OhioEPA

State of Ohio Environmental Protection Agency

Northeast District Office

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

September 21, 2007

RE: TRUMBULL COUNTY
COUNTY-OPERATED
PACKAGE WWTPS

Mr. Rex Fee, Executive Director
Trumbull County Sanitary Engineer
7500 Anderson Avenue, N.E.
Warren, OH 44484

Dear Mr. Fee:

On August 28, 2007, I met with Ms. Ms. Trudy Angles, Chief Operator, and proceeded to conduct inspections of the following County wastewater treatment plants:

- Bazetta WWTP - NPDES Permit No. OH0092550 (Ohio EPA Permit No. 3PG00140)
- Fox Den WWTP - NPDES Permit No. OH0112216 (Ohio EPA Permit No. 3PG00148)
- Logan Arms WWTP - NPDES Permit No. OH0092568 (Ohio EPA Permit No. 3PG00141)
- Newton Falls # 2 WWTP - NPDES Permit No. OH0091642 (Ohio EPA Permit No. 3PG00105)
- Vienna WWTP - NPDES Permit No. OH0097993 (Ohio EPA Permit No. 3PG00144)
- Warren #3 WWTP - NPDES Permit No. OH0091651 (Ohio EPA Permit No. 3PG00106)

The purpose of the inspections was to evaluate the operational compliance of the respective facilities with the terms and conditions of the referenced National Pollutant Discharge Elimination System (NPDES) permits.

Inspection Findings/Compliance Status

At the time of the inspection, the overall operational performance of the treatment processes and equipment at the respective facilities appeared to be satisfactory. Each of the treatment plants was producing an effluent of visually-clear quality. There were no visual indications of degradative impacts in the respective receiving streams.

The following site-specific observations and comments were noted and discussed with Ms. Angles:

Bazetta:

The existing treatment components consist of a 40,000-gpd extended aeration activated sludge treatment process, final settling tank, slow surface sand filter, and UV disinfection. The final effluent discharges to Mosquito Creek Reservoir.

The facility is to be expanded to a capacity of 84,000 gpd and will include flow equalization, sludge holding, and emergency standby power. The upgraded treatment

plant will allow the abatement of the existing ORC 6117.34 nuisance condition that exists in the Lakeshore allotment area. The project will also allow sewerage services to be extended to the Mosquito Lake State Park.

The following deficiency was noted:

- The automatic sampler must be set to collect flow-proportioned composite samples.

Fox Den:

The treatment components consist of a trash trap, flow equalization basin, 28,000-gpd extended aeration activated sludge treatment process, final settling tank, slow surface sand filter, and UV disinfection. Sludge handling consists of an aerated sludge holding tank. The final effluent discharges to an unnamed tributary of Crab Creek.

The following deficiencies were noted:

- The missing air header line in the EQ basin needs to be replaced.
- The exposed steel surfaces should be painted at the earliest opportunity to retard corrosion. Additionally, the integrity of the cathodic protection system should be checked.
- The automatic sampler must be set to collect flow-proportioned composite samples.

Logan Arms:

The wet-stream treatment components consist of a comminutor, 50,000-gpd extended aeration activated sludge treatment process, final settling tank, slow surface sand filtration, and UV disinfection. Sludge handling consists of an aerated sludge holding tank. The final effluent discharges to Crab Creek.

The following deficiencies were noted:

- The wall separating the sludge holding tank from the aeration tank appears to be compromised or failing (i.e., north tank).
- The walls of the old filter (north filter) appear to be in need of rehabilitation and/or repair.
- The wiring connection between the flow meter and automatic sampler had apparently been severed during prior construction activity. Consequently, flow-proportioned samples were not being collected.

- New guardrail had been installed around the aeration tanks. However, the connecting chains had not been installed at the various openings in the guardrail.

Newton Falls # 2:

The treatment components consist of a trash trap, influent pump station, 12,500-gpd extended aeration activated sludge treatment process, final settling tank, slow surface sand filtration, and UV disinfection. The final effluent discharges to an unnamed tributary of Duck Creek.

The following deficiency was noted:

- Slight pin floc in final effluent. Problem was probably due to the blower malfunction noted in the operator's log for the previous day.

Vienna:

The treatment components consist of an airlift pump station, 18,980-gpd extended aeration activated sludge treatment process, final settling tank, and UV disinfection. The final effluent discharges to an unnamed tributary of Squaw Creek.

The following deficiencies were noted:

- The high level overflow in the air lift station must be eliminated.

- The mixed liquor in the aeration tank was dark brown, indicative of an old sludge. Additionally, the sludge blanket in the clarifier was somewhat high. The plant would benefit from the addition of a sludge holding tank.

Warren # 3:

The treatment components consist of a trash trap, influent pump station, 12,500-gpd extended aeration activated sludge treatment process, final settling tank, and UV disinfection. The final effluent discharges to the Mahoning River.

The following deficiencies were noted:

- Need to repair electrical conduit on the exterior of the wet-well.

- The wet-well cover must be cut to fit around the temporary pump line.

Listed below is a summary list of effluent violations at the respective facilities for the period January 2006 through August 2007:

Bazetta WWTP						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2006	001	Total Suspended Solids	7D Qty	2.73	2.96441	5/15/2006
June 2006	001	Dissolved Oxygen	1D Conc	6.0	5.6	6/1/2006
November 2006	001	Dissolved Oxygen	1D Conc	6.0	4.8	11/1/2006

Fox Den WWTP						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
March 2006	001	pH	1D Conc	9.0	9.1	3/15/2006

Logan Arms WWTP						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
October 2006	001	Total Suspended Solids	30DConc	12	12.1666	10/1/2006
March 2007	001	Total Suspended Solids	30DConc	12	12.75	3/1/2007
October 2006	001	Total Suspended Solids	30D Qty	2.3	2.61758	10/1/2006
June 2006	001	Total Suspended Solids	7D Conc	18	23.	6/22/2006
January 2007	001	Total Suspended Solids	7D Conc	18	19.	1/1/2007
March 2007	001	Total Suspended Solids	7D Conc	18	35.	3/15/2007
June 2006	001	Total Suspended Solids	7D Qty	3.4	7.29521	6/22/2006
October 2006	001	Total Suspended Solids	7D Qty	3.4	4.28538	10/15/2006
January 2007	001	Total Suspended Solids	7D Qty	3.4	5.37924	1/1/2007
March 2007	001	Total Suspended Solids	7D Qty	3.4	6.25282	3/15/2007

Newton Falls #2 WWTP						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2006	001	Dissolved Oxygen	1D Conc	5.0	4.6	5/15/2006
June 2006	001	Dissolved Oxygen	1D Conc	5.0	4.5	6/9/2006

Logan Arms WWTP						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
March 2007	001	Total Suspended Solids	30DConc	12	15.	3/1/2007
March 2007	001	Total Suspended Solids	30D Qty	0.86	2.74791	3/1/2007
March 2007	001	Total Suspended Solids	7D Qty	1.3	2.74791	3/8/2007
July 2007	001	Dissolved Oxygen	1D Conc	6.0	5.4	7/17/2007
January 2007	001	Total Suspended Solids	7D Conc	18	19.	1/1/2007
March 2007	001	Total Suspended Solids	7D Conc	18	35.	3/15/2007
June 2006	001	Total Suspended Solids	7D Qty	3.4	7.29521	6/22/2006
October 2006	001	Total Suspended Solids	7D Qty	3.4	4.28538	10/15/2006
January 2007	001	Total Suspended Solids	7D Qty	3.4	5.37924	1/1/2007

Vienna WWTP						
Reporting Period	**Station**	**Parameter**	**Limit Type**	**Limit**	**Reported Value**	**Violation Date**
March 2007	001	Total Suspended Solids	30DConc	12	15.	3/1/2007
March 2007	001	Total Suspended Solids	30D Qty	0.86	2.74791	3/1/2007
March 2007	001	Total Suspended Solids	7D Qty	1.3	2.74791	3/8/2007
July 2007	001	Dissolved Oxygen	1D Conc	6.0	5.4	7/17/2007

Please be advised that failure to comply with the terms and conditions of your NPDES permit may be subject to enforcement actions pursuant to Chapter 6111 of the Ohio Revised Code. Such actions can result in fines of up to $10,000 per day of violation. Please inform this office, in writing, within 10 days of receipt of this notification as to the actions taken or proposed to address the above violation and/or deficiencies. Your response ***shall*** include specific dates for completion of the actions. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

Should you have any questions or comments regarding this letter, please contact this office.

Respectfully,

Ermelindo Gomes
Environmental Engineer
Division of Surface Water

EG/mt