



**Environmental
Protection Agency**

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



1PE0000220090312

BUTLER

HAMILTON WATER RECLAMATION FACILITY

SARLE, EDWARD

2009/03/12



State of Ohio Environmental Protection Agency

Southwest District Office

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Dayton, Ohio 45402-2911

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

March 11, 2009

Mr. Mark Brandenburger
City of Hamilton
One Renaissance Building
345 High Street
Hamilton, Ohio 45011

Re: Butler County, Hamilton WWTP, Compliance Evaluation Inspection

Dear Mr. Brandenburger:

On February 17, 2009, I conducted a Compliance Evaluation Inspection at this facility (NPDES Permit No. OH0025445; OEPA Permit No. 1PE00002*LD). Ralph Reigelsperger, Rich Engel, Dan Arthur, Billy Slaven, Greg Hildebrand and Jane Winkler were representing this facility. A copy of my inspection report is enclosed.

All areas evaluated in the inspection report were found to be satisfactory. However, the storm water discharges from this facility were noted as not having been permitted. The City of Hamilton must address this area as soon as possible but not later than April 10, 2009.

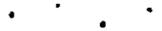
If you have any questions, please call me at (937) 285 - 6096.

Sincerely,

Ned Sarle
Division of Surface Water
Permits Section

Enclosure

cc: Ralph Reigelsperger, City of Hamilton
Billy Slaven, City of Hamilton





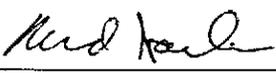
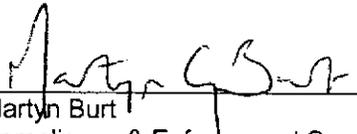
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PE00002*LD	OH0025445	2/17/2009	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Hamilton WWTP 2451 River Road Hamilton, Ohio 45015	9:20 A.M.	8/1/2003
	Exit Time	Permit Expiration Date
	12:30 P.M.	6/30/2008
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Ralph Reigelsperger, Director of Public Works	(513) 785-7272	
Rich Engel, City Engineer	(513) 785-7273	
Dan Arthur, Civil Engineer	(513) 785-7286	
Billy Slaven, Water Reclamation Superintendent	(513) 868-5971	
Greg Hildebrand, Asst. Water Reclamation Supt.	(513) 868-5971	
Jane Winkler, Laboratory Supervisor	(513) 868-5971	
Name, Address and Title of Responsible Official	Phone Number	
Mark Brandenburger, City Manager One Renaissance Building 345 High Street Hamilton, Ohio 45011	(513) 785-7000	

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	S	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	N	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
See Attached Summary of Findings / Comments	
Inspector	Reviewer
 Ned Sarle Division of Surface Water Southwest District Office	 Marty Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
3/16/09 Date	3/11/09 Date

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..... N
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

See Attached Summary of Findings / Comments.

Section F: Permit Violations / Compliance Schedules

- (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 / Consent Order
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:

See Attached Summary of Findings / Comments.

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)..... 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..... Y
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... N/A
- (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..... Y
- (l) Regulatory agency notified of bypasses..... Y
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)

Hard bound books are maintained by each shift operator.

- (c) Log book(s) kept onsite (in an area protected from weather)..... Y
- (d) Log book contains the following:
 - I. Identification of treatment works..... N
 - 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
- (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..... Y

Comments/Status:

See Attached Summary of Findings / Comments.

Section H: Sludge Management

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

Comments/Status:

None.

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: Radar/ Open Channel)
- (b) Calibration frequency adequate Y
(Date of last calibration: 5/13/2008)
- (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:

Flow monitoring equipment may measure between 0 – 70 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).. N/E
 - (b) If alternate analytical procedures are used, proper approval has been obtained..... N/E
 - (c) Analyses being performed more frequently than required by permit. N/E
 - (d) If (c) is yes, are results in permittee's self-monitoring report..... N/E
 - (e) Commercial laboratory used..... N/E
- Parameters analyzed by commercial lab:

Lab name:

Quality Control/Quality Assurance

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

Satisfactory Marginal Unsatisfactory

Date:

Comments/Status:

None.

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001							

Comments/Status:

No discharge occurred during the inspection. This was the result of the repairs that were being completed on the two secondary clarifiers.

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:

None.

Summary of Findings / Comments

NPDES Permit #: OH0000445
OEPA Permit #: 1PE00002*LD

Areas Requiring a Response

The facility's NPDES Permit expired on June 30, 2008. A timely NPDES Permit renewal application was received on October 1, 2007. The Ohio EPA is planning on renewing this permit later this year. In addition, storm water discharges from sewage treatment systems with a design flow rate of 1.0 MGD or greater are required to have a general Industrial Storm Water permit. The City of Hamilton (Hamilton) has failed to obtain coverage under this permit. Hamilton may obtain this coverage by either submitting NPDES Permit Application Form 2F or an NOI application for a general permit. The Ohio EPA would recommend obtaining coverage under the general storm water permit. The NOI application may be obtained at the following website: <http://www.epa.state.oh.us/dsw/storm/stormform.html> . A copy of the Industrial General Storm Water Permit may also be viewed at the following website: http://www.epa.state.oh.us/dsw/permits/GP_IndustrialStormWater.html . The NOI and \$200 application fee must be submitted to the Ohio EPA, Central Office.

Areas Not Requiring a Response

A review of the Monthly Operating Reports (MORs) for the period of April through December 2008 indicated no NPDES Permit violations. Future violations must be reported as required by the NPDES Permit as detailed in Part III.12 titled "Noncompliance Notification."

On January 19, 2007, a new Consent Order (CO) became effective for Hamilton. Hamilton was in violation of the previous CO due to bypasses from the sewage collection and treatment system. The new CO requires Hamilton to take action to address these bypasses.

All Sanitary Sewer Overflows (SSOs) are required to be reported in accordance to the NPDES Permit and the CO. Hamilton must report the SSOs in accordance to the NPDES Permit as detailed in Part III, Section 11 titled "Unauthorized Discharges" and in Part III, Section 12 titled "Noncompliance Notification." The CO requires SSOs from overflow locations 002, 014, 022, 027 and 037 to be reported on the Monthly Operating Reports (MORs).

For the SSOs addressed in the CO, Attachment I lists the bypasses reported for April through December 2008. Overflow location 027 and 037 both discharged two times due to a four to six month storm event. Future SSOs must continue to be reported in accordance to the NPDES Permit and the CO.

Hamilton submitted on January 12, 2009 a Permit to Install application for a new sanitary sewer to eliminate overflow 002. This application has now been approved. Hamilton is planning on constructing this sanitary sewer later on this year. Hamilton is also planning on submitting by May 2009 the Permit to Install applications for the new

NPDES Permit #: OH0C 145
OEPA Permit #: 1PE00002*LD

sanitary sewers to eliminate overflows 014 and 022. These sewers should be constructed in 2010.

The CO also requires the internal WWTP bypasses be reported on the MORs at station 603. No internal WWTP bypasses were reported for April through December 2008.

The quarterly reports required by the CO were received on July 3, 2008; October 1, 2008; and January 2, 2009.

The annual report required by the CO was received on February 13, 2009. For 2008, fifty-one water in basement (WIB) events were due to a 25 year rain event. An additional forty WIB events were reported as a result of sewer blockages. This appears to be a high number of basement backups due to sewer blockages. These events do not appear to be concentrated in any one area. The sewage collection system is 220 miles long. In 2008, Hamilton slipped lined 25,000 feet or 2% of sanitary sewer system. Hamilton also cleaned and videotaped 2% of these sewers. Based on this cleaning schedule, the sanitary sewers would be cleaned once every fifty years. Most communities in Butler County clean their sanitary sewers once every 5 to 10 years. Hamilton should consider increasing the sewer system cleaning schedule to prevent WIB events due to the sewer blockages.

A System Evaluation and Capacity Assurance Plan (SECAP) required by the CO was received on December 28, 2007. Final revisions on this plan were received on March 3, 2009.

An audit of the MOM was required by the CO to be submitted by October 1, 2008. This audit was submitted on October 1, 2008.

The WWTP is designed for an average daily flow rate of 32.0 MGD. A review of the MORs for April through December 2008 indicated the average daily flow was 16.24 MGD. The peak daily flow rate was reported as 33.63 MGD.

For many years, the Hamilton WWTP has experienced color pass through as a result of two local industrial dischargers. The resulting WWTP discharges alter the Great Miami River's color and are violations of the NPDES Permit and the Water Quality Standards. Since the last inspection, one color pass through event was reported on May 19, 2008. Smart Papers LLC was the source of this violation. Hamilton must work diligently with these local facilities to eliminate colored WWTP discharges.

Sludge produced at the Hamilton WWTP is land applied, composted or land filled. Synagro land applies the lime stabilized sludge. They are also contracted to haul the sludge to Rumpke land fill. The composted sludge is removed by Evans Landscaping and is taken to their Hamilton County facility. The composted sludge is then used as a soil amendment and is sold around the state.

On September 14, 2008, a large windstorm knocked out the two power feeds to the Hamilton WWTP. Hamilton was able to store much of the wastewater in influent pipe

NPDES Permit #: OH000045
OEPA Permit #: 1PE00002*LD

and in excess treatment units. Hamilton was able to maintain compliance with their NPDES Permit limits. However, a small overflow occurred at manhole 82-022 on the influent sewer just outside of the WWTP. Hamilton is considering installing a back up generator at the WWTP. A backup generator would provide for a more reliable power source. The Ohio EPA would recommend using a backup generator instead of the dual power feed.

A small bypass from a faulty valve at the WWTP was reported on September 4, 2008. Hamilton has adequately reported this bypass.

One WWTP odor complaint was reported to Hamilton since the last inspection. Hamilton must continue their efforts to minimize these odors.

The WWTP is staffed 24 hours a day for 7 days a week.

Attachment I

Sewage Collection System Bypasses				
April through December 2008				
Station	Parameter	Units	Date	Reported Value

27	Flow Rate	MGD	5/15/2008	0.13463
27	Flow Rate	MGD	5/16/2008	0.04167
37	Flow Rate	MGD	5/15/2008	0.18138
37	Flow Rate	MGD	5/16/2008	0.22436

