

**Environmental
Protection Agency**

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

May 9, 2011

RE: ODNR PYMATUNING STATE PARK
NPDES PERMIT NO. 3PP00013
ANDOVER TWP, ASHTABULA COUNTY
COMPLIANCE EVALUATION INSPECTION

Mr. Phil Vichosky, Park Manager
Ohio Department of Natural Resources
Pymatuning State Park
P.O. Box 1000
Andover, OH 44003

Dear Mr. Vichosky:

On May 5, 2011, a site inspection was conducted at the above referenced facility on South Pymatuning Lake Road, Andover Township, Ashtabula County. The inspection was conducted by John Schmidt of this office. Dean Bullard, Teresa Sasala, and Ken Griffith represented the Ohio Department of Natural Resources (ODNR). The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The last compliance inspection was conducted on September 24, 2009.

There are two wastewater treatment facilities that serve the state park, one known as the Campground WWTP and the other known as the Beach/Marina WWTP. Each system consists of a trash trap/comminutor (muffin monster), extended aeration tanks, clarification, surface sand filtration, chlorine disinfection, dechlorination, and post disinfection aeration. Sludge management of sludge removal from aerated sludge tanks when needed to another POTW. The Campground WWTP discharges to Pymatuning Reservoir (Shenango River) adjacent to the east side of the facility approximately 2 miles south of State Route 85. The Beach / Marina WWTP discharges to Pymatuning Reservoir (Shenango River) adjacent to the west side of the facility near State Route 85. No backup power is provided to the facility, but the facility is provided with alarms.

Observations

Following are observations made during the inspection.

Campground WWTP

1. The design flow of the extended aeration plant is 80,000 gallons per day, although the plant is currently not receiving anywhere near that flow, as it is outside the tourist season. Both sides of the plant were operating at the time of the inspection, in preparation for the commencement of the tourist season.

2. The collection system for this WWTP consists of gravity sewers and three large pump stations, three medium pump stations, and two small pump stations. The pump stations appear to be in working order at the time of the inspection.
3. The plant is operated by Dean Bullard who also operates the Pymatuning Water Treatment Plant on behalf of ODNR.
4. Log books and the operation and maintenance manual are maintained both at the Campground WWTP and at the water treatment plan laboratory and were available for inspection.
5. The overall condition of the treatment plant during this inspection was satisfactory with the plant well kept. Collected trash was containerized for disposal at a solid waste landfill.
6. The comminutor (muffin monsters) had their motors replaced in 2010.
7. The influent sampler (Sigma) is maintained at the proper temperature and collects a time proportional sample. The sampler was empty as a sample had just been pulled. A thermometer should be maintained in the sample storage area of the unit to verify that the correct temperature is being maintained.
8. The flow equalization tank was found in operating condition, providing good aeration and mixing. The blowers were cycled and found in operating condition. The alarms were tested and found in operating condition.
9. The content of the aeration tank had a medium brown color and good mixing. Sludge returns were a medium brown color with no foaming. The skimmers were functioning properly and returning a clear discharge. This is an indication of a plant in proper operation. The blowers were cycled and found in operating condition. The alarms were tested and found in operating condition.
10. The surface of the clarifier was clear, reasonably clear of scum. Effluent channels, weirs and sidewalls of the east clarifier were clean. A small amount of sludge was noted on the sidewalls of the west clarifier. Mr. Bullard noted that this clarifier will be taken down for maintenance soon. Weirs and effluent channels are scrubbed weekly. Some algal growth was noted on the weirs and effluent channels in the west clarifier.
11. The sand filter dosing tanks were observed in operable condition. Blowers were cycled and found in operable condition. The alarms were tested and found in operating condition.

12. Surface sand filters were reasonably clean and operable. Some filters that are currently out of service should have the typical leaf litter and light weeds removed prior to placing into service. Filter media was replaced in 2009. The effluent discharged to the sand filter during the inspection was clear and free of color and turbidity. ODNR maintains two sets of flow dissipation pads for the sand filters. Consideration should be given to providing larger dissipation pads to keep the sand from forming a bowl around the pads. The wastewater percolated freely through the sand indicating that the beds were not clogged.
13. The final effluent sampler (Sigma) is maintained at the proper temperature and collects a time proportional sample. The sampler was empty as a sample had just been pulled. A thermometer should be maintained in the sample storage area of the unit to verify that the correct temperature is being maintained.
14. The disinfection system was found stocked with the appropriate chemicals. ODNR feeds sodium hypochlorite and uses dechlorination tablets to remove excess chlorine residual.
15. The final effluent was clear as observed at the final tank outlet between the plant and the final outfall. The final discharge (Outfall 001) at the unnamed tributary to Pymatuning Reservoir was observed in acceptable visual quality. No sludge or algal growth was noted at the final discharge.
16. Samples are collected by Mr. Bullard. Mr. Bullard or Teresa Sasala perform on-site analysis of pH and DO and performs observations of flow, color, odor, and turbidity.
17. Alloway Laboratories provides the sample bottles and preservatives and performs laboratory analysis of collected samples.
18. Mr. Bullard submits the data to Ohio EPA's electronic discharge monitoring report (e-DMR) system.

Beach/Marina WWTP

19. The design flow of the extended aeration plant is 15,000 gallons per day. The beach/marina portion of the park has been closed since October 2010, and ODNR typically opens the area to the public the last week of May, prior to the Memorial day weekend. The plant is currently turned off and there is no power to the facility. The plant is typically reseeded prior to the start of the tourist season. Opening of the area may be delayed due to high water from heavy spring rains.

20. The plant is operated by Dean Bullard who also operates the Pymatuning Water Treatment Plant on behalf of ODNR.
21. Log books and the operation and maintenance manual are maintained both at the Campground WWTP and at the water treatment plan laboratory and were available for inspection.
22. The overall condition of the treatment plant during this inspection was satisfactory with the plant well kept. Collected trash was containerized for disposal at a solid waste landfill.
23. The comminutor (muffin monsters) had their motors replaced in 2010.
24. The content of the aeration tank had a collection of rainwater accumulated over the winter. ODNR maintains water in all below-grade tanks to counteract hydrostatic uplift. Blowers and alarms could not be tested due to a lack of power to the facility.
25. The content of the final clarifiers had a collection of rainwater accumulated over the winter. ODNR maintains water in all below-grade tanks to counteract hydrostatic uplift. Return sludge lines and skimmers could not be tested due to a lack of power to the facility.
26. The content of the surface sand filter dosing tanks had a collection of rainwater accumulated over the winter. ODNR maintains water in all below-grade tanks to counteract hydrostatic uplift. Pumps and alarms could not be tested due to a lack of power to the facility.
27. Surface sand filters had an accumulation of leaf litter and light weeds from the winter. Filter media was replaced in 2009. The effluent discharged to the sand filter could not be examined due to a lack of power. It was noted that the walls of the sand filters should be grouted and sealed to ensure that they are watertight.
28. The disinfection system was not examined at the time of this inspection as the inspection was conducted outside the disinfection season of May through October. [check for broken chlorinator piping]
29. The content of the disinfection tank had a collection of rainwater accumulated over the winter. ODNR maintains water in all below-grade tanks to counteract hydrostatic uplift.

30. The final effluent was not observed due to a lack of flow. The final outfall to Pymatuning Reservoir could not be observed due to it being submerged.
31. Samples are collected by Mr. Bullard. Mr. Bullard performs on-site analysis of pH and DO and performs observations of flow, color, odor, and turbidity. Analytical data is not collected between October and April due to a lack of flow.
32. Alloway Laboratories provides the sample bottles and preservatives and performs laboratory analysis of collected samples other than pH, DO, and flow.
33. Mr. Bullard submits the data to Ohio EPA's electronic discharge monitoring report (e-DMR) system.

NPDES Permit Compliance Review

ODNR operates the Pymatuning State Park WWTPs under NPDES Permit No. 3PP00013*DD. A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period September 1, 2009 through April 1, 2011 indicates apparent noncompliance of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

Limit Violations

The following limit violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	80082	CBOD 5 day	1D Conc	15	27.	1/20/2010
001	80082	CBOD 5 day	30D Conc	10	12.55	1/1/2010
001	00400	pH	1D Conc	6.5	6.47	1/24/2010
001	00610	Nitrogen, Ammonia (NH3)	1D Conc	3.0	15.7	7/15/2010
001	00610	Nitrogen, Ammonia (NH3)	30D Conc	2.0	8.945	7/1/2010
001	31616	Fecal Coliform	1D Conc	2000	17000.	7/1/2010
001	31616	Fecal Coliform	30D Conc	1000	17000.	7/1/2010
001	31616	Fecal Coliform	1D Conc	2000	6700.	8/5/2010
001	50060	Chlorine, Total Residual	1D Conc	0.019	.05	8/28/2010
002	80082	CBOD 5 day	30D Conc	10	12.	8/1/2010
001	50060	Chlorine, Total Residual	1D Conc	0.019	.05	9/6/2009
001	50060	Chlorine, Total Residual	1D Conc	0.019	.13	9/7/2009
001	50060	Chlorine, Total Residual	1D Conc	0.019	.05	9/13/2009
001	00400	pH	1D Conc	6.5	6.26	9/7/2009
002	50060	Chlorine, Total Residual	1D Conc	0.019	.11	9/5/2009
001	80082	CBOD 5 day	30D Conc	10	10.35	11/1/2009
001	00400	pH	1D Conc	6.5	6.35	9/9/2010
001	00400	pH	1D Conc	6.5	6.42	9/10/2010
001	00400	pH	1D Conc	6.5	6.14	9/11/2010

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Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00400	pH	1D Conc	6.5	6.37	9/12/2010
001	00400	pH	1D Conc	6.5	6.34	9/15/2010
001	00400	pH	1D Conc	6.5	6.47	9/16/2010
001	00400	pH	1D Conc	6.5	6.39	9/17/2010
002	80082	CBOD 5 day	30D Conc	10	13.	9/1/2010
001	80082	CBOD 5 day	1D Conc	15	27.	5/6/2010
001	80082	CBOD 5 day	30D Conc	10	11.375	5/1/2010
001	00610	Nitrogen, Ammonia (NH3)	1D Conc	3.0	21.9	6/3/2010
001	00610	Nitrogen, Ammonia (NH3)	30D Conc	2.0	21.9	6/1/2010
001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.91	1.16048	6/3/2010
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.61	1.16048	6/1/2010
001	31616	Fecal Coliform	1D Conc	2000	7100.	6/3/2010
001	31616	Fecal Coliform	30D Conc	1000	7100.	6/1/2010
002	80082	CBOD 5 day	30D Conc	10	15.	6/1/2010

Ohio EPA notes that violations of CBOD in 2010 placed the facility in significant noncompliance, and Ohio EPA notified ODNR of this via letter on August 11, 2010. To-date, no response has been received. On August 3, 2010, ODNR provided an explanation to the June 2010 violations due to a loss of power to the WWTP over two days. **ODNR must ensure a reliable power source to the WWTPs or must have provisions for backup power during the tourist season.** This may be accomplished through the installation of permanent backup generators at each facility or wiring each facility for a portable generator and obtaining a single portable generator for both facilities.

Remaining effluent limit violations must be explained, along with measures to ensure that they are not repeated.

Reporting Violations

The following reporting code violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50050	Flow Rate			AF	1/23/2011
001	50050	Flow Rate			AF	1/24/2011
001	50050	Flow Rate			AF	1/25/2011
001	50050	Flow Rate			AF	1/26/2011
001	50050	Flow Rate			AF	1/27/2011

Reporting code violations must be explained, along with measures to ensure that they are not repeated.

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The following reporting frequency violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	31616	Fecal Coliform	1/Month	1	0	10/01/2009
001	00530	Total Suspended Solids	1/Week	1	0	10/08/2009
001	80082	CBOD 5 day	1/Week	1	0	10/08/2009
001	00530	Total Suspended Solids	1/Week	1	0	01/01/2010
001	80082	CBOD 5 day	1/Week	1	0	01/01/2010
001	00610	Nitrogen, Ammonia (NH3)	1/2Weeks	1	0	03/15/2010
001	00530	Total Suspended Solids	1/Week	1	0	04/22/2010
001	80082	CBOD 5 day	1/Week	1	0	04/22/2010
001	00610	Nitrogen, Ammonia (NH3)	1/2Weeks	1	0	06/15/2010
001	00610	Nitrogen, Ammonia (NH3)	1/2Weeks	1	0	08/15/2010

Reporting frequency violations must be explained, along with measures to ensure that they are not repeated.

If you feel some of Ohio EPA's reporting records are in error, you may wish to reenter this information through the eDMR system or mail your data to Ohio EPA DSW central office and request that the data be entered on your behalf. Ohio EPA's eDMR support staff may also be available to assist you in this matter. Emailing questions to James.Roberts@epa.state.oh.us is the quickest way to get a response if you have a specific question with the eDMR program or how to make corrections to what is reported in the eDMR program.

Compliance Schedule

You current NPDES permit does not contain a compliance schedule.

NPDES Permit Renewal

Ohio EPA notes that your NPDES permit expires on February 29, 2012. Therefore, an NPDES renewal application must be submitted prior to September 30, 2011. During the inspection, we discussed upcoming changes to your permit, including provisions for monitoring for E. Coli, TKN, nitrate-nitrite, and phosphorus for each plant. Additional parameters may be warranted based upon a review of your current permit operating data. In addition, we discussed the need for having backup power available to each facility in the event of a power disruption.

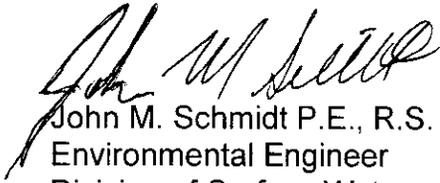
Based upon the inspection findings and the overall compliance record of the facility, the Ohio Department of Natural Resources is considered to be in significant compliance with the terms and conditions of its NPDES permit for the ODNR Pymatuning State Park WWTPs.

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Please inform this office, in writing, within 30 days of the date of this letter as to the actions we discussed that have been or will be taken to correct the above noncompliance or explanations if you believe the noncompliance issues noted are in error. Your response to this letter should include the dates that the actions have been or will be completed. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

If you have any questions or comments regarding this inspection, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.
Environmental Engineer
Division of Surface Water

JMS/mt

pc: Dean Bullard, ODNR, Pymatuning State Park

File: SP/Ashtabula/Andover Twp./ODNR Pymatuning State Park (3PP00013)