



Environmental  
Protection Agency

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

March 7, 2011

RE: Lake County  
County Operated Package Plants  
Compliance Evaluation Inspections  
NPDES Permit Nos. - 3PG00072,  
3PH00054, 3PG00130, 3PG00063

Mr. Robert Shelby, Director of Operations  
Lake County Department of Utilities  
Lake County Administration Center  
105 Main Street  
Painesville, Ohio 44077

Dear Mr. Shelby:

On March 2, 2011, this writer conducted Compliance Evaluation Inspections of the Heatherstone, Rio Grande, Sunshine Acres and Dodd's Hill wastewater treatment plants. The purpose of the inspections was to evaluate the WWTPs' operation and maintenance conditions, and to evaluate the facilities' compliance with National Pollutant Discharge Elimination System (NPDES) permit effluent limits. Mr. Michael Melnyk, Assistant Superintendent at the Gary L. Kron Water Reclamation Facility and Mr. Jonathan Hegfield, Supervisor of Package Plants, represented the county during the inspections.

#### **Plant Observations and Comments**

##### *Dodd's Hill WWTP (NPDES Permit No. 3PG00072)*

The plant was producing an effluent with satisfactory visual quality, free of solids and oil and grease. The plant consists of a 24,000 gallon extended aeration plant followed by a micro-screen and ultraviolet light disinfection. At the time of inspection, all treatment units were in operation. Operation and maintenance of the plant was satisfactory.

A review of the plant's discharge monitoring reports for the period of December 2009 through January 2011 revealed no effluent limitation violations or frequency violations.

##### *Heatherstone WWTP (NPDES Permit No. 3PH00054)*

The plant was producing an effluent free of solids and oil and grease. The 0.4 MGD plant consists of aeration, clarification, surface sand filtration and UV disinfection. At the time of inspection, all treatment units were in operation. Operation and maintenance of the plant was satisfactory. According to Mr. Hegfield, the diffusers in the #2 aeration tank have been replaced and a steel wall under the tank's catwalk has been replaced with a concrete wall.

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A review of the plant's discharge monitoring reports for the period of revealed the December 2009 through January 2011 following effluent limitation violations:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	30D Qty	18	18.2162	1/1/2010
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	4.5	4.85	2/1/2010
001	00610	Nitrogen, Ammonia (NH3)	7D Qty	6.8	12.5383	2/1/2010
001	00530	Total Suspended Solids	7D Qty	27	27.1043	12/1/2010

Rio Grande WWTP (NPDES Permit No. 3PG00130)

The plant was producing an effluent with satisfactory visual quality, free of solids and oil and grease. The 21,500 gpd plant consists of a Flat Plate Membrane Bioreactor (MBR) System followed by UV disinfection. The formerly used extended aeration plant has been removed with the exception of the effluent tank and a single filter bed. The tank and filter bed were originally kept in order to provide additional support to the MBR system. The effluent tank is no longer used for sludge holding, and just contains groundwater/rain water. Sludge is now removed directly from the MBR tank. The filter bed is also no longer used. By design, the MBR system meets permit limits without the need for a filtration following the MBR system. Operation and maintenance of the MBR plant was satisfactory. Soil erosion in the vicinity of the effluent discharge pipe, on the south side of State Route 86, continues to be problematic. More erosion has occurred since the last inspection in December 2009. A section of pipe has fallen into the pit formed from the erosion. This area is a potential public safety hazard that needs to be addressed.

A review of the plant's discharge monitoring reports for the period of December 2009 through January 2011 revealed no effluent limitation or frequency violations.

Sunshine Acres WWTP (NPDES Permit No. 3PG00063)

The 20,000 gpd plant includes an extended aeration plant followed by a surface sand filter and UV disinfection. On February 28, 2011, the entire plant flooded due to the heavy rains and snow melt. At the time of inspection, the water had receded and the plant was in operation; however, the plant was still recovering from the flood. The sludge on the plant grounds and covering the surface of the sand filter should be removed as soon as possible.

A review of the plant's discharge monitoring reports for the period of December 2009 through January 2011, revealed no effluent limitation violations.

Written notification of any overflow must be reported to the Division of Surface Water. The Sanitary Sewer Overflow 5-day Follow Up Report form may be used. The form can

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be downloaded from the Ohio EPA website at [http://www.epa.state.oh.us/dsw/permits/technical\\_assistance.aspx#SSO](http://www.epa.state.oh.us/dsw/permits/technical_assistance.aspx#SSO) .

Please be advised that failure to comply with the effluent limitations or to satisfy the monitoring or reporting requirements of your NPDES permit may be cause for enforcement pursuant to the Ohio Revised Code Chapter 6111.

The operation and maintenance logbooks kept at each of the plants must state the name of the operator performing the work, in addition to the operator's arrival and departure times at the plants.

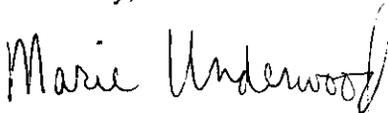
The NPDES permit expiration dates for the Dodd's Hill, Heatherstone, Rio Grande and Sunshine wastewater treatment plants are 3/31/12, 7/31/12, 7/31/12 and 7/31/12, respectively. The renewal application for an NPDES permit must be submitted to this district office 180 days prior to the expiration date.

**Actions to be Taken by Permittee**

Within 14 days of the date of this letter, you are required to notify this office, in writing, outlining the corrective action, either actual or proposed, that will be taken to eliminate the above highlighted deficiencies.

Should you have any questions regarding this letter, please contact the undersigned at (330) 963-1183.

Sincerely,



Marie Underwood, P.E.  
Environmental Engineer  
Division of Surface Water

MU/mt

cc: Jonathan Hegfield, Supervisor  
Michael Melnyk, Assistant Superintendent