



State of Ohio Environmental Protection Agency

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\*1PK0000520110414\*

HAMILTON SYCAMORE CREEK WWTP

WARE, RONALD

2011/04/14

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



Environmental  
Protection Agency

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

April 14, 2011

Donald G. Linn, P. E., Superintendent  
Division of Wastewater Treatment  
Metropolitan Sewer District of Greater Cincinnati  
1600 Gest Street  
Cincinnati, Ohio 45204

**Re: Sycamore Creek WWTP, NPDES Permit No. 1PK00005\*JD / OH0025488  
Compliance Evaluation Inspection**

Dear Mr. Linn:

On Thursday, March 31, 2011, I conducted a Compliance Evaluation Inspection at the above referenced facility. Tom Kutcher, Barb Browne, Dave Wilson, and Keith Heffner with the Metropolitan Sewer District of Greater Cincinnati (MSDGC) were present during the inspection. The purpose of the inspection was to evaluate compliance with the terms and conditions this facility's NPDES permit.

A copy of the inspection report is enclosed. As indicated in the report, all of the areas that were evaluated during the inspection were rated as satisfactory. No response or corrective action is required at this time.

A notification letter concerning the NPDES permit violations that occurred in August 2010 was received by this office on April 13, 2011. Please be advised that Paragraph 12 of Part III on page 40 of the facility's current NPDES permit (1PK00005\*JD) provides information on how to provide notification of NPDES permit violations by e-mail.

Thank you and your staff for the time extended during this inspection. If you have any questions regarding this report, please contact me at (937) 285 - 6098 or by e-mail at [ron.ware@epa.state.oh.us](mailto:ron.ware@epa.state.oh.us).

Sincerely,

Ron Ware  
Ohio EPA - Division of Surface Water  
Southwest District Office

RW/rb

cc: Barb Browne, MSDGC  
Dave Wilson, MSDGC  
Ed Ewbank, MSDGC

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401 East Fifth Street  
Dayton, OH 45402-2911

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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
1PK00005*JD	OH0025488	3/31/2011	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Hamilton County MSD - Sycamore WWTP 9273 Old Remington Road Cincinnati, Ohio 45240		August 1, 2010
	Exit Time	Permit Expiration Date
		January 31, 2015
Name(s) and Title(s) of On-Site Representatives		Phone Number(s)
Barb Browne, Senior Plant Supervisor David Wilson, Senior Plant Supervisor Keith Heffner, Plant Supervisor (Polk Run) Tom Kutcher, Assistant Superintendent		(513) 793 - 1525
Name, Address and Title of Responsible Official		Phone Number
Donald G. Linn, P. E., Superintendent Metropolitan Sewer District of Greater Cincinnati 1600 Gest Street Cincinnati, Ohio 45204		(513) 244 - 5142

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)	
Inspector	Reviewer
Ron Ware Date 4/14/11	Martyn Burt Date 4/14/11
Ron Ware Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Permit #: 1PK00005\*JD  
 NPDES #: OH0025488

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:

A Storm Water Pollution Prevention Plan has been completed for the Sycamore Creek WWTP. Construction of improvements to the grit removal facilities and installation of effluent "disc" filters are currently underway. A new set of controls for the non-potable water system and a SCADA system are now in place at the plant.

**Section F: Compliance**

- (a) Any 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 N

Comments/Status:

(a)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
Aug. 2010	003	Dissolved Oxygen	1D Conc	6.0	5.5	8/14/2010
Aug. 2010	003	Dissolved Oxygen	1D Conc	6.0	2.8	8/18/2010

These violations occurred during a time frame in which plant operations staff was determining how to effectively operate the Chemically Enhance High Rate Treatment (CEHRT) units.

**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 system (two generators) handles the entire treatment facility.
  - ii. How often is the generator tested under load.....  

Once a week (every Thursday).
  
- (b) Which components have an alarm system available for power or equipment failures.....  

The Sycamore Creek WWTP has a SCADA system. Plant operations staff can monitor and/or change set points on various treatment units at a station in the Administration Building or at other individual locations at the plant site.
  
- (c) All treatment units in service other than backup units..... Y
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....  

"Maximo" program
  
- (e) Any major equipment breakdown since last inspection..... N
- (f) Operation and maintenance manual provided and maintained..... Y
- (g) Any plant bypasses since last inspection..... N
- (h) Any plant upsets since last inspection..... N

**Comments/Status:**

Between March 1, 2010 and March 31, 2011, the Chemically Enhance High Rate Treatment (CEHRT) units treated and discharged a portion of the treatment plant influent flow on 39 separate occasions. The Sycamore Creek WWTP can take up to 18 MGD through secondary treatment before the need arises to use the CEHRT units.

**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.....Y
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)  
eOPS (electronic operations) – long term storage, reporting and data entry.  
Each operator has their own log-in and password.
- (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)... 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:

**Section G: Operation & Maintenance con't**

**Collection System:**

- (a) Are there pump stations in the collection system..... N/E
  - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent..... \_\_\_\_\_
  - ii. How many pump stations have telemetered alarms..... \_\_\_\_\_
  - iii. How many pump stations have operable alarms..... \_\_\_\_\_
  
- (b) Any chronic collection system overflows since last inspection..... N/E
- (c) Regulatory agency notified of all overflows..... N/E
- (d) Are there CSOs in the collection system..... N/E  
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..... N/E
- (g) RDII Program established and active..... N/E
- (h) Any WIB complaint received since last inspection..... N/E
- (i) Is there a WIB response plan..... N/E
- (j) Is any portion of the collection system at or near dry weather capacity..... N/E

**Comments/Status:**



**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	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 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"/>

- (b) Has amount of sludge generated changed significantly since the last inspection..... N
- (c) How much sludge storage is provided at the plant.....  

Two holding tanks with a combined holding capacity of 780,000 gallons, which provide about 19 days of storage.
- (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..... N/A
- (g) Are sludge application sites inspected to verify compliance with NPDES permit..... N/A
- (h) Is a contractor used for sludge disposal..... Y  
 If so, what is the name of the contractor.....  

Merrill Brothers

**Comments/Status:**

**Section I: Self-Monitoring Program**

**Flow Measurement:**

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

Ultrasonic level sensor – ("Accusonic" unit in an open channel)
- (b) Flow meter calibrated annually ..... Y  
(Date of last calibration: March 24, 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:**

**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:**

**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).. Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (e) Analyses being performed more frequently than required by permit. N
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/A
- (g) Satisfactory calibration and maintenance of instruments/equipment. N/E (see score from GLC page)
- (h) Commercial laboratory used..... Y  
Parameters analyzed by commercial lab: Bioassays, metals

Lab name: Stantec (bioassays), Pace (metals)

*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:**

All lab analysis of samples from the Sycamore Creek WWTP are performed at the Polk Run WWTP.

**Section J: Effluent/Receiving Water Observations**

Outfall # 1PK00005003

Outfall Description: Final effluent discharge to Sycamore Creek.

Receiving Stream: Sycamore Creek

Description of conditions in receiving stream: No observable solids from the treatment plant, slight amounts of foam

**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:**