



State of Ohio Environmental Protection Agency

Northwest District Office

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Bowling Green, OH 43402-9398

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www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Ashland County
Cinnamon Lake
NPDES Permit

January 21, 2009

Bob Adams, Utility Manager
Cinnamon Lake Utilities Association
1443 Laurel Drive
West Salem, Ohio 44287

Dear Mr. Adams,

On January 8, 2009, an inspection was made of the wastewater treatment facilities serving the Cinnamon Lake subdivision located at 1443 Laurel Drive, West Salem, Ashland County. At the time of the inspection all major treatment units were in service. Mr. Mike Witmer and yourself were present during the inspection to answer any questions regarding plant operations.

The new flow splitter box had been installed. The new box includes slide gates on each outlet which allows the operator to more evenly split the flow between the treatment plants. You indicated that the northwestern sand filter bed had the media replaced. The old sand layer was dug out and new sand was filled in. You mentioned a noticeable improvement of the filtering time through this bed. You indicated that the other sand beds would probably not be redone until after plant upgrades are installed. Skimmers were added to the older treatment plant. The surface of the clarifiers in these tanks was noticeably cleaner. We also discussed the need to make sure that the effluent flow meter is calibrated at least once /year.

A review of the facility's discharge monitoring reports from the months of July through November 2008 revealed numerous **violations** of the limits contained in your NPDES permit. A summary of these violations is included on a separate sheet. All of these violations were for exceeding the ammonia limits. You continued to stress that the polishing pond adds ammonia to the effluent and that the flow directly from the treatment plant has lower ammonia levels.

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

Sincerely,

Walter Ariss
Environmental Specialist II
Division of Surface Water

/lb

Enclosed

pc:NWDO-DSW.file

OHIO ENVIRONMENTAL PROTECTION AGENCY

OPERATION AND MAINTENANCE INSPECTION
 WWTP'S LESS THAN 25,000 GPD

Facility Name Cinnamon Lake WWTP NPDES Permit No. 21P00009
 Facility Address 1443 Laurel Dr Expiration Date 3/31/2010
 City West Salem County Ashland Date 1/8/09 Time 11:15 am pm
 Township Jackson
 Name and Address of Owner _____
 Person Contacted Bob Adams Owner Phone _____
 Flow: Design 150,000 GPD Present 50,000-130,000 GPD (metered - estimated)
 Trib. Pop. _____ (actual - estimated) Weather at time of inspection: Temp 30° snow
 OEPA Personnel Walter Aries District NWDO

1. Plant Effluent - Mark Severity No.

No.	Severity Description	No.	Turbidity	No.	Odor	No.	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 River - not observed

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
0	None		Clear		None		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

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"/> liquid
_____	_____ Chlorination Tablets
_____	_____ Dechlorination Tablets
_____	_____ U.V.

- Yes No
 4. Compliance with NPDES Permit
 Periodic Violations Y N Parameters: _____
 Chronic Violations _____ NH₃
 5. Adequate plant safety
 6. Operation and Maintenance Service Name _____
 Frequency of Visits _____

Facility Name: Cinnamon Lake

Process	# Units	Unit	If Needed - Description and Comments
Preliminary		Trash Trap	Pumping Frequency:
		Grease Trap	Pumping Frequency:
	8	Bar Screen	looks okay
		Comminutor	
		Flow Equalization	
Aeration Equipment	8	Plant Timer <u>Y</u> N	Cycle Time:
		Motor/ Blower Unit <i>running</i>	
Secondary Treatment	8	Aeration Tank	Color: <i>good color in both plants</i> Adequate Aeration: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Final Settling	8	Clarifier	look good
	8	Sludge Return	In <input checked="" type="checkbox"/> Out <input type="checkbox"/>
	8	Surface Skimmer	In <input checked="" type="checkbox"/> Out <input type="checkbox"/>
		Fixed Media Clarifier	
Tertiary Treatment	8	Surface Sand Filter	<i>one filter seal had sand dig out + replaced/other three heavily weeded</i>
		Polishing Pond	
		Other	
Disinfection	8	Chlorine Tube Feeder <i>liquid</i>	<i>Out - not needed in winter</i>
		Dechlorination Tube Feeder	
		Ultraviolet (UV)	
Flow Metering		Elapsed Pump Time	
	8	Recorder (continuous total)	<i>make sure flow meter is calibrated at least 1 year</i>
Pumps	8	Raw Wastewater (type)	<i>submersible - okay</i>
	8	Sand Filter Effluent Dosing	<i>submersible - okay</i>
Sludge Handling	8	Aerated Storage Tank	
	8	Sludge Drying Bed	<i>2 are clean</i>
Sludge Disposal		Municipal POTW	
	8	Landfill	
		Land Application	
Advanced Treatment		Post Aeration	
		Spray Irrigation	
		Other	

Cinnamon Lake WWTP NPDES permit limit violations
July through November 2008

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2PR00009*JD	July 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	2.0875	7/1/2008
2PR00009*JD	July 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	.92068	7/1/2008
2PR00009*JD	July 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	3.58	7/3/2008
2PR00009*JD	July 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	2.3713	7/3/2008
2PR00009*JD	July 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	2.36	7/24/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	2.50333	8/1/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	.71593	8/1/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	2.36	8/14/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.09871	8/14/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	3.16	8/21/2008
2PR00009*JD	August 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	1.99	8/28/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	4.79	9/1/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	1.16268	9/1/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	2.47	9/4/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	5.98	9/11/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.74284	9/11/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	3.75	9/18/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	.96518	9/18/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	6.96	9/25/2008
2PR00009*JD	September 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.47524	9/25/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.0	4.77	10/1/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.6	1.20491	10/1/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	6.03	10/2/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.20965	10/2/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	4.31	10/9/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.37032	10/9/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	3.72	10/16/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	.98561	10/16/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	1.5	5.02	10/24/2008
2PR00009*JD	October 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.9	1.25405	10/24/2008
2PR00009*JD	November 2008	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	3.0	4.9125	11/1/2008
2PR00009*JD	November 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	4.55	11/5/2008
2PR00009*JD	November 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	5.13	11/13/2008
2PR00009*JD	November 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	5.06	11/20/2008
2PR00009*JD	November 2008	001	00610	Nitrogen, Ammonia (NH3)	1D Conc	4.5	4.91	11/24/2008