since last inspection..... N
- (g) Adequate sludge storage provided at plant..... Y
- (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:

Sludge management plan needs to be updated.

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:)
- (b) Calibration frequency adequate Y
(Date of last calibration: *June, 2007*)
- (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..... Y
- (f) Flow measuring equipment inspection frequency
 Daily Weekly monthly other

Comments/Status:

*SCADA System - records a flow measurement every day
Flow reading at 12:05 pm was 5.37 MGD*

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..... Y
 - (e) Commercial laboratory used..... Y
- Parameters analyzed by commercial lab: *parameters pH, D.O., NH₃-N, BOD₅, TSS, and fecal coliform bacteria are done at the plant lab. All other parameters are analyzed by the commercial lab.*

Lab name: *Belmonte Labs*

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: 2007

Comments/Status:

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	None	None	Clear	Slight - just dst from outfall	None	Clear	---

Comments/Status:

- final effluent discharges from a 48-inch concrete pipe (with headwall) to a short 15-ft. rocky channel and then into Muddy Creek

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:



11-11-11