



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

August 2, 2013

Mr. Joshua Smith
City of Hamilton
One Renaissance Building
345 High Street
Hamilton, Ohio 45011

RE: Butler County, Hamilton WWTP, Compliance Evaluation Inspection

Dear Mr. Smith:

On July 25, 2013, Caitlin Ruza and I conducted a Compliance Evaluation Inspection at this facility (NPDES Permit No. OH0025445; OEPA Permit No. 1PE00002*MD). Greg Hildebrand, Billy Slaven, Craig Koger, Joy Rodenburgh, Adam Korn, Chad Brown and Darla Bokeno were representing this facility. A copy of my inspection report is enclosed.

The inspection report contains three marginal areas. The Flow Measurement section was rated marginal as a result of the failure to calibrate the flow meter annually. The Operations & Maintenance section was rated marginal as a result of the numerous Water in Basement events and sewage collection bypasses that were caused by sewer blockages. The Collection System section was rated marginal due to wastewater being pumped out of the sewage collection system four times.

The areas noted in the report summary will require a written response by August 23, 2013. The response should include a description of the actions proposed to correct the violations and the dates anticipated for completion of these actions.

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

Sincerely,

A handwritten signature in black ink, which appears to read "Ned Sarle".

Ned Sarle
Environmental Specialist
Division of Surface Water
Permits Section

Enclosure

ec: Craig Koger, City of Hamilton
Greg Hildebrand, City of Hamilton

NS\bp



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*MD	OH0025445	7/25/2013	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, OH 45015	9:30 A.M.	9/1/2009
	Exit Time	Permit Expiration Date
	3:20 P.M.	7/31/2014
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Greg Hildebrand, Water Reclamation Superintendent	(513) 868-5971	
Billy Slaven, Water Reclamation Project Manager	(513) 868-5971	
Craig Koger, Street and Sewer Superintendent	(513) 785-7584	
Joy Rodenburgh, Senior Civil Engineer	(513) 785-7283	
Adam Korn, Civil Engineer	(513) 785-7238	
Chad Brown, Associate Civil Engineer	(513) 785-7266	
Darla Bokeno, Environmental Specialist	(513) 785-7211	
Name, Address and Title of Responsible Official	Phone Number	
Joshua Smith, City Manager One Renaissance Building 345 High Street Hamilton, Ohio 45011	(513) 785-7000	

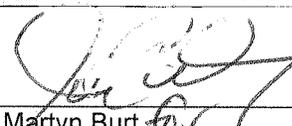
Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	M	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	S	Compliance Schedule
M	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
M	Collection System				

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

See Attached Summary of Findings / Comments.

Inspector	Reviewer
 Ned Sarle Environmental Specialist Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
Date 7/25/13	Date 8/2/13

NPDES Permit #: OH0025445
 OEPA Permit #: 1PE00002*MD

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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..... | N |
| (e) Number and location of discharge points are as described
in permit..... | Y |
| (f) Storm water discharges properly permitted..... | Y |

Comments/Status:

A NOE has been submitted for the Industrial Storm Water General NPDES Permit.
 See Attached Summary of Findings / Comments.

Section F: Compliance

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

Comments/Status:

None.

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.....

The back up power sources can operate the whole WWTP.

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

Once a month.

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

The WWTP is staffed with two shifts a day for 7 days a week. SCADA and telemeter systems are also provided to alert the operators of any alarms. The monitoring system is for the whole WWTP.

(c) All treatment units in service other than backup units..... N

(d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....

A computer program is used by maintenance staff for providing this maintenance.

(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..... Y

(h) Any plant upsets since last inspection..... N

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Comments/Status:

One influent pump is offline due to a broken shaft. This will be repaired in several weeks when the replacement part is delivered.

See Attached Summary of Findings / Comments.

Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... IV
- (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).... Y
- (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 books are maintained by each shift operator.

- (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
 - 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)... Y
 - 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:

None.

Section G: Operation & Maintenance con't

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.....7
 - ii. How many pump stations have telemetered alarms.....7
 - iii. How many pump stations have operable alarms.....7

- (b) Any chronic collection system overflows since last inspection..... Y
- (c) Regulatory agency notified of all overflows..... Y
- (d) Are there CSOs in the collection system..... N/A
if so, what is the LTCP status.....
- (e) How are CSOs monitored (chalk, block, level sensor, etc.).....
- (f) Portable pumps available for collection system maintenance..... Y
- (g) RDII Program established and active..... Y
- (h) Any WIB complaint received since last inspection..... Y
- (i) Is there a WIB response plan..... Y
- (j) Is any portion of the collection system at or near dry weather capacity..... N

Comments/Status:

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See Attached Summary of Findings / Comments.

Section H: Sludge Management

(a) Method of Sludge Disposal...

Land Application

Haul to Another NPDES Permittee

Haul to a Mixed Solid Waste Landfill

*if one of the selected methods is land application, complete applicable charts.

Class A - Exception Quality Sewage Sludge (monitoring station 584)

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Class B Sewage Sludge (monitoring station 581)

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options							
	Option 1 -38% Volatile Solids Reduction	Option 2 -Anaerobic Bench Scale Analysis	Option 3 – Aerobic Bench Scale Analysis	Option 4 – Specific Oxygen Uptake Rate	Option 5 – Aerobic Time and Temperature	Option 6 – Alkali Addition	Option 7 – >75% Percent Solids without Unstabilized Solids	Option 8 - >75% Percent Solids with Unstabilized Solids
Alternative 1 – Time and Temperature Regime (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – High pH and High Temperature (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 3 – Other Processes (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 4 – Unknown Processes (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Composting (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Heat Drying (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Heat Treatment (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Thermophilic Aerobic Digestion (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Beta Ray Irradiation (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Gamma ray Irradiation (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Pasteurization (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 6 - Approved Equivalent Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) Has amount of sludge generated changed significantly since the

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options									
	Option 1 -38% Volatile Solids Reduction	Option 2 -Anaerobic Bench Scale Analysis	Option 3 - Aerobic Bench Scale Analysis	Option 4 - Specific Oxygen Uptake Rate	Option 5 - Aerobic Time and Temperature	Option 6 - Alkali Addition	Option 7 - >75% Percent Solids without Unstabilized	Option 8 - >75% Percent Solids with Unstabilized	Option 9 - Land Injection	Option 10 - Immediate Incorporation
Alternative 1 - Geometric Mean of Seven Fecal Samples (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Aerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Air Drying (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Anaerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Composting (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Lime Treatment (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 3 - Approved Equivalent Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- last inspection..... Y
- (c) How much sludge storage is provided at the plant.....
- (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" scree n at headworks for facilities that land apply sludge..... Y
- (g) Are sludge application sites inspected to verify compliance with NPDES permit..... Y
- (h) Is a contractor used for sludge disposal..... Y
 If so, what is the name of the contractor.....

Comments/Status:

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):

Radar and open channel.

- (b) Flow meter calibrated annually N
(Date of last calibration: 5/10/2011)
- (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 flow monitoring equipment must be calibrated as soon as possible. The 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
(see GLC page)
- (d) 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/Status:

None.

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

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N/E
- (b) Do SOP's include the following if applicable..... N/E
 - 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).. N/E
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/E
- (e) Analyses being performed more frequently than required by permit. N/E
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/E
- (g) Satisfactory calibration and maintenance of instruments/equipment. N/E (see score from GLC page)
- (h) Commercial laboratory used..... N/E
Parameters analyzed by commercial lab: Metals and sludge.

Lab name: Ginosko Labs

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling..... N/E
Date:
- (b) Were any parameters "Unsatisfactory"..... N/E
- (c) Reasons for "Unsatisfactory" parameters.....

Comments/Status:

None.

Section J: Effluent/Receiving Water Observations

Outfall # 001

Outfall Description: Effluent pipe discharge.

Receiving Stream: Great Miami River.

Receiving Stream Description: No adverse conditions were noted.

Comments/Status:

Effluent sign posted as required.

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

Areas Requiring a Response

The effluent flow meter was last calibrated on May 10, 2011. This meter must be calibrated once a year. This meter must be calibrated as soon as possible. Please indicate when this will be done.

One of the two secondary clarifiers is offline. This clarifier was taking offline last winter so that effluent structure could be repaired. With the WWTP upgrade that was to occur this summer, the city of Hamilton decided not to put this clarifier back into service. This is not acceptable, and the City must get this clarifier back into operation as soon as possible.

The NPDES Permit requires that outfall signs be placed at all discharge locations including dedicated sewage bypass locations. This is addressed in Part II, Section W of the NPDES Permit. These signs have not been provided as required for outfalls 027 and 037. These signs must be installed as soon as possible.

Areas Not Requiring a Response

For January through December 2012, 19 Water in Basement events (WIBs) were reported due to sanitary sewer blockages. In the past, the totals were 29 in 2011; 42 in 2010; 38 in 2009 and 40 in 2008. These events are not concentrated in any single area of the city. For October 2011 through June 2013, four sanitary sewer overflows were also reported due to sewer blockages. Sewage was also pumped out of the sanitary sewer on four occasions due to high flows. Ohio EPA is concerned about the large number of basement backups and sanitary sewer bypasses due to these sewer blockages.

The sewage collection system consists of approximately 240 miles. The city of Hamilton (Hamilton) indicated previously that their goals would be to clean 10% of the sewers (24 miles) and to visually inspect 8% of the sewers (20 miles). For the past year, Hamilton cleaned and visually inspected the following miles of sewers:

Period	Cleaned (miles)	TV (miles)
7-9 / 2012	9.68	4.94
10-12 / 2012	8.77	8.58
1-3 / 2013	6.66	4.09
4-6 / 2013	6.87	7.85

Based on this review period, the City cleaned 13.3 percent of the sanitary sewers and visually inspected 10.6 percent of the sanitary sewers. This is a significant improvement of past totals. Twenty five flow totes are being used to monitor the collection system. The city of Hamilton now has two vactor trucks and two TV trucks. The City repairs sources of infiltration and inflow (I/I) as they are found. The slip lining

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program is also ongoing to control the I/I. Hopefully, these actions will reduce the number of future WIBs and bypasses due to blockages.

A review of the Discharge Monitoring Reports (DMRs) for the period of January through June 2013 indicated no effluent violations were reported. Future violations must continue to 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, CO and the Overflow Emergency Response Plan (OERP). 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 also requires SSOs from overflow locations 002, 014, 022, 027 and 037 to be reported on the DMRs.

For the SSOs addressed in the CO, Attachment I lists the bypasses reported for October 2011 through June 2013. All other SSOs are addressed on Attachment II. Future SSOs must continue to be reported in accordance to the NPDES Permit, CO and OERP.

Overflow location 002 was plugged in June 2010. Overflow locations 014 and 022 were also plugged in December 2010.

To address overflow locations 027 and 037, a new trunk sewer constructed between overflow location 027 and the WWTP has been approved. The trunk sewer will use much of the old Smart Papers trunk sewer. The sewer construction started in July 2013 and should be completed in August 2014.

The old Smart Paper trunk sewer has been noted as having significant I/I. The city of Hamilton should continue their efforts to minimize this I/I.

The CO also requires the internal WWTP bypasses be reported on the DMRs at station 603. Numerous internal WWTP bypasses were reported for October 2011 through June 2013. These bypasses are listed on Attachment III. In addition, the primary grease collector tank overflowed less than 20,000 gallons on January 23, 2012 and less than 10,000 gallon on April 26, 2016.

The WWTP is designed for an average daily flow rate of 32.0 MGD. A review of the DMRs for October 2011 through June 2013 indicated the average daily flow was 9.72 MGD. The peak daily flow rate was reported as 35.43 MGD. These flows are down significantly since Smart Papers and Mohawk Papers no longer are in business.

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Sludge produced at the Hamilton WWTP is either land applied or landfilled. Synagro is contracted for the land application program and hauling the sludge to the Rumpke landfill. In 2012, 1657 tons of sludge was land applied, and 1437 tons of sludge was landfilled.

The WWTP is being upgraded to eliminate internal wastewater bypasses. The WWTP upgrade phase one has been completed. This work included replacing the aeration equipment, constructing a new vector dump station, and adding a new backup generator.

The PTI application for the WWTP upgrade phase two has been submitted. Since submitting this application, the city of Hamilton has proposed another alternative that would allow for some peak flows to be bypassed internally. We have determined that this may be an option that we can consider. The City is in the process of drafting a technical memorandum addressing this proposal. This should be submitted in the near future.

Attachment I

Sewage Bypasses from Overflow Structures

October 2011 through June 2013

Station	Parameter	Units	Date	Reported Value
27	Overflow Volume	Million Gallons	10/19/2011	0.13583
27	Overflow Volume	Million Gallons	10/20/2011	0.24009
27	Overflow Volume	Million Gallons	11/3/2011	0.0106
27	Overflow Volume	Million Gallons	11/4/2011	0.13868
27	Overflow Volume	Million Gallons	11/15/2011	0.58673
27	Overflow Volume	Million Gallons	11/22/2011	0.26174
27	Overflow Volume	Million Gallons	11/28/2011	1.07638
27	Overflow Volume	Million Gallons	11/29/2011	1.29385
27	Overflow Volume	Million Gallons	11/30/2011	0.35704
27	Overflow Volume	Million Gallons	12/5/2011	7.67921
27	Overflow Volume	Million Gallons	12/6/2011	1.74038
27	Overflow Volume	Million Gallons	12/21/2011	0.27769
27	Overflow Volume	Million Gallons	1/17/2012	0.06015
27	Overflow Volume	Million Gallons	1/26/2012	1.18338
27	Overflow Volume	Million Gallons	1/27/2012	1.57405
27	Overflow Volume	Million Gallons	4/30/2012	0.02938
27	Overflow Volume	Million Gallons	5/2/2012	0.02531
27	Overflow Volume	Million Gallons	9/5/2012	0.00643
27	Overflow Volume	Million Gallons	9/6/2012	0.00274
27	Overflow Volume	Million Gallons	9/8/2012	0.00135
27	Overflow Volume	Million Gallons	1/11/2013	AH
27	Overflow Volume	Million Gallons	1/13/2013	AH
27	Overflow Volume	Million Gallons	1/30/2013	AH
27	Overflow Volume	Million Gallons	3/11/2013	0.93008
27	Overflow Volume	Million Gallons	3/18/2013	0.95446
37	Overflow Volume	Million Gallons	11/3/2011	0.05356
37	Overflow Volume	Million Gallons	11/4/2011	0.17852
37	Overflow Volume	Million Gallons	11/14/2011	0.03284
37	Overflow Volume	Million Gallons	11/15/2011	0.19888
37	Overflow Volume	Million Gallons	11/22/2011	0.02444
37	Overflow Volume	Million Gallons	11/28/2011	0.80861
37	Overflow Volume	Million Gallons	11/29/2011	0.68319
37	Overflow Volume	Million Gallons	12/1/2011	0.01255
37	Overflow Volume	Million Gallons	12/2/2011	0.01462
37	Overflow Volume	Million Gallons	12/5/2011	3.74383
37	Overflow Volume	Million Gallons	12/6/2011	0.2174
37	Overflow Volume	Million Gallons	12/8/2011	0.00233

Attachment I

Sewage Bypasses from Overflow Structures

October 2011 through June 2013

Station	Parameter	Units	Date	Reported Value
37	Overflow Volume	Million Gallons	12/16/2011	0.00616
37	Overflow Volume	Million Gallons	12/21/2011	0.33075
37	Overflow Volume	Million Gallons	12/22/2011	0.0034
37	Overflow Volume	Million Gallons	12/23/2011	0.0056
37	Overflow Volume	Million Gallons	1/17/2012	0.0858
37	Overflow Volume	Million Gallons	1/26/2012	1.03325
37	Overflow Volume	Million Gallons	1/27/2012	0.56496
37	Overflow Volume	Million Gallons	4/25/2012	0.01471
37	Overflow Volume	Million Gallons	4/30/2012	0.1898
37	Overflow Volume	Million Gallons	5/2/2012	0.19758
37	Overflow Volume	Million Gallons	5/5/2012	0.03576
37	Overflow Volume	Million Gallons	8/9/2012	0.00342
37	Overflow Volume	Million Gallons	9/3/2012	0.07853
37	Overflow Volume	Million Gallons	9/8/2012	0.25603
37	Overflow Volume	Million Gallons	1/11/2013	0.02249
37	Overflow Volume	Million Gallons	3/11/2013	0.26809
37	Overflow Volume	Million Gallons	3/12/2013	0.0199
37	Overflow Volume	Million Gallons	3/18/2013	0.64799
37	Overflow Volume	Million Gallons	4/24/2013	0.01182

“AH” – Flow data not available.

Attachment II

Sewage Collection System Bypasses

October 2011 through June 2013

Date	Location	Overflow Volume	Cause
10/28/11	MH64-055	unknown	Blockage
12/5/11	MH41-057	28,800	Rain/Pump
12/5/11	MH44-007	39,600	Rain/Pump
12/5/11	MH77-056	25,200	Rain/Pump
12/5/11	MH43-016	3600	Rain/Pump
2/22-3/14/12	MH59-031	unknown	Blockage
3/23/12	MH56-029	unknown	Vandalism
5/7/12	MH39-039 & 041	unknown	Rain/collapsed line
6/13/12	MH 67-096	unknown	Blockage
8/19/13	MH 53-040	unknown	Blockage

Attachment III

WWTP Bypasses

October 2011 through June 2013

Parameter	Units	Date	Reported Value
Bypass Volume	Million Gallons	10/20/2011	0.459
Bypass Volume	Million Gallons	11/15/2011	4.211
Bypass Volume	Million Gallons	11/16/2011	0.456
Bypass Volume	Million Gallons	11/22/2011	0.375
Bypass Volume	Million Gallons	11/23/2011	1.367
Bypass Volume	Million Gallons	11/28/2011	6.684
Bypass Volume	Million Gallons	11/29/2011	13.541
Bypass Volume	Million Gallons	11/30/2011	9.522
Bypass Volume	Million Gallons	12/1/2011	2.492
Bypass Volume	Million Gallons	12/2/2011	0.027
Bypass Volume	Million Gallons	12/5/2011	6.446
Bypass Volume	Million Gallons	12/6/2011	5.272
Bypass Volume	Million Gallons	12/7/2011	6.882
Bypass Volume	Million Gallons	12/8/2011	1.778
Bypass Volume	Million Gallons	12/9/2011	0.059
Bypass Volume	Million Gallons	12/21/2011	3.576
Bypass Volume	Million Gallons	12/22/2011	5.912
Bypass Volume	Million Gallons	12/23/2011	5.04
Bypass Volume	Million Gallons	12/24/2011	0.05
Bypass Volume	Million Gallons	1/26/2012	2.61
Bypass Volume	Million Gallons	1/27/2012	4.949
Bypass Volume	Million Gallons	1/28/2012	2.975
Bypass Volume	Million Gallons	1/29/2012	0.013
Bypass Volume	Million Gallons	5/2/2012	5.485
Bypass Volume	Million Gallons	5/3/2012	0.156
Bypass Volume	Million Gallons	5/5/2012	2.582
Bypass Volume	Million Gallons	5/6/2012	0.487
Bypass Volume	Million Gallons	5/8/2012	5.297
Bypass Volume	Million Gallons	5/9/2012	0.157
Bypass Volume	Million Gallons	3/11/2013	8.974
Bypass Volume	Million Gallons	3/12/2013	3.3
Bypass Volume	Million Gallons	3/18/2013	2.432
Bypass Volume	Million Gallons	3/19/2013	0.522