

**Environmental
Protection Agency**

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

April 25, 2011

RE: Summit County
Village of Peninsula
CVNP Earthlore Environmental Center
Pre-Permit Inspection/CEI Inspection
Ohio EPA No. 3PN00006

Mr. Paul J. Stoehl
Cuyahoga Valley National Park
9329 Riverview Road
Brecksville, OH 44141

Dear Mr. Stoehl:

On March 2, 2011, an NPDES pre-permit inspection was conducted by this writer at the wastewater treatment system serving CVNP's Earthlore Environmental Center. Present during the inspection was the system's operator, Mr. Michael Zuppo of CVNP. Then on April 18, 2011, a follow-up inspection was conducted by this writer and Bill Zawiski of this office.

According to our files, the wastewater treatment system received a Permit to Install from the Ohio EPA on August 13, 1993. The basis of design of the system was an average daily flow of 7500 gpd. The system consists of an influent grinder pump station and a two-cell wastewater stabilization pond, approximately 28,000 square feet in surface area. Following the stabilization ponds is a wetland/evaporation system, approximately 101,000 square feet in surface area. The wetland/evaporation system was to be considered a free-water surface (FWS) wetlands.

Originally the system was designed with no discharge. But because the system began discharging during spring thaws, a chlorination/dechlorination tank had been installed and a National Pollutant Discharge Elimination (NPDES) permit had been issued by this office on April 1, 2001. The system discharges into an unnamed tributary of the Cuyahoga River.

During the March inspection, it was noted that the FWS wetlands has not established all of the proper vegetation, resembling more of a pond than a wetlands. The front end of the "wetlands", near the splitter box, smelled of raw sewage. There was a steady flow of effluent discharging from the disinfection tank, and the effluent appeared to be clear of any visible solids. During the April inspection, there were no objectionable odors.

A review of your electronic Discharge Monitoring Reports (DMRs) from April 2009 to April 2011 revealed the following effluent violations:

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
December 2009	Total Suspended Solids	30D Conc	12	30.	12/1/2009
December 2009	Total Suspended Solids	7D Conc	18	46.	12/1/2009
December 2009	Total Suspended Solids	30D Qty	0.034	.11885	12/1/2009
March 2010	Total Suspended Solids	30D Conc	12	45.	3/1/2010
March 2010	Total Suspended Solids	7D Conc	18	80.	3/22/2010
March 2010	Total Suspended Solids	30D Qty	0.034	.53936	3/1/2010

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
March 2010	Total Suspended Solids	7D Qty	0.51	.9084	3/22/2010
March 2010	CBOD 5 day	30D Conc	10	16.	3/1/2010
March 2010	CBOD 5 day	7D Conc	15	32.	3/22/2010
April 2010	Total Suspended Solids	30D Conc	12	16.	4/1/2010
April 2010	Total Suspended Solids	30D Qty	0.034	.06056	4/1/2010
April 2010	Nitrogen, Ammonia (NH3)	30D Conc	3.0	4.2	4/1/2010
April 2010	CBOD 5 day	30D Conc	10	22.	4/1/2010
April 2010	CBOD 5 day	7D Conc	15	22.	4/8/2010
April 2010	Dissolved Oxygen	1D Conc	6.0	3.1	4/8/2010
June 2010	Total Suspended Solids	30D Conc	12	46.	6/1/2010
June 2010	Total Suspended Solids	7D Conc	18	48.	6/15/2010
June 2010	Total Suspended Solids	30D Qty	0.034	.31037	6/1/2010
June 2010	CBOD 5 day	7D Conc	15	16.	6/15/2010
June 2010	Dissolved Oxygen	1D Conc	6.0	5.1	6/15/2010
June 2010	Dissoived Oxygen	1D Conc	6.0	3.2	6/29/2010
December 2010	Total Suspended Solids	30D Conc	12	41.	12/1/2010
December 2010	Total Suspended Solids	7D Conc	18	68.	12/8/2010
December 2010	Total Suspended Solids	30D Qty	0.034	.42581	12/1/2010
December 2010	Total Suspended Solids	7D Qty	0.51	.77214	12/8/2010
January 2011	Total Suspended Solids	30D Qty	0.034	.04164	1/1/2011
January 2011	Nitrogen, Ammonia (NH3)	30D Conc	3.0	3.95	1/1/2011
January 2011	Nitrogen, Ammonia (NH3)	7D Conc	4.5	4.9	1/15/2011
March 2011	Total Suspended Solids	30D Qty	0.034	.04542	3/1/2011
March 2011	Nitrogen, Ammonia (NH3)	30D Conc	3.0	5.45	3/1/2011
March 2011	Nitrogen, Ammonia (NH3)	7D Conc	4.5	6.6	3/15/2011

Please be advised such instances of noncompliance are subject to enforcement pursuant to ORC 6111.

Because you are in significant noncompliance with the effluent limits in your current NPDES permit, this office is including a compliance schedule in your renewal permit. The compliance schedule requires the following: an Operation and Maintenance Manual be submitted to this office within 6 months; a General Plan of investigatory findings and possible system upgrades to be submitted within 12 months; a Permit to Install application along with detail plans for the proposed upgrades to be submitted within 18 months; and construction of the upgrades to be completed within 24 months.

This office feels it is imperative to have a better understanding of the treatment system's hydrology, and more accurate data on the effluent discharging from the system. Your renewal NPDES permit will include a 602 monitoring station, with an accurate flow meter, after 24 months. This 602 station shall be located after the stabilization ponds, prior to the wetlands (i.e. possibly at the splitter box). Daily flow monitoring will still be required for the 001 effluent station. And, within 24 months, a more accurate flow monitor shall also be installed at the 001 outfall station.

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It is suggested CVNP obtain the services of a Professional Engineer to evaluate your current operation and maintenance practices and to evaluate the effectiveness of the current treatment system. This office would like to work closely with your P.E. to come up with possible solutions to the noncompliance issues.

Also, a change in the State's Water Quality Standards is replacing the fecal coliform effluent limitation with an *E. coli* effluent limitation. Please note that your renewal permit's interim effluent table contains the fecal coliform limitation, but also includes *E. coli* monitoring. The final effluent table includes an *E. coli* effluent limitation instead of fecal coliform limitation. The Schedule of Compliance in your permit directs you to submit to this office, six months after the effective date of the permit, a brief status report on the ability of your existing treatment works to meet the final effluent limit for *E. coli*.

Furthermore, it was noted in your renewal NPDES application that your certified operator Mr. Michael Zuppo, possesses a Class IV wastewater license from Wyoming. Ohio Administrative Code (OAC) 3745-7-04 requires the operator of record to be a State-certified operator. Facilities which discharge less than 25,000 gpd, are required to have an operator of record with at least a Class A license.

The Public Notice of the draft renewal NPDES permit will be published in the local newspaper. Once Central Office sends you the draft permit, please read it carefully. If you have any questions, please contact me at (330) 963-1151.

Sincerely,

A handwritten signature in cursive script that reads "William J Zuppo for".

Jennifer S. Bennage
Environmental Engineer
Division of Surface Water

JSB/mt

cc: Michael Zuppo, Operator

ec: Bill Zawiski, Environmental Supervisor, Ohio EPA, NEDO, DSW