



**Environmental  
Protection Agency**

**John R. Kasich, Governor**

**Mary Taylor, Lt. Governor**

**Scott J. Nally, Director**

February 28, 2012

RE: TRUMBULL COUNTY  
BROOKFIELD WWTP  
NPDES PERMIT NO: OH0036285  
OHIO EPA PERMIT NO. 3PJ00001  
COMPLIANCE EVALUATION INSPECTION

Mr. Rex Fee, Executive Director  
Trumbull County Sanitary Engineer  
842 Youngstown Kingsville Road  
Vienna, OH 44473

Dear Mr. Fee:

Ohio EPA conducted a compliance evaluation inspection at the above-referenced facility on February 23, 2012. Messrs. Jim Satterlee and Charles Yannucci represented the facility and the undersigned represented Ohio EPA. The inspection was performed to evaluate the operation and maintenance of the treatment system, and determine the facility's overall compliance with its National Pollutant Discharge Elimination System (NPDES) permit.

The wet-stream components of the 1.3 MGD treatment plant consist of influent screw pumps, mechanical bar screen, aerated grit chamber, vertical loop reactors (activated sludge), final settling tanks, chlorine disinfection, and dechlorination. Treated effluent is discharged to Yankee Run through Outfall 001.

Peak flows in excess of 4.6 MGD are processed as a side stream through a swirl concentrator prior to commingling with the treated wastewater at Outfall 001. Waste activated sludge is presently processed through a gravity thickener, aerobic digester, and sludge drying beds prior to landfill disposal.

During the inspection, the following observations and/or deficiencies were noted:

1. At the time of the inspection, the overall operation and maintenance of the treatment works was satisfactory. All treatment processes necessary for the treatment of dry and wet weather flows were in service.
2. The final effluent at Outfall 001 was clear, and was not causing an immediately noticeable, adverse impact to the receiving stream.
3. Part II, P of the facility's NPDES permit requires that an outfall sign be constructed at the treatment plant's final outfall, 001, by no later than four months after the effective date of the permit. During the inspection, no such sign was noted.

It was noted during the inspection that the sign had been ordered, made, and received. Mr. Yannucci explained that it would be installed shortly. Once the sign has been installed, please provide documentation to this office that this requirement has been met.

4. Please provide documentation describing the most recent calibrations/certifications of the influent and effluent sampler thermometers.
5. Suspended particulates were observed in the clarifiers.

A review of the monthly electronic Discharge Monitoring Reports (eDMRs) received by Ohio EPA for the period, October 2010 - January 2012 indicated violations of the terms and conditions contained in the NPDES permit. The specific instances of noncompliance are as follows:

Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
November 2011	601	80082	CBOD 5 day	3/Week	3	2	11/08/2011
November 2011	601	80082	CBOD 5 day	3/Week	3	2	11/22/2011
December 2010	001	00552	Oil and Grease, Hexane	1/2Weeks	1	0	12/15/2010

In addition to the above, the evaluation noted the following headworks bypasses at the swirl concentrator (Station 602):

Station	Parameter	Units	Date	Reported Value
602	Bypass Volume	MGAL	11/30/2010	1.206
602	Bypass Volume	MGAL	12/12/2010	0.669
602	Bypass Volume	MGAL	1/1/2011	0.789
602	Bypass Volume	MGAL	2/21/2011	5.328
602	Bypass Volume	MGAL	2/28/2011	0.9461
602	Bypass Volume	MGAL	3/5/2011	3.1158
602	Bypass Volume	MGAL	3/6/2011	0.7221
602	Bypass Volume	MGAL	3/9/2011	0.6655
602	Bypass Volume	MGAL	3/10/2011	1.2303
602	Bypass Volume	MGAL	3/11/2011	1.3951
602	Bypass Volume	MGAL	3/12/2011	2.0833
602	Bypass Volume	MGAL	3/13/2011	0.7048
602	Bypass Volume	MGAL	4/5/2011	0.7237
602	Bypass Volume	MGAL	4/13/2011	0.4399
602	Bypass Volume	MGAL	4/17/2011	1.0777
602	Bypass Volume	MGAL	4/20/2011	1.1509
602	Bypass Volume	MGAL	4/22/2011	0.3489
602	Bypass Volume	MGAL	4/23/2011	0.3286
602	Bypass Volume	MGAL	4/25/2011	1.7134
602	Bypass Volume	MGAL	4/26/2011	0.2926
602	Bypass Volume	MGAL	5/3/2011	0.4919

602	Bypass Volume	MGAL	5/15/2011	0.3635
602	Bypass Volume	MGAL	5/18/2011	0.2485
602	Bypass Volume	MGAL	5/25/2011	0.7856
602	Bypass Volume	MGAL	6/24/2011	0.012
602	Bypass Volume	MGAL	11/14/2011	0.03
602	Bypass Volume	MGAL	11/28/2011	0.033
602	Bypass Volume	MGAL	11/29/2011	0.0673
602	Bypass Volume	MGAL	12/5/2011	0.086
602	Bypass Volume	MGAL	12/21/2011	0.6992
602	Bypass Volume	MGAL	12/22/2011	0.0554
602	Bypass Volume	MGAL	1/17/2012	0.0748
602	Bypass Volume	MGAL	1/23/2012	0.9379
602	Bypass Volume	MGAL	1/26/2012	1.5169

Based on the above, it would appear that the facility is still impacted by excessive inflow and infiltration (I/I) in the collection system. The efficiency of the wastewater treatment plant depends on a well-maintained and properly functioning collection system. We understand that the County has had a study performed by a consultant to: 1) evaluate the likely sources of the I/I; and 2) assist the County in developing an I/I mitigation program. Part I, C.4.b of the NPDES permit requires that the permittee submit a copy of the results of this study to Ohio EPA by no later than 12 months from the effective date of the permit, which was May 1, 2011. Therefore, please see to it that the results of this study are submitted to this office by May 1, 2012.

Please be advised, the diverting or bypassing of wastewater from any portion of the treatment facility is prohibited and may be subject to enforcement action pursuant to Ohio Revised Code (ORC) Chapter 6111. All bypass events must be reported as an unauthorized discharge in accordance with Part III, items 11 and 12, of your NPDES permit.

Part I,C.1.b of the NPDES permit requires that a status report be submitted to this office that describes the ability of the existing treatment technology to meet the new Escherichia coli (E. coli) limits. To date, such a report has not yet been received.

Part I,C. 2-3 of the NPDES permit also requires that a pretreatment local limits technical justification be performed, and the results be submitted to Ohio EPA, by no later than six months from the effective date of the NPDES permit. To date, neither this office, nor Ohio EPA's central office, have received a pretreatment local limits technical justification report as required by the NPDES permit

Please be advised that failure to comply with the terms and conditions of the NPDES permit is subject to enforcement action pursuant to ORC Chapter 6111. Please submit to this office, within 14 days' receipt of this letter, written documentation describing the course of action that will be taken, or has been taken, to address the above-referenced violations and deficiencies. Your response shall include specific dates for the initiation and completion of this action plan.

BROOKFIELD WWTP  
FEBRUARY 28, 2012  
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Should you have any questions or comments regarding this letter, please contact this office at (330) 963-1120.

Respectfully,

A handwritten signature in cursive script that reads "Tomás Parry".

Tomás Parry  
Environmental Engineer  
Division of Surface Water

TP/cs

Enclosure: photographs

cc: Charles Yannucci, Brookfield WWTP

