



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

Re: **Notice of Violation**
Ashland County
Cinnamon Lake
NPDES Permit

September 16, 2013

Mr. Eugene Sheridan
Cinnamon Lake Utilities Association
1443 Laurel Drive
West Salem, Ohio 44287

Dear Mr. Sheridan:

On August 15, 2013, an inspection was made of the wastewater treatment facilities serving the Cinnamon Lake subdivision located at 1443 Laurel Drive, West Salem, Ashland County. Larry and Tony of the utility staff were present during the inspection to answer questions regarding the treatment plant operations.

It was observed that two new metal filter trays had been added to the southeast filter bed. These trays have been placed in the filter beds directly beneath the distribution pipes. It is hoped that these trays will help to catch excessive solids during high flows before they can blind off the filter beds. These trays have been in use since the middle of July. It was noted that piping had been installed through the filter bed walls into the south two filter beds. This piping allows for the filter to be drained during high flows when they become flooded due to solids blinding the filters. This new piping drains to the sludge drying beds and eventually back to the head of the treatment plant.

The operator's log book was reviewed and found to be adequate. The two certified operators are keeping time sheets in the lab that document their time spent at the wastewater plant.

The treatment plant staff is using a new method to test for ammonia. A colorimetric meter and distillation are being used instead of the ammonia selective electrode method. Please be aware that this method uses a reagent that contains mercury. All wastes produced by the test after the introduction of the reagent should be collected for proper disposal. **Under no circumstance** should any wastes from this test be washed down the drain.

The laboratory bench sheets and calculations for the CBOD test were briefly reviewed. It appears that some of test readings used to calculate the CBOD result should be discarded. The CBOD test requires that the final dissolved oxygen reading of any sample shall be greater than 1.0 mg/L to be considered a valid sample. The depletion of any sample should be at least 2.0 mg/L of D.O. The review of the bench sheets for the first three weeks in July 2013 showed that several effluent sample results with a final D.O. reading of less than one were included in the calculation of CBOD for that day. These results should not have been included. We recommend that the dilution of the samples be increased to allow for a higher remaining D.O. after the 5 day test. Perhaps using a sample volume of 100 to 150 mL would be more appropriate and lead to better test results.

Mr. Eugene Sheridan
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A review of the facility's discharge monitoring reports submitted to our office for the months of March through July 2013 revealed numerous **violations** of the limits contained in your National Pollutant Discharge Elimination System (NPDES) permit. A printout of these **violations** has been enclosed for your review. Your facility is currently in significant non-compliance (SNC) with the ammonia limits.

A facility becomes in SNC when it exceeds the effluent limit for four or more months in two consecutive quarters or exceeds the effluent limit significantly in any two months during two consecutive quarters. Achieving compliance with Ohio's environmental laws is a primary focus of Ohio EPA in order to reduce risks to public health and welfare.

Before we initiate enforcement action, we would like to work with you to achieve satisfactory progress to bring this facility back into compliance. **Within 21 days of the date of this letter**, please submit, in writing, the actions that you propose to undertake or have taken in order to return your facility into compliance with your NPDES permit. You will need to provide us a timetable for these actions that does not extend past December 31, 2013. These actions and timetable may also be submitted by email to me at walter.ariss@epa.ohio.gov.

In our previous inspection report dated March 29, 2013, our office requested an update on the Sanitary Sewer Evaluation Study (SSES) that had been partially completed. We instructed Cinnamon Lake to provide a timeline to complete the SSES work. On April 25, our office received a response from Cinnamon Lake. The response included much of the requested information; however, it did not include a timeline to complete the SSES work. An acceptable timeframe in our experience to complete this work would be four years. A response should be made to our office **within 60 days** of this letter identifying a timeline to complete the SSES as outlined in the previous NPDES permit and the 2004 Poggemeyer Design group report on I/I.

If you have any questions, please call me at 419-373-3070.

Sincerely,



Walter Ariss, P.E.
Environmental Specialist II
Division of Surface Water

/jlm

Enclosures

ec: Tracking

OHIO ENVIRONMENTAL PROTECTION AGENCY

OPERATION AND MAINTENANCE INSPECTION
WWTP'S LESS THAN 150,000 GPD

NPDES Permit No. 2PR00009

Facility Name Cinnamon Lake Utilities Expiration Date 4/30/15

Facility Location 6065 Cinnamon Dr Date 8/15/13 Time 11:00 am pm

City West Salem County Ashtabula Township _____

Name of Owner _____ Owner Phone _____

Person Contacted _____ Operator of Record Chip Burrows + Jeff Miller

Flow: Design 150,000 GPD WWTP Classification: A or I X II

Trib. Pop. _____ (actual - estimated) Weather at time of inspection: Temp 65° - sun

OEPA Personnel Walter A. Iss District NWDO

1. Plant Effluent - Mark Severity No.

No.	Severity Description	Turbidity	Odor	Color
0	None	<input checked="" type="checkbox"/> Clear	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Colorless
1	Mild			
2	Moderate	Light Solids	Musty	Grey
3	Serious			
4	Extreme	Heavy Solids	Septic	Black

2. Effect of Effluent on Receiving Stream Name: Muddy Fork Mohican

No.	Severity Description	Turbidity	Odor	Color
0	None	<input checked="" type="checkbox"/> Clear	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Colorless
1	Mild			
2	Moderate	Light Solids	Musty	Grey
3	Serious			
4	Extreme	Heavy Solids	Septic	Black

3. a. Plant has _____ excellent good _____ fair _____ poor _____ operation
 b. Plant has _____ excellent good _____ fair _____ poor _____ maintenance
 c. Sand filters have _____ excellent good _____ fair _____ poor _____ maintenance- N/A

d. Not operating at expected efficiency due to:

- (1) _____ hydraulic overload
 (2) _____ organic/solids overload
 (3) _____ personnel inefficiency
 (4) _____ equipment failure
 (5) _____ wastes
 (6) _____

Disinfection: (Required May 1 thru Oct. 31)	
IN	OUT
_____	_____
_____	_____
<input checked="" type="checkbox"/>	_____

Chlorination Tablets
 Dechlorination Tablets
 Ultraviolet (U.V.)

Yes No

4. Compliance with NPDES Permit

Periodic Violations Y N Parameters: _____

Chronic Violations NH₃

5. O & M logbook kept and available on site: Location at WWTP + lab

6. Staffing Requirement Met (Class A - 2 days per week for minimum 1 hour per week)
 (Class I - 3 days per week for minimum 1.5 hours per week)

7. Adequate Plant Safety: Deficiencies _____

Facility Name: Channon Lake

Process	# Units	Unit	If Needed - Description and Comments
Preliminary		Trash Trap	Pumping Frequency
		Grease Trap	Pumping Frequency
	1	Bar Screen Mechanical Screen Comminutor	okay - auger needs cleaned
	2	Flow Equalization	both tanks almost empty
Aeration Equipment	X	Plant Timer <u>Y</u> <u>X</u> <u>N</u>	Cycle Time:
		Motor / Blower Unit <u>running</u>	blowers okay
Secondary Treatment	X	Aeration Tank	Color: good color Adequate Aeration <u>Y</u> <u>N</u>
Final Settling	X	Clarifier	good clarity in all
	X	Sludge Return	In <u>X</u> Out
	X	Surface Skimmer	In <u>X</u> Out
		Fixed Media Clarifier	
Tertiary Treatment	X	Surface Sand Filter new filter trays	3 beds clean - one with dry sludge
		Polishing Pond	
		Other	
Disinfection		Contact Tank	
		Chlorine Tube Feeder	
		Dechlorination Tube Feeder	
	X	Ultraviolet (UV)	in
Flow Metering		Elapsed Pump Time	
	X	Recorder (continuous total)	okay
Pumps		Raw Wastewater (type)	okay
		Sand Filter Effluent Dosing	okay
			okay
Sludge Handling	X	Aerated Storage Tank	dry - baled 8/7
	X	Sludge Drying Bed	beds in use
Sludge Disposal	X	Municipal POTW	
		Landfill	
		Land Application	
Advanced Treatment		Post Aeration	
		Spray Irrigation	
		Other	

none

Get New Data

Cinnamon Lake WWTP NPDES permit limit violations March through July 2013.

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	5.9	3/5/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	11.	3/12/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	5.28765	3/12/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	11.1	3/19/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	9.45304	3/19/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	17.3	3/27/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	3.0	11.325	3/1/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	10.8697	3/27/2013
2PR00009*KD	March 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	1.7	6.99998	3/1/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	17.8	4/2/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	9.09536	4/2/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	12.6	4/9/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	4.10143	4/9/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	11.7	4/17/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	6.37697	4/17/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	20.	4/24/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	3.0	15.525	4/1/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	2.6	8.7055	4/24/2013
2PR00009*KD	April 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	1.7	7.06981	4/1/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	13.4	5/2/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	6.137	5/2/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	19.6	5/9/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	5.04465	5/9/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	8.2	5/15/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	2.17259	5/15/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	11.	5/22/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	13.05	5/1/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	2.41483	5/22/2013
2PR00009*KD	May 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	3.94227	5/1/2013
2PR00009*KD	June 2013	001	00530	Total Suspended Solids	1D Conc	18.0	21.	6/6/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	4.9	6/6/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.94738	6/6/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	13.	6/12/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	4.13322	6/12/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	8.	6/20/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.87736	6/20/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	9.2	6/26/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	8.775	6/1/2013
2PR00009*KD	June 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	2.19842	6/1/2013
2PR00009*KD	July 2013	001	00300	Dissolved Oxygen	1D Conc	5.0	4.71	7/2/2013
2PR00009*KD	July 2013	001	00530	Total Suspended Solids	1D Conc	18.0	31.	7/16/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	11.4	7/2/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	3.02043	7/2/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	6.25	7/9/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	3.028	7/9/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	17.4	7/16/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	3.42467	7/16/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	33.6	7/25/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	17.1625	7/1/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	6.74033	7/25/2013
2PR00009*KD	July 2013	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	4.05336	7/1/2013