Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

November 21, 2011

RE: LORAIN COUNTY
COLUMBIA TWP.
THE ACTIVITY CENTER
11300 ROOT RD
PERMIT NO. 3PR00487

PNL Holdings
30628 Detroit Rd., # 299
Westlake, OH 44145
Attn: Don Porter

Dear Mr. Porter:

On November 1, 2011, a compliance inspection was conducted on the wastewater treatment plant (WWTP) serving The Activity Center. The inspection was conducted by this writer, and Mr. John Sabo of the Lorain County Health Department. The Activity Center is located at 11300 Root Road, Columbia Township, Lorain County.

The purpose of the November 1st inspection was to evaluate the WWTP's operation and maintenance condition, and its compliance with NPDES Permit to discharge terms and conditions. The last compliance inspection was conducted on July 22, 2009.

At the time of the inspection, the following observations were made:

1) Contents of the trash trap were typical, and did not need pumping.

2) The flow equalization tank was in use and was approximately ¾ full. Contents of the flow equalization tank were well aerated and gray in color. Both pumps in the flow equalization tank were in the 'AUTO' mode, and operated when manually tested. The high water level alarm was operational when manually tested.

3) The aeration tank contents were dark brown in color, and were not being aerated at the time of the inspection. The aeration tank blowers were found to be on a timer, and the blowers did operate when the timer was bypassed and the system was manually tested.

4) The return sludge line did not operate when the system was manually tested. The return sludge line should be checked for possible blockage, or air leak, which could cause the air lift pump to fail when the blowers were running.

5) The pressure relief valve on the blower did not work when the plates were removed. The pressure relief valve was 'frozen', probably due to rust, and should be cleared of rust and made operational.

6) Contents of the settling tank were clear, and the effluent trough in the tank was clean, dry, and free of solids.

7) The skimmer in the settling tank was not operating at the time of the inspection, as the blower motors were off. When the system was manually tested, the skimmer still did not operate. Upon observation, the skimmer was found to be adjusted approximately 2" above the water level. The skimmer should be properly adjusted, to approximately ¼" below the surface of the water in the tank.

8) The surface sand filter dosing station contained two pumps, which were set in the 'AUTO' mode. When manually tested, both pumps satisfactorily operated. The high water level alarm was also operational when tested manually

9) The surface sand filter west cell was in use when the filters were dosed. Both the west and east filter cells contained a slight amount of vegetative growth, which should be removed, and the sand should be kept raked level.

10) Disinfection of the effluent is performed utilizing an Ultra Violet (UV) disinfection unit. At the time of the inspection, the audible alarm was going off, indicating a malfunction of the unit. Since effluent disinfection is not required from November 1st through April 30th, the UV unit was shut off. The UV unit will need to be checked and made operational before the next disinfection season starts (May 1st).

11) The aerated sludge holding tank contents were light gray in color, and were being violently agitated by the air being introduced. It is recommended the air flow to the sludge holding tank be reduced to more of a gentle roll.

A review of the Activity Center WWTP operating data submitted to the Ohio EPA, for the period of time since the last inspection (July 1, 2009, through November 1, 2011) was conducted prior to the inspection. The electronic Discharge Monitoring Report (eDMR) data for that period found the following NPDES Permit numeric effluent violations:

THE ACTIVITY CENTER
NPDES PERMIT NO. 3PR00487
EFFLUENT NUMERIC VIOLATIONS
(JUL. 1, 2009 –NOV. 1, 2011)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2009	Dissolved Oxygen	1D Conc	6.0	4.5	8/27/2009
August 2010	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.38	8/1/2010
August 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.38	8/1/2010
August 2010	Dissolved Oxygen	1D Conc	6.0	3.8	8/4/2010
December 2009	pH	1D Conc	6.5	2.9	12/2/2009
December 2010	Total Suspended Solids	30D Conc	12	42.	12/1/2010
December 2010	Total Suspended Solids	7D Conc	18	42.	12/8/2010
June 2011	Dissolved Oxygen	1D Conc	6.0	5.3	6/8/2011

A review of the data for the same period also found the following reporting frequency violations:

THE ACTIVITY CENTER
NPDES PERMIT NO. 3PR00487
REPORTING FREQUENCY VIOLATIONS
(JUL. 1, 2009 –NOV. 1, 2011)

Reporting Period	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
March 2010	00530	Total Suspended Solids	1/Quarter	1	0	03/01/2010
March 2010	00400	pH	1/Quarter	1	0	03/01/2010
March 2010	00300	Dissolved Oxygen	1/Quarter	1	0	03/01/2010
June 2010	31616	Fecal Coliform	1/Quarter	1	0	06/01/2010
June 2010	00400	pH	1/Quarter	1	0	06/01/2010
March 2010	80082	CBOD 5 day	1/Quarter	1	0	03/01/2010
June 2010	00530	Total Suspended Solids	1/Quarter	1	0	06/01/2010
March 2010	00610	Nitrogen, Ammonia (NH3	1/Quarter	1	0	03/01/2010
June 2010	00610	Nitrogen, Ammonia (NH3	1/Quarter	1	0	06/01/2010
June 2010	80082	CBOD 5 day	1/Quarter	1	0	06/01/2010
June 2010	00300	Dissolved Oxygen	1/Quarter	1	0	06/01/2010

Please address the above outlined maintenance issues, and contact Mr. Sabo for a follow up verification inspection. Mr. Sabo's telephone number is (440) 284-3228. Also, please inform this office of the name of the required licensed operator responsible for the operation and maintenance of the WWTP.

Proper operation and maintenance practices should continue to be implemented, which will enable the WWTP to continuously meet its NPDES Permit effluent limits.

If there are questions or comments regarding the contents of this letter, please contact this office.

Respectfully,

Charles E. Allen
Environmental Engineer
Division of Surface Water

CA/cs

pc: Lorain County Health Department
Attn: John Sabo

SP/Lorain/ColumbiaTwp/TheActivityCenter