



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

September 30, 2013

Mr. Mark Livengood, Manager  
Eastern Regional WRC  
4257 Dryden Road  
Dayton, Ohio 45439

**RE: Montgomery County Eastern Regional Water Reclamation Center,  
Compliance Evaluation Inspection, NPDES Permit No.  
1PL00001\*MD/OH0026590, Montgomery County**

Dear Mr. Livengood:

On September 12, 2013, representatives of the Ohio EPA Southwest District Office conducted a Compliance Evaluation Inspection at the Montgomery County Eastern Regional Water Reclamation Center. The inspection was conducted as part of the National Pollutant Discharge Elimination System (NPDES) permit renewal process.

The findings from the inspection are included in the attached report. The report includes two items that require a response. Please provide a written response by no later than November 25, 2013. If you have any questions regarding the report, please call Mr. Reynolds at (937) 285-6097.

Sincerely,

Martyn Burt  
Compliance Supervisor  
Division of Surface Water

MB/kb

ec: Elizabeth Moore, Team Leader, Montgomery County



State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

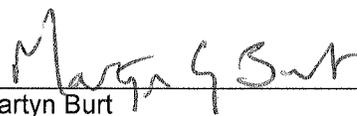
Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PL00001*MD	OH0026590	9/12/2013	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Eastern Regional Water Reclamation Facility 1802 Spaulding Road Kettering, Ohio 45432	9:00 AM	5/1/2009
	Exit Time	Permit Expiration Date
	11:00 AM	7/31/2013
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Elizabeth Moore, Eastern Regional Team Leader Mark Livengood, Manager Rob Powers, Operator	(937) 781 - 3032 (937) 781 - 2559	
Name, Address and Title of Responsible Official	Phone Number	
Mark Livengood - Manager 4257 Dryden Road Dayton, Ohio 45439	(937) 781 - 2559	

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	N	Other
M	Collection System				

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

See attached report.

Inspector	Reviewer
 Date: 10/12/13	 Date: 10/12/13
Joe Reynolds Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

## Inspection Findings

On Thursday, September 12, 2013, representatives of the Ohio EPA, Southwest District Office (Michelle Waller, Ned Sarle, and Joe Reynolds) met with representatives of the Montgomery County Eastern Regional Water Reclamation Center (Elizabeth Moore and Rob Powers) to perform a Compliance Evaluation Inspection at the treatment facility. The inspection was conducted as part of the National Pollutant Discharge Elimination System permit renewal process.

National Pollutant Discharge Elimination System (NPDES) permit number 1PL00001\*MD was issued to the Montgomery County Board of Commissioners on April 13, 2009. The permit expired on July 31, 2013. An NPDES renewal application was submitted February 20, 2013.

The County's NPDES permit has a compliance schedule for obtaining compliance with a final effluent phosphorus loading of 24.6 kg/day. Through the addition of Ferric Chloride to the effluent of the solids contact tanks the County has been able to meet the new effluent limit. The first annual follow-up report is due December 1, 2013.

The treatment plant is permitted at 13 MGD. The system can treat up to 26 MGD under normal operational mode (low influent loadings, mainly domestic, just 3 SIU's). For short periods of time the system can treat up to 60 MGD.

Infiltration and inflow into the collection system has contributed to maximum flows of 26 MGD (average 9 MGD). There were four sanitary sewer overflows reported in 2012. All four occurred in January and were less than 1000 gallons each. Nicole Diad is the Field Operations Manager in charge of the collection system oversight.

The treatment plant has a secondary bypass. Bypassed flows pass through screening, storage, and disinfection prior to discharge through outfall 602. In 2011 there were 14 bypass events. Infiltration and inflow work has helped to reduce this number to 2 (to date of the inspection) in 2013.

The treatment plant is staffed 24/7. A Supervisory Control and Data Acquisition (SCADA) system also is being used as part of the system oversight.

## Inspection Findings (cont.)

The County produces Class B sludge. The sludge press operation and land application of bio solids is contracted with SYNAGRO. The majority of the bio solids are land applied. Occasionally solids are hauled to Stony Hollow Landfill.

In order to control snail populations a low sludge volume is maintained in the plant. Increased flushing of the filters is used to control the biomass.

Preliminary treatment is provided by two influent screens. The screens are run on timers. Four raw pumps (8 million gallons each, VFD motors) pump to two fine screens.

After screening the influent flows pass through two grit tanks. Only one tank was being used at the time of the inspection. There are three air blowers and two air compressors that are used to aerate and remove grit from the system. A traveling bridge moves along the tank sucking grit off the bottom of the tank.

A splitter box divides flows from the grit removal system between three primary tanks. Only two were on- line. Skimmed solids from the primaries are returned to a scum collection / disposal system.

After primary clarification flows are pumped to three trickling filters, only two were on line. Flows above 32 MGD are diverted to the storm building for filtration, then to three storm tanks that operate in series. Stored waste water is normally drained back to the head of the plant. If storm flows exceed the storage capacity, the storm tanks discharge to the disinfection system through outfall 602 and ultimately are discharged through outfall 001. The storage tanks are minimally used. All three tanks were empty at the time of the inspection.

From the trickling filters flow is sent to the solids contact tanks (two tanks). These tanks are used to mix RAS flows with the trickling filter effluent. A percentage then is returned to the filters. Ferric Chloride is added at the effluent of these tanks.

Three secondary clarifiers receive effluent from the solids contact tanks. All three clarifiers were on-line at the time of the inspection.

## Inspection Findings (cont.)

There are two chlorine contact tanks. Only one was on-line at the time of the inspection. Hypochlorite is fed at the influent. Bisulfite is fed at the effluent weir. Post aeration also occurs at the end of the contact tank. There are three post aeration blowers. Only one is run at a time.

Between November 2012 and August 2013 the county reported one nitrogen ammonia final effluent numeric violations (1.56 mg/l vs. 1.5 mg/l).

## Items Requiring a Response

1. Please provide an update on all infiltration and inflow reduction work completed in the last year and proposed for the coming year.
2. Please provide an update detailing the circumstances that contributed to the two bypasses through outfall 602.