OhioEPA

State of Ohio Environmental Protection Agency

Northwest District Office

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

Re: Ashland County
Cinnamon Lake
NPDES Permit

July 25, 2008

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

Dear Mr. Adams:

On July 9, 2008, 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 you were present during the inspection to answer any questions regarding plant operations.

You indicated that a new flow splitter box had been ordered and should be installed in the next few months. Unfortunately the clarifier skimmers in the older treatment plant have not yet been repaired. You stated that when the new splitter box is being installed the skimmer lines would be repaired and returned to service. The clarifiers in the old treatment plant had a heavy layer of scum present during the inspection.

During the inspection the sand filters that were in use were both ponded with water. An overflow pipe located in each bed was being used to dewater the filters. This condition is caused by the washing out of solids from the treatment plant during rain events. The excessive solids blind the beds and don't allow the water to pass through. Solids were evident flowing out of these overflow pipes.

We also observed the chlorine contact tank, where the concrete baffles had been repaired with treated lumber. It appeared as though the short circuiting through the chlorine tank had been corrected.

A review of the facility's discharge monitoring reports from the months of October 2007 through June 2008 revealed numerous ***violations*** of the limits contained in your NPDES permit. A summary of these violations is included on a separate sheet. Our office remains concerned regarding the number of permit violations occurring at the treatment plant. It is apparent that upgrades will need to be made at the treatment plant in order to come into compliance. The Association should be aware that a compliance schedule will be included in the next NPDES permit renewal for the construction of upgrades to the treatment plant.

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

Sincerely,

Walter Ariss
Environmental Specialist II
Division of Surface Water

Enclosure

pc: DSW-NWDO File

OHIO ENVIRONMENTAL PROTECTION AGENCY

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

NPDES Permit No. 2PD00009

Facility Name Cinnamon Lake WWTP Expiration Date 3/31/2010

Facility Address 1443 Laurel Dr Date 7/9/08 Time 2:30 am (pm)

City West Salem County Ashland Township

Name and Address of Owner

Person Contacted Bob Adams Owner Phone

Flow: Design 150,000 GPD Present 100,000-120,000 GPD (metered - estimated) dry weather

Trib. Pop. 530 houses (actual - estimated) Weather at time of inspection: Temp 82° sunny

OEPA Personnel Walter Ariss District NWDO

1. Plant Effluent - Mark Severity No.

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
0	None		Clear	X	None	X	Colorless
1	Mild	X					
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 - 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 ___X___ good _____ fair _____ poor operation
   b. Plant has _____ excellent ___X___ good _____ fair _____ poor maintenance
   c. Sand filters have _____ excellent _____ good _____ fair ___X___ poor maintenance

   d. Not operating at expected efficiency due to:
   (1) X hydraulic overload
   (2) _____ organic/ solids overload
   (3) _____ personnel inefficiency
   (4) _____ equipment failure
   (5) _____ wastes
   (6) filter beds bypassing

Disinfection: (Required May 1 thru Oct.31.)

IN	OUT	
X		Chlorination ~~Tablets~~ liquid
		Dechlorination Tablets
		U.V.

	Yes	No	
4.		X	Compliance with NPDES Permit
5.	X		Adequate plant safety
6.		X	Operation and Maintenance Service

	Y	N	Parameters:
Periodic Violations	X		NH3, TSS
Chronic Violations	X		NH3, TSS

Name

Frequency of Visits

Facility Name: Cimarron Lake

Process	# Units	Unit	If Needed - Description and Comments
Preliminary		Trash Trap	Pumping Frequency:
		Grease Trap	Pumping Frequency:
	✓	Bar Screen	in use
		Comminutor	
		Flow Equalization	
Aeration Equipment	✓	Plant Timer ___ Y ✓ N Motor/ Blower Unit running	Cycle Time: aeration was good in both plants
Secondary Treatment	✓	Aeration Tank	Color: good color in both plants Adequate Aeration: Y ✓ N ___
Final Settling	✓	Clarifier	Clarifiers on old plant had a heavy layer of scum on the surface
	✓	Sludge Return	In ✓ Out ___
	✓	Surface Skimmer	In ✓ Out ✓ Skimmers not working on old plant
		Fixed Media Clarifier	
Tertiary Treatment	✓	Surface Sand Filter	2 filters flooded & using overflow pipes
		Polishing Pond	
		Other	
Disinfection	✓	Chlorine ~~Tube~~ Feeder liquid	running
		Dechlorination Tube Feeder	
		Ultraviolet (UV)	
Flow Metering		Elapsed Pump Time	
	✓	Recorder (continuous total)	okay/calibrated last year
Pumps	✓	Raw Wastewater (type)	need new flow splitter box
	✓	Sand Filter Effluent Dosing	okay
Sludge Handling	✓	Aerated Storage Tank	okay
	✓	Sludge Drying Bed	in use
Sludge Disposal		Municipal POTW	
	✓	Landfill	
		Land Application	
Advanced Treatment		Post Aeration	
		Spray Irrigation	
		Other	

Cinnamon Lake NPDES permit limit violations
October 2007 through June 2008

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
October 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	2	6.7575	10/1/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	30D Qty	1.1	1.68505	10/1/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Conc	3	5.83	10/4/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Conc	3	6.32	10/11/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Qty	1.7	1.9137	10/11/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Conc	3	7.97	10/18/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Qty	1.7	1.87032	10/18/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Conc	3	6.91	10/25/2007
October 2007	001	00610	Nitrogen, Ammonia (NH3	1D Qty	1.7	1.8308	10/25/2007
January 2008	001	00530	Total Suspended Solids	30D Conc	12	12.335	1/1/2008
January 2008	001	00400	pH	1D Conc	9.0	9.29	1/25/2008
January 2008	001	00400	pH	1D Conc	9.0	9.33	1/29/2008
February 2008	001	00530	Total Suspended Solids	30D Conc	12	18.65	2/1/2008
February 2008	001	00530	Total Suspended Solids	30D Qty	6.8	7.19306	2/1/2008
February 2008	001	00530	Total Suspended Solids	1D Conc	18	31.3	2/6/2008
February 2008	001	00530	Total Suspended Solids	1D Qty	10.2	20.1399	2/6/2008
February 2008	001	00530	Total Suspended Solids	1D Conc	18	24.2	2/13/2008
February 2008	001	00530	Total Suspended Solids	1D Conc	18	23.1	2/14/2008
March 2008	001	00530	Total Suspended Solids	30D Conc	12	14.9175	3/1/2008
March 2008	001	00530	Total Suspended Solids	30D Qty	6.8	7.30569	3/1/2008
March 2008	001	00530	Total Suspended Solids	1D Conc	18	26.5	3/6/2008
March 2008	001	00530	Total Suspended Solids	1D Qty	10.2	16.0484	3/6/2008
April 2008	001	00530	Total Suspended Solids	30D Conc	12	13.0375	4/1/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.374	4/1/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	30D Qty	1.7	1.90959	4/1/2008
April 2008	001	00530	Total Suspended Solids	1D Conc	18	26.8	4/2/2008
April 2008	001	00530	Total Suspended Solids	1D Conc	18	25.8	4/3/2008
April 2008	001	00530	Total Suspended Solids	1D Qty	10.2	11.1324	4/3/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	4.5	5.9	4/3/2008
April 2008	001	00530	Total Suspended Solids	1D Conc	18	20.2	4/10/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	4.5	5.65	4/10/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	4.5	5.24	4/16/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	4.5	5.34	4/17/2008
April 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	4.5	4.74	4/23/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	1.5	6.21	5/1/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.774	5/1/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	1D Qty	0.9	2.13894	5/1/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.6	.62915	5/1/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	1D Conc	1.5	2.66	5/23/2008
May 2008	001	00610	Nitrogen, Ammonia (NH3	1D Qty	0.9	1.00681	5/23/2008
June 2008	001	31616	Fecal Coliform	1D Conc	2000	2900.	6/10/2008