OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

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

May 11, 2010

RE: GEAUGA COUNTY
VILLAGE OF BURTON
PRE PERMIT INSPECTION
NPDES #3PB00066

Mr. Brian Johnston
Village of Burton, Board of Public Affairs
PO Box 408
Burton, OH 44021

Dear Mr. Johnston:

On May 6, 2010, this writer met with Mr. Paul Easton and Mr. Jerry Rose to review the operations and maintenance and conduct an inspection of the wastewater treatment plant which serves the Village of Burton. The intent of the inspection was to gather information for the renewal of your NPDES permit.

The Village of Burton serves a population of around 1450 through approximately 600 connections. The wastewater treatment system consists of a bar screen, comminutor, extended aeration plant, ferric chloride addition, sludge holding tank, chlorination and dechlorination, and lagoons.

INSPECTION SUMMARY:

Below are the findings and recommendations from the inspection:

At the time of the inspection, the wastewater treatment plant was operating in satisfactory condition and producing a satisfactory quality effluent.

1) The influent screen and comminutor were in operation and free of rags and debris. The aeration system was provided with adequate air circulation and a satisfactory rollover was visually observed in both tanks. The clarifier contained some small amounts of pin floc throughout the tank which was visually observed passing over the weirs into the tank effluent trough. The weirs and influent baffle contained small amounts of accumulated algae and solids. It is understood the clarifier is hosed down daily to prevent the overgrowth on the weirs and sidewalls. The sludge holding tanks were inspected and appeared to be in satisfactory condition. The chlorine contact tank was observed to have solids and some grease floating on the surface of the tank.

2) The ferric chloride is stored in a separate building adjacent to the clarifier. The ferric chloride is fed at the aeration system and clarifier interface. The facility utilizes chlorine gas which is stored in a large tank outdoors and provided with a cover. The chlorination feed system is located in a small building adjacent to the lagoons. The flow meter and effluent sampler are located in this building. The dechlorination chemical is stored in a

15 gallon container on the cement pad at the entrance to the building. The dechlorination feed equipment is located inside the building. The dechlorination chemical must be provided with a spill containment structure in the event the plastic container should spill over.

3) The lagoon system consists of a larger lagoon around 8 feet deep and a smaller lagoon around 3 to 4 feet deep. The two lagoons are arranged in series with the effluent from the plant discharging to the larger lagoon and flowing via an underground conduit to the smaller lagoon. The larger lagoon is aerated and a large amount of floating solids were present on the surface of the lagoon. The smaller lagoon appeared to be in satisfactory condition with a no algae growth present. It is understood the facility applies copper sulfate to the lagoons for algae control. The final effluent box was in good condition and the final effluent was clear and free of solids. The effluent flow meter is located at the final effluent weir box and is a sonic meter located at the parshall flume.

4) The reported flow values for the length of the current permit revealed that 32% of the values were above the average design flow of the wastewater treatment plant, 270,000 gpd. It is understood the wastewater treatment plant receives an increased flow from the fairgrounds during the week of the county fair. However, a plot of all flow values shows a good distribution of heavy flows throughout the year. It is understood the collection system does contain Inflow and Infiltration. The Village has done work on the collection system over the years with none of the solutions showing immense improvement.

NPDES SUMMARY

1) The Water Quality Standards (WQS) have been revised to reference e-coli bacteria versus fecal coliform. As such, all NPDES permits which currently reference fecal coliform monitoring must be revised upon permit renewal. Your facility will be given a compliance schedule to obtain compliance with the WQS for e-coli. The renewal permit will reference fecal coliform limits with e-coli monitoring for the first disinfection season (2010). The final table will include e-coli limits of 364 monthly and 161 weekly.

2) As discussed during the inspection, the renewal NPDES permit for your facility will contain limits for Mercury and Copper that are protective of water quality. The projected effluent quality (PEQ) computed by this office utilized all sampling collected during the current permit cycle. The PEQ data was utilized in a wasteload allocation for the wastewater treatment plant discharge. Based on the WLA, the following limits are recommended for the permit renewal:

	Average	Maximum
Copper-TR	17 ug/l	54 ug/l
Mercury-TR (BPO)	3.1 ng/l	3400ng/l
Mercury-TR (APO)	1.3 ng/l	1700 ng/l

Ohio's rules phase out the use of mixing zones or dilution in developing any water quality-based limits for mercury and other bioaccumulative chemicals of concern. As such, all

discharges are required to meet WQS at the final discharge by November 15, 2010. To accommodate the phase out, the NPDES permit will implement the phase out limits by November 1, 2010. The mixing zone phase out means that all modeling and dilution assumptions cease on November 15, 2010, and that all dischargers requiring mercury limits must meet WQS end-of-pipe as of that date (1.3 ng/l in the Lake Erie Basin).

According to the mercury sampling completed over the course of the existing permit, it is most likely the Village will not be capable of meeting the WQS for mercury at the final discharge. As such, the Village must submit a mercury variance as soon as possible. For existing discharges, a mercury variance is an option. However, the mercury variance must be submitted as soon as possible and prior to the expiration of the existing permit (3PB00066*ED). Failure to submit the mercury variance immediately would result in the Village to meet the mercury WQS end-of-pipe which is 1.3 ng/l.

Please be aware, the renewal permit will contain a compliance schedule recommending the following:

- Copper compliance schedule
- Begin monitoring for e-coli in the interim final effluent table. The final effluent table will include e-coli limits of 362 weekly and 161 monthly.
- Obtain compliance with the final effluent table for outfall 001.

3) The wastewater treatment plant is currently classified by the Ohio EPA as a Class II wastewater treatment facility. This classification is located in the NPDES permit which had an effective date of October 1, 2005. New operator and plant certification rules have gone in effect and are found in OAC 3745-7-04. The new regulations provide the plant classification rankings and operator staffing requirements. According to OAC 3745-7-04, the Village of Burton Wastewater Treatment Plant will remain a Class II facility. The minimum staffing requirements for a Class II facility are 5 days a week for a minimum of 20 hours per week. It is understood the Village currently employs two operators. The two operators have responsibilities at both the water treatment plant and the wastewater treatment plant. It must be noted that the staffing requirements at the wastewater treatment plant are separate from those staffing requirements at the water treatment plant. The Village must ensure a proper staffing level at both treatment systems to meet the OAC staffing level requirements.

4) Please note, in accordance with Ohio Administrative Code 3745-7-02 (A) (2), the facility must designate one or more operator of record to oversee the technical operation of the treatment works. A copy of the ORC form is included with this letter. The ORC must be completed and submitted to the Ohio EPA.

   The eDMR PIN for this facility must be assigned to an individual who has working knowledge of the facility and wastewater treatment plant. According to eDMR records, it appears the PIN and submitter of eDMR for the Village of Burton is Geauga County Water Resources Labs. Federal regulations require a DMR be submitted by a "responsible official" or a "duly authorized representative" of the responsible official. Both terms are defined in the federal regulations. The renewal permit for the Village of Burton will contain language quoted directly from the federal regulation (Title 40 of the Code of Federal Regulations, Part 122.22) that designates who may submit DMR data.

You may continue to have the lab fill out the form, since there is no restriction on who may fill out the DMR. However, the lab cannot legally submit those DMR's. The lab does not meet the definition of "responsible official" or "duly authorized representative" of a responsible official because the lab does not have "responsibility for the overall operation" of the facility, or meet any of the more specific requirements of the federal regulations. An Operator in Responsible Charge of a facility definitely meets the requirements of a duly authorized representative. The responsible official for the facility must make the arrangements to either submit the DRM's themselves by obtaining a PIN, or go through the eBusiness Center to delegate submit privileges to someone who meets the definition of a duly authorized representative. This delegated person would need to obtain their own PIN.

Guidance documents are available on the following web page:
http://www.epa.ohio.gov/dsw/edmr/eDMR.aspx
If you have any questions regarding the process, please e-mail your concern to: Jamie.Roberts@epa.state.oh.us

VIOLATION SUMMARY

A summary of NPDES permit discharge and frequency violations for the period of January 1, 2008 through March 1, 2010 has been attached to this letter. During this timeframe, a number of frequency violations were reported. These violations may be reporting errors that can be resolved if the samples were collected. Any reporting errors must be reported to the Ohio EPA so the matter can be resolved. You may contact Mr. James Roberts of this Agency's Central Office to discuss this issue directly.

Your NPDES renewal permit will be drafted in the near future and public noticed. Once the permit is public noticed, you will have 30 days to make any comments. If you have any questions or comments regarding this letter, please contact this office at (330) 963-1299.

Respectfully,

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

LAW:bo

enclosures: Violation Summary
ORC Form
EDMR Pin requirements

pc: Mr. Paul Eaton, Operator, Village of Burton w/enclosures
Mr. George Hess II, P.E., Hess & Associates Engineering Inc.

File: Public/Village of Burton P/C

Violation Summary:

Discharge Monitoring Violations

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2009	001	Copper, Total Recovera	30D Conc	45	78.3	8/1/2009
August 2009	001	Copper, Total Recovera	1D Qty	0.046	05927	8/4/2009
May 2008	001	Nitrogen, Ammonia (NH3	30D Conc	2.0	2.725	5/1/2008
May 2008	001	Nitrogen, Ammonia (NH3	7D Conc	3.0	3.175	5/1/2008
May 2008	001	Nitrogen, Ammonia (NH3	30D Qty	2.05	2.70836	5/1/2008
May 2008	001	Nitrogen, Ammonia (NH3	7D Qty	3.07	3.33345	5/8/2008
March 2009	001	Total Suspended Solids	7D Qty	30.7	36.4117	3/8/2009

Frequency Violations

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
January 2008	602	Copper, Total (Cu)	1/Quarter	1	0	01/01/2008
February 2008	602	Copper, Total (Cu)	1/Quarter	1	0	02/01/2008
April 2008	602	Copper, Total (Cu)	1/Quarter	1	0	04/01/2008
May 2008	602	Copper, Total (Cu)	1/Quarter	1	0	05/01/2008
June 2008	001	Mercury, Total (Low Le	1/Quarter	1	0	06/01/2008
July 2008	602	Copper, Total (Cu)	1/Quarter	1	0	07/01/2008
August 2008	001	Mercury, Total (Low Le	1/Quarter	1	0	08/01/2008
September 2008	602	Copper, Total (Cu)	1/Quarter	1	0	09/01/2008
October 2008	602	Copper, Total (Cu)	1/Quarter	1	0	10/01/2008
November 2008	602	Copper, Total (Cu)	1/Quarter	1	0	11/01/2008
December 2008	001	Mercury, Total (Low Le	1/Quarter	1	0	12/01/2008
December 2008	602	Copper, Total (Cu)	1/Quarter	1	0	12/01/2008
January 2009	602	Copper, Total (Cu)	1/Quarter	1	0	01/01/2009
February 2009	602	Copper, Total (Cu)	1/Quarter	1	0	02/01/2009
April 2009	602	Copper, Total (Cu)	1/Quarter	1	0	04/01/2009
May 2009	602	Copper, Total (Cu)	1/Quarter	1	0	05/01/2009
July 2009	602	Copper, Total (Cu)	1/Quarter	1	0	07/01/2009
September 2009	602	Copper, Total (Cu)	1/Quarter	1	0	09/01/2009
October 2009	602	Copper, Total (Cu)	1/Quarter	1	0	10/01/2009
November 2009	602	Copper, Total (Cu)	1/Quarter	1	0	11/01/2009
January 2010	602	Copper, Total (Cu)	1/Quarter	1	0	01/01/2010
February 2010	602	Copper, Total (Cu)	1/Quarter	1	0	02/01/2010