



State of Ohio Environmental Protection Agency

Northeast District Office

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

May 20, 2008

RE: CITY OF BEDFORD WWTP
CUYAHOGA COUNTY
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT 3PD00005 (OH0024040)

Mr. Robert Reid, City Manager and Council
City Hall
165 Center Road
Bedford, OH 44146

Dear Mr. Reid and Council:

On May 7, 2008, this office met with Mr. Jason Milani, Superintendent, to conduct an inspection of the above referenced wastewater treatment plant (WWTP). The purpose of the inspection was to obtain and review information in anticipation of renewal of the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit for this facility expired January 31, 2008. Receipt of the renewal application by Ohio EPA authorizes the permittee to discharge beyond the expiration date.

NPDES Renewal Application

The process flow diagrams submitted with the 2A and 2S applications are not accurate and do not reflect current plant operations. Revised diagrams representative of the current wastewater process flow and sewage sludge treatment process must be submitted to this office.

Form 2A indicates an average inflow and infiltration (I&I) rate of 500,000 gpd and states that there is an annual program to investigate sources of I&I. As discussed, excessive daily flows above the average daily design flow of the wastewater treatment plant of 3.2 mgd has resulted in numerous violations of the NPDES loading limitations (see attachment). Provide this office with a detailed description of the annual I&I program. Include dates (past and future) for the completion of the tasks identified by your program.

Form 2A does not indicate the certification of the individuals listed as in responsible charge of the collection system. Please be advised, as noted in previous correspondence from this office dated March 21, 2000, the collection system must be under the supervision of a state certified operator. At that time, it was decided that the responsibility would fall under the authority of Mr. Jason Milani, Superintendent. Confirmation of the responsibility of the collection system must be confirmed in writing to this office. Include the certification of the individual named.

Current NPDES Permit

Submit the certification required by Part II, 1.h. regarding the mercury effluent limitation. This certification is necessary for considering the continuation of the mercury variance effluent limitation upon renewal of the NPDES permit. Failure to submit the certification, along with the required information, will result in issuing a water quality based effluent limitation.

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Wastewater Treatment Plant

The treatment system consists of bar screens and comminutors, grit removal, primary clarification, trickling filters, secondary clarification, rapid sand filtration and chlorination/dechlorination. Phosphorous removal is achieved through the addition of ferric chloride. The off-line flow equalization basin is used to divert and store excess wastewater flows during wet weather events. Sludges from the primary and secondary clarifiers are combined and diverted to a gravity sludge thickener. Thickened sludge is transferred to a primary and secondary digester operated in series. Digested sludge is pumped to a belt filter press for dewatering. The sludge cake is hauled off-site for proper disposal. A stand-by diesel generator is capable of providing power to the entire facility.

At the time of the inspection the facility appeared to be well maintained. All components necessary for the treatment of dry and wet weather flows were operable with the exception of one comminutor. The comminutor has been removed from its influent channel; replacement parts have been ordered. It is anticipated that the repairs will be completed and the comminutor returned to service by the end of May. Upon completion of the repairs a letter of confirmation must be submitted to this office.

Primary clarification consists of three tanks. Normal operating procedures utilizes the south and west tanks, only. The east tank is usually out of service but is maintained and functional.

Two internal treatment system bypass locations were noted and discussed during this inspection. The two bypasses involve the diversion around treatment from the flow equalization basin and the diversion from rapid sand filtration at the rapid sand filter lift station. Both bypasses tie in with the treated plant effluent ahead of the permitted final effluent outfall designated as station 001.

Please be advised, the diverting or bypassing of wastewater from any portion of the treatment facility is prohibited and must be reported as an unauthorized discharge in accordance with Part III, items 11 and 12, of your NPDES permit. This includes notification by telephone and confirmation in writing. Sampling must occur during bypass events.

Chlorination of the effluent occurs ahead of the rapid sand filters and is fed all year. The chlorination limitation in the current NPDES permit applies only during the designated summer months. Upon permit renewal the chlorine limitation will be considered for all reporting months.

Please be advised, the operator certification rule, Ohio Administrative Code (OAC) 3745-7 has changed effective December 21, 2006. The rule now requires the owner and the operator of record to maintain operation and maintenance records. These records shall be accessible onsite for twenty-four hour inspection. Please refer to this rule for the information required to be maintained.

Laboratory

The laboratory area appeared to be clean and well kept. Samples required by the NPDES permit are collected by plant personnel and are analyzed by the in-house laboratory except for metals and mercury which are sent to contract commercial laboratories. The Performance Evaluation Report DMR-QA study number 27 indicates all analytes reported were within the

"acceptable" range of analytical precision with the exception of fecal coliform and phosphorous. These analytes were reported as "not acceptable" and "check for error," respectively. As noted during this inspection laboratory personnel re-evaluated the two analytes and submitted the results as required by the program. The values reported were found to be "acceptable."

The Quality Assurance/Quality Control (QA/QC) program implemented by the plant laboratory has not been adequately documented by its current written QA/QC manual. The purpose of a QA/QC program is to monitor the confidence of the data generated by the laboratory. Completion of a written plan must be confirmed in writing to this office. Components of the plan should include, but are not limited to, the following:

- Documentation of the standard operating procedures to be followed for sample collection, handling, analyses and reporting. The written procedures for the analyses performed must reference the methodology to which these procedures conform.
- General laboratory requirements including equipment and material maintenance. A temperature log shall be maintained for all drying ovens, incubators, sample refrigerators, etc.
- Analytical quality control procedures geared to produce data of known and defensible quality through the analyses of standards, duplicates and spikes.

Discharge Monitoring Reports

Discharge monitoring reports (DMR), received by Ohio EPA for the period January 2005 through March 2008, were reviewed for compliance with the effluent limitations and monitoring requirements of the NPDES permit. The specific violations are cited in the enclosed attachment.

Numerous final effluent limitation violations have occurred resulting in significant noncompliance specifically for CBOD₅ and Total Suspended Solids. As noted above, the excessive daily flows have resulted in violations of the NPDES permit loading limitations. A detailed description of the City's I&I program must be submitted to this office. Additional information that will address the violations noted in the attachment must be submitted along with the I&I program. Failure to return to compliance with the effluent limitations of the NPDES permit may be cause for enforcement action.

The frequency violations appear to be a failure to collect the appropriate number of samples within a given week. As discussed during the inspection a week starts with the first day of the month and ends seven days later. The definition for "average weekly" may be found in Part III of the NPDES permit. Sampling procedures must be changed accordingly to avoid recurring frequency violations.

Limitation violations associated with mercury occurring prior to June 1, 2006, have been addressed by the issuance of a mercury variance.

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Part III, item 12, of your NPDES permit requires the permittee to provide notification and a letter of explanation outlining the actions taken, or to be taken, to correct all instances of noncompliance.

It is our understanding that the DMR's are transmitted to Ohio EPA using the new online electronic discharge monitoring report submission system (e-DRM). Pursuant to Part III of the NPDES permit, a signed hardcopy of the monitoring reports must be maintained onsite for records retention purposes. As discussed, some of the reports reviewed during the inspection were not signed. Reports shall be signed in accordance with the requirements of 40 CFR 122.22. Provide written documentation confirming all reports have been properly signed.

Storm Water

Under the provisions of the US EPA storm water program and in accordance with OAC 3745-39-04, publically owned treatment works with a design flow of 1.0 mgd or greater are required to apply for an industrial storm water permit. Provisions of the final rule have expanded the No Exposure Certification exemption to all categories of industrial activity, except construction. The exemption allows facilities that do not have process related materials exposed to storm water to opt out of obtaining a storm water NPDES permit. Storm water language will be added to the NPDES permit upon renewal.

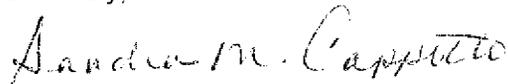
Conclusion

Within thirty days of the date of this letter submit a written response to this office addressing all deficiencies cited above.

Please be advised, failure to comply with the terms and conditions of the NPDES permits may be cause for enforcement pursuant to the Ohio Revised Code Chapter 6111.

A draft copy of the renewal permit will be sent under separate cover. Any comments regarding the draft permit must be submitted in writing during the public notice period. If you should have any questions please contact this office at (330) 963-1124.

Sincerely,



Sandra M. Cappotto
Environmental Scientist
Division of Surface Water

SMC/mt

Attachment

cc: Jason Milani, Superintendent, City of Bedford (w/attachment)
Clint Bellar, Service Director, City of Bedford (w/attachment)

**Attachment - City of Bedford WWTP
NPDES Permit 3PD00005**

Limitation Violations

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	80082	CBOD 5 day	30D Qty	121	199.687	1/1/2005
001	80082	CBOD 5 day	7D Qty	182	272.541	1/1/2005
001	80082	CBOD 5 day	7D Qty	182	359.722	1/8/2005
001	80082	CBOD 5 day	30D Qty	121	148.583	2/1/2005
001	80082	CBOD 5 day	7D Qty	182	189.752	2/8/2005
001	80082	CBOD 5 day	7D Qty	182	184.062	2/15/2005
001	80082	CBOD 5 day	30D Qty	121	212.511	4/1/2005
001	80082	CBOD 5 day	7D Qty	182	567.997	4/22/2005
001	80082	CBOD 5 day	7D Qty	182	184.210	5/15/2006
001	80082	CBOD 5 day	7D Qty	182	214.957	1/15/2007
001	80082	CBOD 5 day	7D Qty	182	210.043	1/8/2008
001	80082	CBOD 5 day	30D Qty	121	126.400	2/1/2008
001	80082	CBOD 5 day	7D Qty	182	354.990	2/1/2008
001	80082	CBOD 5 day	30D Qty	121	215.627	3/1/2008
001	80082	CBOD 5 day	7D Qty	182	429.273	3/1/2008
001	80082	CBOD 5 day	7D Qty	182	320.212	3/15/2008
001	01119	Copper, Total Recover	1D Conc	26	47	7/12/2005
001	01119	Copper, Total Recover	1D Qty	0.31	.31363	7/12/2005
001	01119	Copper, Total Recover	1D Conc	26	27	2/14/2006
001	01119	Copper, Total Recover	1D Qty	0.31	.50089	1/8/2008
001	31616	Fecal Coliform	7D Conc	2000	2439.81	7/22/2005
001	31616	Fecal Coliform	7D Conc	2000	2483.90	5/15/2006
001	50092	Mercury, Total	30D Conc	1.4	5.65	1/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00005	1/1/2005
001	50092	Mercury, Total	30D Conc	1.4	5.3	2/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00006	2/1/2005
001	50092	Mercury, Total	30D Conc	1.4	10.9	3/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00013	3/1/2005
001	50092	Mercury, Total	30D Conc	1.4	8.85	4/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00012	4/1/2005
001	50092	Mercury, Total	30D Conc	1.4	12.1	5/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.0001	5/1/2005
001	50092	Mercury, Total	30D Conc	1.4	3.95	6/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00003	6/1/2005
001	50092	Mercury, Total	30D Conc	1.4	8.65	7/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00006	7/1/2005
001	50092	Mercury, Total	30D Conc	1.4	4.9	9/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00003	9/1/2005
001	50092	Mercury, Total	30D Conc	1.4	3.7	10/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00003	10/1/2005

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50092	Mercury, Total	30D Conc	1.4	4.15	11/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00003	11/1/2005
001	50092	Mercury, Total	30D Conc	1.4	3.75	12/1/2005
001	50092	Mercury, Total	30D Qty	0.0000	.00003	12/1/2005
001	50092	Mercury, Total	30D Conc	1.4	29	1/1/2006
001	50092	Mercury, Total	30D Qty	0.0000	.00027	1/1/2006
001	50092	Mercury, Total	30D Conc	1.4	4.3	2/1/2006
001	50092	Mercury, Total	30D Qty	0.0000	.00004	2/1/2006
001	50092	Mercury, Total	30D Conc	1.4	9.7	3/1/2006
001	50092	Mercury, Total	30D Qty	0.0000	.00007	3/1/2006
001	50092	Mercury, Total	30D Conc	1.4	5.4	4/1/2006
001	50092	Mercury, Total	30D Qty	0.0000	.00004	4/1/2006
001	50092	Mercury, Total	30D Conc	1.4	14	5/1/2006
001	50092	Mercury, Total	30D Qty	0.0000	.00009	5/1/2006
001	50092	Mercury, Total	30D Conc	11	12.15	2/1/2007
001	50092	Mercury, Total	30D Qty	0.0001	.00015	4/1/2007
001	00665	Phosphorus, Total (P)	7D Qty	18.2	23.2107	4/22/2005
001	00665	Phosphorus, Total (P)	7D Qty	18.2	20.2542	2/1/2008
001	00665	Phosphorus, Total (P)	30D Qty	12.1	15.7426	3/1/2008
001	00665	Phosphorus, Total (P)	7D Qty	18.2	25.2915	3/1/2008
001	00665	Phosphorus, Total (P)	7D Qty	18.2	20.8573	3/15/2008
001	00530	Total Suspended Solids	30D Qty	145	239.918	1/1/2005
001	00530	Total Suspended Solids	7D Qty	218	273.013	1/1/2005
001	00530	Total Suspended Solids	7D Qty	218	559.833	1/8/2005
001	00530	Total Suspended Solids	30D Qty	145	153.653	2/1/2005
001	00530	Total Suspended Solids	7D Qty	218	230.582	2/8/2005
001	00530	Total Suspended Solids	30D Conc	12	13.9166	4/1/2005
001	00530	Total Suspended Solids	30D Qty	145	374.314	4/1/2005
001	00530	Total Suspended Solids	7D Conc	18	27	4/22/2005
001	00530	Total Suspended Solids	7D Qty	218	1181.48	4/22/2005
001	00530	Total Suspended Solids	7D Qty	218	225.615	5/15/2006
001	00530	Total Suspended Solids	7D Qty	218	294.004	1/15/2007
001	00530	Total Suspended Solids	7D Qty	218	321.955	4/8/2007
001	00530	Total Suspended Solids	7D Qty	218	241.332	8/15/2007
001	00530	Total Suspended Solids	7D Qty	218	350.660	1/8/2008
001	00530	Total Suspended Solids	7D Conc	18	19	2/1/2008
001	00530	Total Suspended Solids	30D Qty	145	218.682	2/1/2008
001	00530	Total Suspended Solids	7D Qty	218	670.978	2/1/2008
001	00530	Total Suspended Solids	7D Conc	18	19	3/1/2008
001	00530	Total Suspended Solids	30D Qty	145	340.813	3/1/2008
001	00530	Total Suspended Solids	7D Qty	218	702.350	3/1/2008
001	00530	Total Suspended Solids	7D Qty	218	508.261	3/15/2008

Frequency Violations

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	80082	CBOD 5 day	3/Week	3	2	09/08/2005
601	80082	CBOD 5 day	3/Week	3	2	09/08/2005
001	31616	Fecal Coliform	3/Week	3	2	09/08/2005
001	00610	Nitrogen, Ammonia (NH3)	3/Week	3	2	09/08/2005
001	00530	Total Suspended Solids	3/Week	3	2	09/08/2005
601	00530	Total Suspended Solids	3/Week	3	2	09/08/2005
601	80082	CBOD 5 day	3/Week	3	2	08/22/2006
601	00530	Total Suspended Solids	3/Week	3	2	08/22/2006
001	80082	CBOD 5 day	3/Week	3	2	10/15/2007
601	80082	CBOD 5 day	3/Week	3	2	10/15/2007
001	31616	Fecal Coliform	3/Week	3	2	10/15/2007
001	00610	Nitrogen, Ammonia (NH3)	3/Week	3	2	10/15/2007
001	00530	Total Suspended Solids	3/Week	3	2	10/15/2007
601	00530	Total Suspended Solids	3/Week	3	2	10/15/2007