



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

February 21, 2012

RE: MODERN MANAGEMENT SOLUTIONS
dba P AND M ESTATES
PERMIT NO. 3PX00004
PORTAGE COUNTY
WINDHAM TOWNSHIP

Ms. Carol Foster
General Manager
9181 State Route 82
Garrettsville, Ohio 44231

Dear Ms. Foster:

On February 14, 2012, an inspection of the above referenced facility's wastewater treatment system was conducted. The facility was represented by Mr. Eugene Davis, Class III Waste Water Treatment Plant Operator. The purpose of the inspection was to evaluate the operation and maintenance of the treatment system along the facility's compliance status with respect to the terms and conditions of the above referenced National Pollutant Discharge Elimination System (NPDES) permit.

During the inspection, the following items were noted/discussed:

1. Mr. Eugene Davis from efdavis₂ & ASSOCIATES has been in charge of the technical operations of the wastewater treatment plant since August 2009.
2. Mr. Davis is also responsible for collecting the effluent samples and entering the analytical results into Ohio EPA's Surface Water Information Management System and pinning the monthly report.
3. The plant design of the wastewater treatment system is 50,000 gpd.
4. The blowers were running and the plant was receiving good aeration.
5. The contents of the aeration tanks were medium brown in color and no foam was present.
6. The flow equalization tank was also being aerated. Both flow equalization pumps were tested and found to be operational.
7. No odor was present at the treatment plant.
8. Mr. Davis indicated that plant is currently treating 12,000 to 16,000 gallons per day during normal flow conditions.
9. Both skimmer return lines were functioning properly and returning clear water. The skimmer return lines flow into a scum trap and then discharge into the east aeration tank.
10. Both primary sludge return lines were functioning properly and returning medium brown water.
11. Both secondary sludge return lines were also functioning properly and returning medium brown water.

12. Scum/solids deposition was present behind the baffle in the settling tank. This should be removed on a regular basis.
13. The weirs and the sidewalls in the settling tank were also free of scum/solids deposition. However, pin floc was overflowing the weir.
14. The facility has Hydro Clear Corp. rapid sand filters. Previously the backwash from the rapid sand filters was pumped to two surface sand filter beds which drained back to the raw water pump station building. Mr. Davis indicated that he has not used the surface sand filter beds since October 2009. Currently, the back wash is piped directly back to the raw water pump station building.
15. The treatment plant is equipped with a single ultra violet disinfection unit comprised of four lights. The system was operational but is not currently required to be used. Disinfection is required from May 1st through October 31st.
16. Flow is monitored with a Parshall Flume.
17. The final effluent being discharged was clear and appeared to be of satisfactory visual quality.
18. The trash trap was pumped out and hauled to Struthers WWTP by Dukes Hauling in January 2012.
19. Sludge from the sludge holding tank was also hauled to Struthers WWTP.
20. The perimeter wall of the rapid sand filter beds is showing signs of lamination. See Figure 1. Maintenance on the wall should be performed before further deterioration occurs.
21. Subsequent to Mr. Davis taking over the technical operations of wastewater treatment system, the following actions were taken:
 - A. Both settling tanks were completely pumped out and all debris was removed in Sept/Oct 2009.
 - B. A permanent marker at the outfall was posted per the requirement of Part II, Letter J of the facility's NPDES permit.
 - C. Two new solenoid valves were installed for the air scrubbers on the rapid sand filters.
 - D. A high level mud well back wash cut out flow switch was installed.
 - E. A new cinder block wall was installed around the ultraviolet disinfection system. Additionally, the ultraviolet disinfection system was leveled inside the vault.
 - F. A flow equalization pump was replaced in December 2010.
 - G. All new floats and hangers were installed in the flow equalization tank.
 - H. Mr. Davis maintains a log book inside the rapids sand filter building which documents his time at the plant along with his duties performed.
 - I. The breaker box in the raw water pump station building was replaced.

This office has recently reviewed your self-monitoring reports covering the period September 1, 2008 through January 31, 2012 for the referenced facility. Our review indicates violations of the terms and conditions of your NPDES permit. The specific instances of noncompliance are as follows:

Limit Violations

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	80082	CBOD 5 day	30D Qty	2.0	2.85503	1/1/2009
001	80082	CBOD 5 day	30D Conc	10	15.575	1/1/2009

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00610	Nitrogen, Ammonia (NH3)	30D Conc	4.5	15.75	1/1/2009
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.85	2.76873	1/1/2009
001	00530	Total Suspended Solids	7D Qty	3.4	4.61013	1/8/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Qty	1.28	4.06131	1/8/2009
001	80082	CBOD 5 day	7D Qty	2.8	8.89097	1/8/2009
001	00530	Total Suspended Solids	7D Conc	18	21.	1/8/2009
001	80082	CBOD 5 day	7D Conc	15	40.5	1/8/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	6.75	18.5	1/8/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	4.3	1/13/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	6.75	13.	1/22/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Qty	1.28	1.47615	1/22/2009
001	80082	CBOD 5 day	30D Conc	10	14.125	2/1/2009
001	00530	Total Suspended Solids	7D Conc	18	28.	2/15/2009
001	80082	CBOD 5 day	7D Qty	2.8	3.42126	2/15/2009
001	80082	CBOD 5 day	7D Conc	15	39.3	2/15/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	4.1	2/17/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	6.75	6.83	2/22/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	5.6	4/7/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	5.	4/21/2009
001	00530	Total Suspended Solids	30D Conc	12	13.6666	5/1/2009
001	00530	Total Suspended Solids	7D Conc	18	19.	5/22/2009
001	00400	pH	1D Conc	6.5	5.9	5/26/2009
001	00400	pH	1D Conc	6.5	6.2	6/2/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	4.	7/14/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	4.7	7/21/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	5.7	7/28/2009
001	00300	Dissolved Oxygen	1D Conc	6.0	4.9	8/11/2009
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	2.58	5/1/2010
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	2.51	9/22/2010
001	00665	Phosphorus, Total (P)	30D Conc	1.0	2.	6/1/2011
001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.	6/8/2011
001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.37	9/1/2011

Code Violations

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	31616	Fecal Coliform			AK	7/5/2010
001	31616	Fecal Coliform			AK	7/20/2010
001	31616	Fecal Coliform			AK	9/8/2010
001	31616	Fecal Coliform			AK	7/6/2011
001	31648	E. coli			AK	7/6/2011
001	31616	Fecal Coliform			AK	8/22/2011
001	31648	E. coli			AK	8/22/2011

MODERN MANAGEMENT SOLUTIONS
FEBRUARY 21, 2012
PAGE 4 OF 4

Please be advised that such instances of noncompliance may be cause for enforcement actions pursuant to the Ohio Revised Code, Chapter 6111.

Should you have any comments or questions concerning this letter, please feel free to call me at (330) 963-1143.

Respectfully,

A handwritten signature in black ink that reads "Michael W. Stevens". The signature is written in a cursive style.

Michael W. Stevens
Environmental Engineer
Division of Surface Water

MWS/cs

Pc. Gene Davis, Class III Operator, efdavis 2 & ASSOCIATES



Figure 1