



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

June 4, 2013

RE: GEAUGA COUNTY  
NPDES PERMIT COMPLIANCE  
INSPECTIONS

**CERTIFIED MAIL**

Geauga County Board of Commissioners  
470 Center Street, Building #3  
Chardon, OH 44024

Dear Commissioners:

On May 29, 2013, inspections were conducted at six Wastewater Treatment Plants (WWTP) operated and maintained by Geauga County. Mr. Jim Reider of Geauga County Water Resources was interviewed and the facilities were inspected in his presence. The intent of the inspections was to review operations and maintenance and compliance with the National Pollutant Discharge Elimination System (NPDES) permits. In addition, any ongoing construction activities were reviewed. The facilities inspected were Metzenbaum, Opalocka, Infirmary, Wintergreen, Parkman and Troy Oaks.

Discharge monitoring reports from January 1, 2012 through May 1, 2013 were reviewed for compliance with the current NPDES permits at each facility. A violation summary for each treatment system has been attached to this letter. The following is a summary of the inspections conducted at each facility:

**METZENBAUM NPDES #3PG00076**

At the time of the inspection, the treatment plant was operating satisfactorily. According to discharge monitoring report data, the flow reported from the WWTP for the review period averaged 5,600 gpd. The flow equalization tank was in operation and appeared to be provided with a satisfactory air supply and the rollover within the tank was satisfactory.

The aeration tanks appeared to be running full and the air circulation within the tanks was more noticeable in the last aeration tank. It is understood the diffusers on the last tank were recently serviced. The rollover within the tanks appeared to be more pronounced in the last tank. Some old sludge and scum had accumulated on the surface of the other two tanks in the farther corners. The rollover within the first two tanks was not as noticeable as in the last tank. The sludge return lines were in operation and appeared to be in satisfactory operation. The aeration system appeared to be providing satisfactory treatment and the diffusers in the first two aeration tanks may need routine maintenance in the future. It is understood maintenance is performed on the diffusers as needed. The clarifier was in operation and there were minimal solids on the surface of the tank. The visibility within the clarifier appeared satisfactory and the skimmer was visible and set at what appeared to be a satisfactory depth. The influent baffle had some accumulated solids and the effluent weir contained some minor algae growth. The effluent from the clarifier appeared clear.

The sludge holding tank is aerated but was not being aerated at the time of the inspection. It is understood sludge is routinely wasted, as needed, to the sludge holding tank. The tank is routinely emptied and the contents are hauled offsite to McFarland WWTP for further treatment and disposal.

The dosing chamber appeared to be in satisfactory condition. The surface sand filters were in operation and appeared to be operating satisfactorily. The WWTP includes one larger filter bed and two smaller filter beds. It was noticed that raked sand and solids are stored in the corners of the sand filter beds. It is understood the County hauls these solids to McFarland WWTP for further treatment. As a part of routine maintenance for the sand filter beds, the solids removed from the filter beds must not be stored on the sand beds for an extensive length of time. These solids should be removed from the sand beds as soon as possible so not to interfere with the treatment of the wastewater.

The UV system was in operation and appeared to be in satisfactory condition. The final effluent from the UV tank appeared clear.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC on file for this WWTP is Nathan Johnston.

#### **OPALOCKA NPDES #3PH00000**

The newly updated WWTP is under construction with finalizations expected to be completed July 2013. The updated WWTP is designed to treat an average daily design flow of 160,000 gpd. According to discharge monitoring report data for the review period, the flow reported averaged 95,000 gpd.

Due to construction, some treatment units have been out of service at various times during the length of construction. It is understood the flow meter was out of service and not functioning for a period of time. According to discharge monitoring reports, the flow meter was out and the reporting code "AD" was used for flow during the following timeframe: December 1-31, 2012 and February 5, 2013 to April 30, 2013. It is understood the meter has been placed in service and the metering manhole and weirs are expected to be installed this summer (July 2013 timeframe).

This office takes ongoing construction on a WWTP into consideration when reviewing compliance with the NPDES permit. We understand construction on the newly upgraded WWTP has been ongoing and therefore some treatment processes have been out of service at various times, which may have caused NPDES limit violations.

The upgraded WWTP includes three new blowers, new tertiary filtration, conversion of the old aerobic digesters to a flow equalization tank, a new aerobic digester and a new building to house the blowers and tertiary filters.

At the time of the inspection, treatment units appeared to be in satisfactory condition. The influent sampler and influent splitter box appeared to be in satisfactory condition. The sampler refrigerator should be provided with a thermometer. The flow equalization basin was not in use at the time of the inspection. It is understood flow equalization is used when needed. The stabilization basins appeared to be in satisfactory condition. It is understood updated weirs are to be added to the stabilization basins this summer. The new digesters were both online and appeared to be in satisfactory condition. The settling tanks are estimated to be online this summer. The rapid sand filters were in operation and appeared to be in satisfactory condition.

The post aeration was being worked on during the inspection. The UV was in operation and appeared to be in satisfactory condition.

The flow monitoring was in operation and appeared to be in satisfactory condition at the time of the inspection. All controls at the WWTP have been updated and are designed for automation. A SCADA system is included in the upgraded WWTP and will go online when all the upgrades are complete (this summer). The addition of flow equalization basins has improved the variations in flow at the WWTP due to storm events. The final effluent appeared clear and in satisfactory condition.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC's on file for this WWTP are Dennis Powers, Roy Nieman, Dave Osborn, Jim Reider and Petar Joksimovich.

**INFIRMARY CREEK NPDES #3PG00103**

The upgraded WWTP has a capacity of 149,0000 gpd. WWTP upgrades are complete and the upgraded WWTP is in operation. At the time of the inspection, all WWTP units were operational. The WWTP service area includes the County Jail and Geauga Hospital. It is understood the hospital accounts for nearly 65% of the capacity of the WWTP.

According to discharge monitoring report data, the flow reported from the WWTP for the review period averaged 178,800 gpd. A new ultra sonic flow meter was installed at Infirmary during the upgrades. It is understood the flow meter was originally calibrated by the contractor at an elevation that was 2-inches higher than needed. This resulted in higher flows being reported. It is understood the County was actively looking for the cause of approximately 150,000 gallons of I&I due to these higher flows being reported. The cause of the elevated flows was discovered as flow meter calibration error. The higher flows occurred from October 2012 until recently. Unfortunately, the discharge monitoring reports for those months cannot be corrected due to the flow reported must be an actual reading and not an estimate (based on the parameters of your NPDES permit). However, the County can edit the previous discharge monitoring reports by adding comments to those reports regarding the incorrectly calibrated flow meter. Any loading violations accrued during that timeframe were likely caused by the increased flow reported.

The WWTP was in satisfactory operation and maintenance condition. The influent auger and screening equipment was in satisfactory condition. The Aluminum Sulfate feed is located at the WWTP influent, right after the screening. The influent flow splitter is located directly before the flow equalization tank. The flow equalization tanks are located in what was the old WWTP. The air was turned off in the flow equalization tanks because the water level in these tanks was below the elevation of the diffusers.

The aeration tanks were in satisfactory condition. The tanks were provided with a satisfactory amount of air and the mixed liquor in the tanks was a chocolate brown color with no odor noted. The sludge returns were in operation and returning a satisfactory amount of sludge to the aeration tanks. The settling tank contained some surface scum and the visibility within the tank was satisfactory. The two digesters were in operation and one was aerated at the time of the inspection.

The rapid sand filters were in satisfactory condition. Some sediment was located in the influent weir. The filter effluent appeared clear. The backwash from the rapid sand filters is discharged to a pump vault before it is pumped to the headworks of the WWTP.

The effluent sampler appeared to be in satisfactory condition. The sampler refrigerator should be provided with a thermometer. The UV was in operation and appeared to be in satisfactory condition. The final effluent from the WWTP was clear.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC's on file for this WWTP are Brian Cain, Dave Osborn, Jim Reider and Corey Allen.

**WINTERGREEN NPDES #3PG00055**

At the time of the inspection, the treatment plant was operating satisfactorily. The plant currently serves approximately 26 homes located in the subdivision and has an average daily design flow of 15,000 gpd. According to discharge monitoring report data, the flow reported from the WWTP for the review period averaged 10,500 gpd. It is understood the County is planning to pursue a tie in with the City of Chardon WWTP.

The WWTP is located on the edge of a hillside. The chlorine contact tank is located on the very edge of the hillside and is at risk of sliding down the steep slope. At the time of the inspection, all the treatment units were in operation and appeared to be operating satisfactorily. The WWTP contains no tertiary treatment. It is understood solids are hauled out of the system when the MLSS is over 3,000 mg/l (based on the operator sedimentation test).

The contents of the aeration tank were a dark brown and the tank was provided with aeration. The sludge return line was in operation and returning thick dark concentrated solids to the aeration tank. The settling tank/clarifier portion of the system contained some solids on the surface of the tank. The skimmer was visible and the effluent weir contained a minimal amount of algae and solids. The effluent from the settling tank was clear. The chlorination and dechlorination were in operation and provided with tablets. The final effluent from the WWTP was clear.

Previous NPDES permits issued by this office included compliance schedules for the upgrades to the WWTP. A PTI was issued to the County for improvements to the WWTP. The upgrades were never completed due to funding. Although the reported noncompliance at this WWTP is not severe, the condition of the treatment system is such that it will require updates in the future to maintain an effective level of treatment.

Due to the condition of the WWTP, this office is requesting the County evaluate the system and provide an update on either completing an upgrade or plans to abandon the WWTP and connect to the City of Chardon.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC's on file for this WWTP are Brian Cain, Dave Osborn, Jim Reider and Corey Allen.

**PARKMAN NPDES #3PG00160**

The Parkman WWTP was in good operation and maintenance condition at the time of the inspection. The Ohio EPA issued a Permit-to-Install (PTI) for the WWTP which was installed in 2007. The capacity of the WWTP is 200,000 gpd. According to discharge monitoring report data, the flow reported from the WWTP for the review period averaged 23,300 gpd. The WWTP was reclassified as a Class I WWTP in a modified NPDES permit, which had an effective date of October 1, 2010.

The plant is subject to groundwater inflow which fills unused tanks through a release valve into the system. The collected rain water is located in three of the unused aeration tanks. During the inspection, Mr. Reider indicated the County was interested in occasionally pumping these tanks to a storm water retention basin located onsite. This office has no objections to the occasional pumping out of the tanks which collect rainwater and storm water. This must only be rainwater and any water pumped must have no contact with any wastewater or chemicals.

The wastewater system is a vacuum system with a constant vacuum maintained in the collection system. Individual collector units are located at every two to three homes in the system. A large vacuum pump station located near the WWTP controls the discharge to plant.

At the time of the inspection, all process units were in operation. The plant was producing a final effluent that appeared satisfactory. The blowers were in operation and appeared to be supplying a satisfactory amount of air to the treatment units. The flow equalization tank was in operation and appeared to be in satisfactory condition. One aeration tank was in service and contained mixed liquor that was a chocolate brown color. The air circulation within the tank appeared satisfactory. The sludge return lines were in operation. A ferric chloride feed line was located at the sludge return box. The feed line prevented the box from closing and some return sludge splashed onto the ground around the aeration tank. The return sludge must not be allowed to splash up on the ground around the plant.

The numerous phosphorus violations are a concern and it is recommended the ferric feed be evaluated continuously to ensure proper dosage.

One circular clarifier was in operation and contained minimal solids on the surface of the tank. Solids were noted in the influent baffling area and on the effluent weirs. The effluent from the clarifier appeared clear

The sand filters appeared to be in satisfactory condition. The air compressors appeared to be in satisfactory condition. The filter backwash is sent to the headworks of the WWTP. The UV unit was in satisfactory condition and the post aeration was in operation. The final effluent appeared clear. The composite sampler appeared to be in satisfactory condition.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC's on file for this WWTP are Jim Iams, Dave Osborn and Jim Reider.

#### **TROY OAKS NPDES #3PG00079**

The WWTP is a steel sewage plant. The WWTP has an average design flow of 60,000 gpd. According to discharge monitoring report data, the flow reported from the WWTP for the review period averaged 53,180 gpd.

It is understood that the County will begin requesting for proposals in the upgrade of the WWTP at Troy Oaks. Please keep this office updated as to the status of the WWTP upgrade and the timeframe for a PTI to be submitted.

At the time of the inspection, all processes were in operation. The steel tanks have deteriorated and the structural integrity of the tanks may be questionable. The County is aware of the condition of the tanks and has actively begun working on an upgraded WWTP to replace the deteriorated WWTP.

The trash trap was being cleaned out during the inspection. Sludge is removed from the facility and hauled to McFarland WWTP for ultimate disposal to a landfill. Sludge is removed from the facility approximately every 3 months.

Ferric is fed at the head of the plant for phosphorus removal. Great Lakes Cheese is one of the larger industrial dischargers to the plant and they have their own wastewater pretreatment plant onsite to handle the organic loading from the facility. It is understood that when a slug load from Great Lakes Cheese occurs, Troy Oaks has difficulty keeping up with the ferric feed, which can result in phosphorus violations. The violation summary for Troy Oaks is attached to this letter.

The numerous phosphorus violations are a concern and it is recommended the ferric feed be evaluated continuously to ensure proper dosage. It is also recommended that the County continue to work with Great Lakes Cheese on providing a quick notification whenever a slug load may occur.

At the time of the inspection, the aeration tank was provided with adequate air supply and the contents of the tank were a chocolate brown color. Minimal foam was present at the time of the inspection. The clarifier appeared to be in satisfactory condition with minimal solids accumulation on the weir, effluent trough and skimmer. The rapid sand filters appeared to be in satisfactory condition. The sand appeared intact and the structure of the filters looked satisfactory. The UV was in satisfactory condition at the time of the inspection. The ultra-sonic flow meter was in operation and the effluent composite sampler appeared to be in satisfactory condition.

The old drying beds are utilized for the filter backwash water. The filter backwash discharges to the drying beds and filters through the drying beds. Once the backwash water filters through the drying bed, the effluent is sent to a lift station where it is pumped back to the headworks of the WWTP.

The final effluent from the plant appeared to be in satisfactory condition. The WWTP discharges to LaDue Reservoir.

The operator log book was located on site and was reviewed during the inspection. No deficiencies were noted in the log book. The ORC's on file for this WWTP are Brandon Willman, Jim Iams, Dave Osborn and Jim Reider.

#### **SUMMARY**

It is understood there have been recent staff updates at the County. As such, please be sure to update the ORC lists for each WWTP and add or remove operators so the list is up to date.

This office is requesting an update be provided on the construction progress at Opalocka in July 2013.

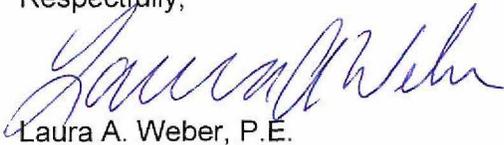
In addition, this office is requesting an update be provided on the phosphorus violations at Troy Oaks and Parkman. The violations may require the County to review the ferric or alum feeds and also the collection system. Any updates regarding Great Lakes Cheese should be forwarded to this office with a copy forwarded to our pretreatment coordinator, Donna Kniss.

Please provide this office with updates regarding the County's plans to either replace Troy Oaks WWTP or convert to a pump station. Please update this office on the County's plans for Wintergreen WWTP.

In general, for the wastewater plants that are outdated and reaching the end of their life, a plan is recommended for replacement or repair of these systems. Please prepare a schedule which outlines the County's plans for the treatment systems in the next 5-10 years. This schedule will be a useful tool for this office during subsequent inspections and meetings.

If you have any questions or comments regarding this letter, please contact this office at (330) 963-1299.

Respectfully,

A handwritten signature in blue ink, appearing to read "Laura A. Weber".

Laura A. Weber, P.E.  
Environmental Engineer  
Division of Surface Water

LAW/cs

Enclosure: Violation Summary

cc: Doug Bowen, Jerry Morgan, Jim Reider, Department of Water Resources (W/ Encl)  
Geauga County Health Department

File: Public/Geauga County

Parkman WWTP

	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit		Violation Date
3PG00160*CD	January 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.905	1/1/2012
3PG00160*CD	January 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.05	1/1/2012
3PG00160*CD	January 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.42	1/8/2012
3PG00160*CD	May 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.79	5/1/2012
3PG00160*CD	May 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	1.79	5/1/2012
3PG00160*CD	June 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	4.475	6/1/2012
3PG00160*CD	June 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.6	6/1/2012
3PG00160*CD	June 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	5.35	6/8/2012
3PG00160*CD	July 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.2975	7/1/2012
3PG00160*CD	July 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.73	7/1/2012
3PG00160*CD	July 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.24	7/8/2012
3PG00160*CD	July 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.98	7/15/2012
3PG00160*CD	August 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.80667	8/1/2012
3PG00160*CD	August 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.7	8/1/2012
3PG00160*CD	August 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.86	8/15/2012
3PG00160*CD	September 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	4.7	9/1/2012
3PG00160*CD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	5.2	9/1/2012
3PG00160*CD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	4.5	9/15/2012
3PG00160*CD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	4.55	9/22/2012
3PG00160*CD	September 2012	001	31648	E. coli	7D Conc	284	622.	9/22/2012
3PG00160*CD	October 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.93	10/1/2012
3PG00160*CD	October 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.3	10/1/2012
3PG00160*CD	October 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.07	10/8/2012
3PG00160*CD	November 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.08	11/1/2012
3PG00160*CD	November 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.08	11/8/2012
3PG00160*CD	December 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.85	12/1/2012
3PG00160*CD	December 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	1.85	12/1/2012
3PG00160*CD	January 2013	001	00530	Total Suspended Solids	7D Conc	18	19.	1/1/2013
3PG00160*CD	January 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.13	1/1/2013
3PG00160*CD	January 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.13	1/8/2013
3PG00160*CD	February 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.5	2/1/2013
3PG00160*CD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.5	2/1/2013
3PG00160*CD	March 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.03	3/1/2013
3PG00160*CD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.33	3/1/2013
3PG00160*CD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	1.73	3/15/2013
3PG00160*CD	March 2013	001	00300	Dissolved Oxygen	1D Conc	6.0	1.4	3/21/2013
3PG00160*CD	March 2013	001	00300	Dissolved Oxygen	1D Conc	6.0	1.6	3/26/2013

Metzenbaum WWTP

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PG00076*CD	May 2012	001	00300	Dissolved Oxygen	1D Conc	6.0	5.73	5/22/2012
3PG00076*CD	June 2012	001	31648	E. coli	30D Conc	161	286.349	6/1/2012
3PG00076*CD	June 2012	001	31648	E. coli	7D Conc	362	390.	6/22/2012

Opalocka WWTP

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PH00000*GD	May 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.3	5/8/2012
3PH00000*GD	June 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.8	4.592	6/1/2012
3PH00000*GD	June 2012	001	00530	Total Suspended Solids	7D Conc	15	22.5	6/8/2012
3PH00000*GD	June 2012	001	61941	pH, Maximum	1D Conc	9.0	9.15	6/12/2012
3PH00000*GD	June 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	5.7	5.95	6/22/2012
3PH00000*GD	July 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.8	4.36333	7/1/2012
3PH00000*GD	August 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.8	3.905	8/1/2012
3PH00000*GD	August 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.3	8/10/2012
3PH00000*GD	September 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.8	5.025	9/1/2012
3PH00000*GD	September 2012	001	31648	E. coli	30D Conc	161	250.531	9/1/2012
3PH00000*GD	September 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	5.7	11.2	9/8/2012
3PH00000*GD	September 2012	001	31648	E. coli	7D Conc	362	780.	9/15/2012
3PH00000*GD	September 2012	001	31648	E. coli	7D Conc	362	1440.	9/22/2012
3PH00000*GD	October 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.8	4.95833	10/1/2012
3PH00000*GD	October 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	5.7	6.325	10/1/2012
3PH00000*GD	October 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.7	10/24/2012
3PH00000*GD	October 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.7	10/25/2012
3PH00000*GD	October 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.6	10/26/2012
3PH00000*GD	October 2012	001	00300	Dissolved Oxygen	1D Conc	5.0	4.4	10/29/2012
3PH00000*GD	November 2012	001	00530	Total Suspended Solids	30D Conc	12	12.75	11/1/2012
3PH00000*GD	November 2012	001	00530	Total Suspended Solids	7D Conc	15	15.5	11/1/2012
3PH00000*GD	November 2012	001	00530	Total Suspended Solids	7D Qty	11.0	17.6097	11/1/2012
3PH00000*GD	November 2012	001	80082	CBOD 5 day	7D Qty	9.09	10.1964	11/1/2012
3PH00000*GD	November 2012	001	00530	Total Suspended Solids	7D Conc	15	15.5	11/8/2012
3PH00000*GD	January 2013	001	00530	Total Suspended Solids	30D Conc	12	16.	1/1/2013
3PH00000*GD	January 2013	001	00530	Total Suspended Solids	7D Conc	15	44.	1/1/2013
3PH00000*GD	January 2013	001	00530	Total Suspended Solids	7D Qty	11.0	16.9000	1/1/2013
3PH00000*GD	March 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	2.39	3/18/2013
3PH00000*GD	March 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	3.61	3/29/2013
3PH00000*GD	April 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	3.73	4/2/2013
3PH00000*GD	April 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	3.69	4/8/2013
3PH00000*GD	April 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	4.35	4/9/2013

Troy Oaks WWTP

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PG00079*HD	February 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.1	2/1/2012
3PG00079*HD	February 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.24571	2/1/2012
3PG00079*HD	February 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.23815	2/1/2012
3PG00079*HD	February 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.25326	2/15/2012
3PG00079*HD	March 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.2	3/1/2012
3PG00079*HD	March 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.2	3/1/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.09	4/1/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.38636	4/1/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.35	4/8/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.17	4/15/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.37946	4/15/2012

3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.75	4/22/2012
3PG00079*HD	April 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.55479	4/22/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.17667	5/1/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.1	5/1/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.59903	5/1/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.43478	5/1/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	4.05	5/15/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.81858	5/15/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	3.38	5/22/2012
3PG00079*HD	May 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.54372	5/22/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.94667	6/1/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	3.82	6/1/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.73552	6/1/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.82559	6/1/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.32	6/8/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.42852	6/8/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.7	6/15/2012
3PG00079*HD	June 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.95246	6/15/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	4.575	7/1/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.86854	7/1/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	5.95	7/8/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	1.05397	7/8/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	3.2	7/15/2012
3PG00079*HD	July 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.68312	7/15/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.30333	8/1/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	3.07	8/1/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.41114	8/1/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.51941	8/1/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.37	8/15/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.42968	8/15/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.47	8/22/2012
3PG00079*HD	August 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.28432	8/22/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.48333	9/1/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.7	9/1/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.53376	9/1/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.80019	9/1/2012
3PG00079*HD	September 2012	001	31648	E. coli	30D Conc	126	282.725	9/1/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	3.05	9/8/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.3925	9/8/2012
3PG00079*HD	September 2012	001	31648	E. coli	7D Conc	284	820.	9/15/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.7	9/22/2012
3PG00079*HD	September 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.40859	9/22/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.93	10/1/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.57	10/1/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.38174	10/1/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.37259	10/1/2012
3PG00079*HD	October 2012	001	31648	E. coli	30D Conc	126	1389.63	10/1/2012
3PG00079*HD	October 2012	001	31648	E. coli	7D Conc	284	1167.	10/8/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.72	10/15/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.28059	10/15/2012
3PG00079*HD	October 2012	001	31648	E. coli	7D Conc	284	1533.	10/15/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.5	10/22/2012
3PG00079*HD	October 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.49205	10/22/2012
3PG00079*HD	October 2012	001	31648	E. coli	7D Conc	284	1500.	10/22/2012
3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.89	11/1/2012
3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.28	11/1/2012

3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.32081	11/1/2012
3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.39352	11/1/2012
3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.5	11/15/2012
3PG00079*HD	November 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.24811	11/15/2012
3PG00079*HD	December 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.16	12/1/2012
3PG00079*HD	December 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.12	12/1/2012
3PG00079*HD	December 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.2525	12/1/2012
3PG00079*HD	December 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.2	12/15/2012
3PG00079*HD	December 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.30704	12/15/2012
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.83	1/1/2013
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.397	1/1/2013
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.0	1.64	1/8/2013
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.24581	1/8/2013
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.02	1/22/2013
3PG00079*HD	January 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.5482	1/22/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.375	2/1/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.15	2/1/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.23	.38522	2/1/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.35318	2/1/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.0	2.6	2/15/2013
3PG00079*HD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.23	.41726	2/15/2013
3PG00079*HD	February 2013	001	00300	Dissolved Oxygen	1D Conc	6.0	4.6	2/19/2013

Wintergreen WWTP

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PG00055*DD	June 2012	001	31648	E. coli	30D Conc	161	213.822	6/1/2012
3PG00055*DD	June 2012	001	31648	E. coli	7D Conc	362	433.589	6/15/2012
3PG00055*DD	August 2012	001	31648	E. coli	7D Conc	362	1500.	8/1/2012
3PG00055*DD	February 2013	001	00300	Dissolved Oxygen	1D Conc	6.0	.2	2/12/2013
3PG00055*DD	March 2013	001	00300	Dissolved Oxygen	1D Conc	6.0	1.4	3/4/2013

Infirmary Creek WWTP

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PG00103*FD	January 2012	001	00530	Total Suspended Solids	30D Qty	3.6	5.1476	1/1/2012
3PG00103*FD	January 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	1.2	1.72371	1/1/2012
3PG00103*FD	January 2012	001	00530	Total Suspended Solids	7D Qty	5.5	8.4784	1/15/2012
3PG00103*FD	January 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	1.8	2.00454	1/15/2012
3PG00103*FD	January 2012	001	00530	Total Suspended Solids	7D Qty	5.5	6.40422	1/22/2012
3PG00103*FD	February 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	1.2	1.46754	2/1/2012
3PG00103*FD	February 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	1.8	1.82134	2/15/2012
3PG00103*FD	March 2012	001	00530	Total Suspended Solids	30D Conc	12	17.2	3/1/2012
3PG00103*FD	March 2012	001	00530	Total Suspended Solids	30D Qty	3.6	10.5253	3/1/2012
3PG00103*FD	March 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	1.2	1.75561	3/1/2012

3PG00103*FD	March 2012	001	00530	Total Suspended Solids	7D Conc	18	36.5	3/15/2012
3PG00103*FD	March 2012	001	00530	Total Suspended Solids	7D Qty	5.5	22.1460	3/15/2012
3PG00103*FD	March 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.8	3.1906	3/15/2012
3PG00103*FD	April 2012	001	00530	Total Suspended Solids	30D Qty	3.6	4.23226	4/1/2012
3PG00103*FD	April 2012	001	00530	Total Suspended Solids	7D Qty	5.5	7.24828	4/1/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	4.0	8.574	4/1/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	6.0	14.21	4/1/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	30D Qty	1.2	4.26369	4/1/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.8	7.34116	4/1/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.8	1.87857	4/8/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	6.0	6.43	4/15/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.8	2.79882	4/15/2012
3PG00103*FD	April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.8	1.95874	4/22/2012
3PG00103*FD	May 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.5	3.945	5/1/2012
3PG00103*FD	May 2012	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.45	1.53412	5/1/2012
3PG00103*FD	May 2012	001	31648	E. coli	30D Conc	161	5000.	5/1/2012
3PG00103*FD	May 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	7.07	5/15/2012
3PG00103*FD	May 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.7	2.64924	5/15/2012
3PG00103*FD	May 2012	001	31648	E. coli	7D Conc	362	5000.	5/22/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.5	2.29	6/1/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	3.13	6/1/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.45	.96982	6/1/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.7	1.51642	6/1/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	2.425	6/15/2012
3PG00103*FD	June 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.7	.97821	6/15/2012
3PG00103*FD	July 2012	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.5	1.85	7/1/2012
3PG00103*FD	July 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	2.79	7/1/2012
3PG00103*FD	July 2012	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.45	.79462	7/1/2012
3PG00103*FD	July 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.7	1.16162	7/1/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.5	11/1/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.13	11/1/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	30D Qty	0.56	3.14838	11/1/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.7959	11/1/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.87	11/8/2012
3PG00103*FD	November 2012	001	00665	Phosphorus, Total (P)	7D Qty	0.85	3.50086	11/8/2012
3PG00103*FD	December 2012	001	00665	Phosphorus, Total (P)	30D Conc	1.0	4.02	12/1/2012
3PG00103*FD	December 2012	001	00665	Phosphorus, Total (P)	7D Conc	1.5	4.02	12/1/2012
3PG00103*FD	January 2013	001	00530	Total Suspended Solids	7D Qty	5.5	6.72405	1/1/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.25	1/1/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.68	1/1/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.56	2.60768	1/1/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	3.13398	1/1/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.82	1/22/2013
3PG00103*FD	January 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.08137	1/22/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.335	2/1/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.32	2/1/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.56	2.49899	2/1/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.33731	2/1/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.45	2/8/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.45495	2/8/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.22	2/15/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.38879	2/15/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.35	2/22/2013
3PG00103*FD	February 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.8149	2/22/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	3.1325	3/1/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.63	3/1/2013

3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.56	2.40154	3/1/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.65173	3/1/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.28	3/8/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	1.8813	3/8/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.45	3/15/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.78141	3/15/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.17	3/22/2013
3PG00103*FD	March 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.2917	3/22/2013
3PG00103*FD	April 2013	001	00530	Total Suspended Solids	30D Qty	3.6	3.79919	4/1/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.82667	4/1/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.47	4/1/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	30D Qty	0.56	2.24475	4/1/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.45605	4/1/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	3.11	4/8/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.59206	4/8/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.885	4/15/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	2.36345	4/15/2013
3PG00103*FD	April 2013	001	00665	Phosphorus, Total (P)	7D Qty	0.85	1.10144	4/22/2013