



Environmental
Protection Agency

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

April 19, 2011

RE: Summit County
City of Barberton WWTP
Ohio EPA Permit #3PD00004*JD
Compliance Evaluation/Pre-Permit Inspection

Mayor and Council
City of Barberton
576 West Park Avenue
Barberton, OH 44203

Dear Mayor and Council:

On April 6, 2011, a pre-permit/compliance evaluation inspection was conducted by this writer of this office at the City of Barberton Wastewater Treatment Plant. Present during the inspection were Mr. Dennis Weaver, Utilities Manager and Mr. Robert Burkhard, Industrial Pretreatment Coordinator.

The Barberton WWTP consists of the following components: pre-aeration, bar screen, grit removal, primary settling tanks, equalization basin, trickling filters, intermediate settling tanks, activated sludge extended aeration, final settling tanks, liquid disinfection/dechlorination, aerated sludge digesters, and belt filter presses.

During the inspection, it was noted that construction of plant upgrades are taking place in accordance with PTI #704661 which was issued by the Director of Ohio EPA on November 30, 2009. According to DEFA's reports, the improvements are to consist of:

- Convert the existing aeration tanks for enhanced biological phosphorus removal (EBPR); change aeration diffusers and piping;
- Rehabilitate trickling filters for enhanced nitrogen removal;
- Replace the hypochlorite disinfection tanks and chemical feed building;
- Install covers on final clarifiers;
- Construct a septage receiving station to better pre-treat septage;
- Upgrade the pretreatment screens;
- Upgrade sludge pumps and equalization basin pumps; and
- Install a SCADA (Supervisory Control and Data Acquisition) automated control system.

Following is some of the background on the plant improvements: The plant is permitted to treat an average daily design flow of 6.0 MGD, but has been treating an average of 4.0 MGD. In the past, the plant has operated as a single nitrification plant with one trickling filter left off-line due to low loadings. With the introduction of high BOD landfill

leachate to the influent stream, the plant's waste strength has increased. This has made it necessary for the plant to utilize both trickling filters.

The existing 10,000 gallon capacity septage waste receiving facility has been plagued by breakdowns, system failures, and constant interruptions. The upgraded septage receiving station will be able to accept 50,000 gpd of septage.

Because Ohio EPA had informed the city that their 2011 renewal NPDES permit would contain a phosphorus limit, the city is implementing a process plan for enhanced biological phosphorus removal (EBPR). The implementation of the EBPR will be accomplished by reconfiguring the existing aeration tanks with piping and pumps, and implementing a chemical feed system that will enhance biological conditions. After converting the six aeration basins from a diffused air to a jet aeration system, the tanks' piping will be configured to accommodate the EBPR process.

Upon review of the Discharge Monitoring Reports (DMRs) from March 1, 2009 through March 1, 2011, the following numeric effluent violations were noted:

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2009	001	Nitrogen, Ammonia (NH3)	30D Conc	2	4.4125	5/1/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Conc	3	5.84	5/1/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Conc	3	3.94333	5/8/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Conc	3	4.53	5/15/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Conc	3	3.33667	5/22/2009
May 2009	001	Nitrogen, Ammonia (NH3)	30D Qty	45.4	75.9098	5/1/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Qty	68.1	99.4645	5/1/2009
May 2009	001	Nitrogen, Ammonia (NH3)	7D Qty	68.1	80.1800	5/22/2009
August 2009	001	Nitrogen, Ammonia (NH3)	7D Conc	3	3.03667	8/8/2009
May 2010	001	Nitrogen, Ammonia (NH3)	7D Conc	3	3.03333	5/1/2010
March 2011	001	Dissolved Oxygen	1D Conc	5.0	4.83	3/6/2011

Please be advised such instances of noncompliance are subject to enforcement pursuant to ORC 6111.

During the recent inspection, the final settling tanks contained very little pinfloc, and the plant's effluent appeared clear of visible solids. Operation and maintenance of the plant appeared to be good.

Before renewing your NPDES permit, storm water controls need to be evaluated in order to determine whether storm water requirements are needed in the renewal permit. Because there appear to be no external storm water issues, it is directed you complete

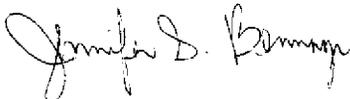
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and submit the enclosed "No Exposure Certification" application form to John Morrison, Ohio EPA Central Office (please send this office a courtesy copy as well). If you qualify for no exposure certification, you are exempt from storm water permit requirements until your facility no longer qualifies for no exposure certification. According to Ohio EPA's Central Office, there is not a current "No Exposure Certification" on file for Barberton.

The Public Notice of the draft renewal NPDES permit will be published in the local newspaper. Please read the permit carefully and submit any written comments to this office within 30 days of the public notice date.

If you have any questions, please contact this office at (330) 963-1151.

Sincerely,



Jennifer S. Bennage
Environmental Engineer
Division of Surface Water

JSB/mt

Enclosure

cc: Dennis Weaver, City of Barberton WWTP
Robert Burkhard, City of Barberton WWTP