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
Mapleton Local Schools
NPDES Permit

September 24, 2007

Mr. John Marks, Superintendent
Mapleton School District
635 County Road 801, Route 3
Ashland, Ohio 44805

Dear Mr. Marks:

On August 29, 2007, an inspection was conducted of the wastewater treatment facilities serving the Mapleton Schools located at 635 County Road 801, Orange Township, Ashland County. At the time of the inspection the facility was operating in satisfactory condition. Mr. Dan Dennison of your staff and Mr. Tony Wierich from McGhee's Technical Water Service were present to grant access to the plant as well as answer questions. No major concerns were noted at the time of the inspection. A clear discharge was observed at the creek.

Mr. Wierich indicated that a modification to the trash trap had recently been completed. An aeration line was added to the tank in order to supply oxygen. Septic conditions created by extensive detention in the trash trap are believed to be the cause of significant non compliance of the plant's effluent. McGhee's believe that aerating the trash trap will greatly improve the treatment through the plant. We will closely monitor the operating reports for the coming months to see if this modification improves treatment. If the treatment does not improve, it may be necessary to try additional steps including the possibility of taking one of the aeration tanks offline.

A review of the monthly operating reports submitted to our agency for the time period of October 2006, through August 2007, revealed numerous violations of the limits contained in your NPDES discharge permit. A printout of these violations is included for your review. It was encouraging to see that no violations occurred in the month of August 2007. The recent modification is hoped to lead to continued compliance.

Our office has received your NPDES permit renewal application and will begin drafting the renewal permit in the coming weeks. Once the draft is complete, you will receive a copy for your review. Please discuss this draft copy with your certified operator and contact our office with any questions.

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

Sincerely,

Walter Ariss
Environmental Specialist II
Division of Surface Water

/llr

Enclosure

pc: DSW-NWDO File w/enclosures
McGhee's Technical Water Services w/enclosures

OHIO ENVIRONMENTAL PROTECTION AGENCY

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

NPDES Permit No. 2PT00040

Facility Name Mapleton Schools Expiration Date 12/31/07

Facility Address 635 CR 801 Date 8/29/07 Time 1:00 am (pm)

City _____ County Ashland Township _____

Name and Address of Owner _____

Person Contacted Tony Wiercich Owner Phone _____

Flow: Design 21,000 GPD Present ~5,000 GPD (metered - estimated)

Trib. Pop. _____ (actual - estimated) Weather at time of inspection: Temp 85 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	✓	None	✓	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: unnamed trib Jerome Fork Mohican

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) design flow - septic truck trap underloaded plant

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

IN	OUT	
✓	_____	Chlorination Tablets
✓	_____	Dechlorination Tablets
_____	_____	U.V.

	Yes	No				
4.	_____	✓	Compliance with NPDES Permit			
				Y	N	Parameters:
			Periodic Violations	_____	_____	_____
			Chronic Violations	✓	_____	TSS, NH_3, CBOD
5.	✓	_____	Adequate plant safety			
6.	✓	_____	Operation and Maintenance Service	Name McGhee's TWSI		

Frequency of Visits 1/week

Facility Name: .....

Process	# Units	Unit	If Needed - Description and Comments
Preliminary	✓	Trash Trap	Pumping Frequency: never pumped / recently began aerating
		Grease Trap	Pumping Frequency:
		Bar Screen	
		Comminutor	
	✓	Flow Equalization	okay
Aeration Equipment	✓	Plant Timer ___Y ✓N Motor/ Blower Unit running	Cycle Time:
Secondary Treatment	✓	Aeration Tank	Color: good color Adequate Aeration: Y✓ N___
Final Settling	✓	Clarifier	look good
	✓	Sludge Return	In ✓ Out ___
	✓	Surface Skimmer	In ___ Out ✓
		Fixed Media Clarifier	
Tertiary Treatment	✓	Surface Sand Filter	look great
		Polishing Pond	
		Other	
Disinfection	✓	Chlorine Tube Feeder	
	✓	Dechlorination Tube Feeder	
		Ultraviolet (UV)	
Flow Metering	✓	Elapsed Pump Time	on influent lift station
		Recorder (continuous total)	
Pumps	✓	Raw Wastewater (type)	grinder
	✓	Sand Filter Effluent Dosing	
Sludge Handling	✓	Aerated Storage Tank	okay
		Sludge Drying Bed	
Sludge Disposal	✓	Municipal POTW	
		Landfill	
		Land Application	
Advanced Treatment	✓	Post Aeration	on
		Spray Irrigation	
		Other	

Mapleton Schools NPDEs permit limit violations
October 2006 through August 2007

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value
October 2006	001	00530	Total Suspended Solids	30D Conc	12	22.8
October 2006	001	00530	Total Suspended Solids	7D Conc	18	22.8
October 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	6.12
October 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	6.12
October 2006	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.08	.09266
November 2006	001	00530	Total Suspended Solids	30D Conc	12	28.
November 2006	001	00530	Total Suspended Solids	7D Conc	18	28.
November 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	14.4
November 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	14.4
November 2006	001	80082	CBOD, 5 day	30D Conc	10	26.4
November 2006	001	80082	CBOD, 5 day	7D Conc	15	26.4
December 2006	001	00530	Total Suspended Solids	30D Conc	12	20.
December 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	4.56
December 2006	001	80082	CBOD, 5 day	30D Conc	10	38.4
December 2006	001	00530	Total Suspended Solids	7D Conc	18	20.
December 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	4.56
December 2006	001	80082	CBOD, 5 day	7D Conc	15	38.4
January 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	19.1
January 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	19.1
February 2007	001	00530	Total Suspended Solids	30D Conc	12	25.6
February 2007	001	00530	Total Suspended Solids	7D Conc	18	25.6
February 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	17.6
February 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	17.6
February 2007	001	80082	CBOD, 5 day	30D Conc	10	16.2
February 2007	001	80082	CBOD, 5 day	7D Conc	15	16.2
March 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	19.8
March 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	19.8
March 2007	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.25	.29977
March 2007	001	80082	CBOD, 5 day	30D Conc	10	38.4
March 2007	001	80082	CBOD, 5 day	7D Conc	15	38.4
April 2007	001	00530	Total Suspended Solids	30D Conc	12	35.
April 2007	001	00530	Total Suspended Solids	7D Conc	18	35.
April 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	9.15
April 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	9.15
April 2007	001	80082	CBOD, 5 day	30D Conc	10	21.6
April 2007	001	80082	CBOD, 5 day	7D Conc	15	21.6
May 2007	001	00530	Total Suspended Solids	30D Conc	12	32.4
May 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	17.9
May 2007	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.08	.33876
May 2007	001	80082	CBOD, 5 day	30D Conc	10	12.1
May 2007	001	00530	Total Suspended Solids	7D Conc	18	32.4
May 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	17.9
May 2007	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.13	.33876
June 2007	001	00530	Total Suspended Solids	30D Conc	12	48.8
June 2007	001	00530	Total Suspended Solids	7D Conc	18	48.8
June 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	11.
June 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	11.
June 2007	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.08	.16654
June 2007	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.13	.16654
July 2007	001	00530	Total Suspended Solids	30D Conc	12	12.8
July 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.55
July 2007	001	80082	CBOD, 5 day	30D Conc	10	39.6
July 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.55
July 2007	001	80082	CBOD, 5 day	7D Conc	15	39.6