OhioEPA

State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Road
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

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

Re: Erie County
Edison High School
Sewerage

August 6, 2007

Berlin-Milan Local Schools
Mr. Donald Opfer, Safety Director
140 South Main Street
Milan, Ohio 44846

Dear Mr. Opfer:

On May 17, 2007, an inspection was made of the wastewater treatment facilities serving the Edison High School in conjunction with the upcoming renewal of the NPDES permit, which expires August 30, 2007. In general, both operation and maintenance were only fair. At the time of my visit, all major mechanical components were in operation and a turbid final effluent was observed discharging into the receiving stream. The final clarifier and chlorine contact tank were both brown in color, very turbid, with floating solids on the surface. It was obvious that the plant was exhibiting signs of hydraulic surges, flushing solids through the plant, which is common in schools.

A review of NPDES monthly operating reports submitted since September 2002, the effective date of the permit, indicate chronic ammonia, and periodic suspended solids, BOD_5 and Fecal Coliform permit violations. (see enclosure) During our August 1st telephone conversation I informed you that the NPDES permit noncompliance issues must be addressed in the upcoming renewal. We recommend treatment plant improvements consisting of 8250 gallons of flow equalization facilities and 3000 gallon aerated sludge holding capacity. Three years will be provided through a Schedule of Compliance to implement the improvements.

You also stated that preliminary discussions are being made for a possible building expansion to serve a new Jr. High School at the site. Should this occur, a plant expansion will be necessary. Please inform me as soon as possible after a final decision is made to determine the treatment needs of the expansion, as well as the above noted improvements.

In the near future you will be receiving a "draft" copy of the NPDES permit renewal. You should review it carefully, as there is a 30 day comment period to respond to any permit conditions. Please continue to operate under the expired permit until such time the renewal becomes effective. Enclosed is our completed inspection form. If you have any questions, or feel a meeting is necessary to further discuss the above recommendations, please feel free to call me at (419) 373-3020 or email at rick.zuzik@epa.state.oh.us

Sincerely,

Richard A. Zuzik, MSE
Division of Surface Water
/csl
pc: Erie Co. Health Dept. DSW, NWDO File

OHIO ENVIRONMENTAL PROTECTION AGENCY

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

NPDES Permit No. 2PR00174

Facility Name Edison High School Expiration Date 9-30-07

Facility Address 2603 SR 113 E. Date 5-17-07 Time 1145 am/pm

City — County Erie Township Milan

Name and Address of Owner Berlin-Milan Local Schools

Person Contacted Maintenance Staff Owner Phone (419) 499-4625

Flow: Design 15,000 GPD Present Unknown GPD (metered - estimated)

Trib. Pop. 550 (actual - estimated) Weather at time of inspection: Temp 60° Overcast

OEPA Personnel Rick Zuzik District NWDO

1. Plant Effluent - Mark Severity No.

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
0	None		Clear	✓	None		Colorless
1	Mild	✓	Slight			✓	light Brown
2	Moderate		Light Solids		Musty		Grey
3	Serious						
4	Extreme		Heavy Solids		Septic		Black

2. Effect of effluent on Receiving Stream Name: Trib of Huron R.

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
0	None		Clear	✓	None		Colorless
1	Mild	✓	Slight			✓	light Brown
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) lack of flow EQ and sludge holding

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	✓		Fecal, TSS, CBODs
Chronic Violations	✓		Ammonia

5. ✓ ____ Adequate plant safety

6. ✓ ____ Operation and Maintenance Service Name AKe Laboratory Inc.

Frequency of Visits ____

Facility Name: Edison M.S.

Process	# Units	Unit	If Needed - Description and Comments
Preliminary	1	Trash Trap	Pumping Frequency:
		Grease Trap	Pumping Frequency:
		Bar Screen	
		Comminutor	
		Flow Equalization	NEEDED
Aeration Equipment	2	Plant Timer ___Y ___N Motor/Blower Unit	Cycle Time: IN
Secondary Treatment	3	Aeration Tank	Color: Brown Adequate Aeration: Y ✓ N ___
Final Settling	1	Clarifier	
	2	Sludge Return	In ✓ Out
	2	Surface Skimmer	In ✓ Out NEED ADJUSTED
	—	Fixed Media Clarifier	
Tertiary Treatment	2	Surface Sand Filter	SOME WEEDS
	—	Polishing Pond	
	—	Other	
Disinfection	1	Contact Tank (prior to SF)	Brown, with solids
	1	Chlorine Tube Feeder	IN
	1	Dechlorination Tube Feeder	IN
		Ultraviolet (UV)	
Flow Metering		Elapsed Pump Time	
		Recorder (continuous total)	
Pumps		Raw Wastewater (type)	
	2	Sand Filter Effluent Dosing	
Sludge Handling		Aerated Storage Tank	
		Sludge Drying Bed	
Sludge Disposal	✓	Municipal POTW	
		Landfill	
		Land Application	
Advanced Treatment		Post Aeration	
		Spray Irrigation	
		Other	

Edison H. S.

10/1/02 - 4/1/07

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	LimitiType	Limit	Reported Value	Violation Date
2PR00174*AD	September 2003	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.43	9/1/2003
2PR00174*AD	August 2003	001	00530	Total Suspended Solids	30D Qty	0.68	1892.5	8/1/2003
2PR00174*AD	August 2003	001	00530	Total Suspended Solids	7D Qty	1.02	1892.5	8/1/2003
2PR00174*AD	August 2003	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.06	340.65	8/1/2003
2PR00174*AD	August 2003	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.08	340.65	8/1/2003
2PR00174*AD	August 2003	001	80082	CBOD 5 day	30D Qty	0.57	2271.	8/1/2003
2PR00174*AD	August 2003	001	80082	CBOD 5 day	7D Qty	0.85	2271.	8/1/2003
2PR00174*AD	February 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	4.3	2/1/2004
2PR00174*AD	March 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.	3/1/2004
2PR00174*AD	March 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.	3/1/2004
2PR00174*AD	October 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	12.85	10/1/2004
2PR00174*AD	October 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	12.85	10/22/2004
2PR00174*AD	January 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.78	1/1/2005
2PR00174*AD	January 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.78	1/1/2005
2PR00174*AD	August 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.7	8/1/2004
2PR00174*AD	August 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.7	8/1/2004
2PR00174*AD	June 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.96	6/1/2004
2PR00174*AD	June 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.96	6/8/2004
2PR00174*AD	November 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	10.35	11/1/2004
2PR00174*AD	November 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	10.35	11/8/2004
2PR00174*AD	November 2004	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.17	.19587	11/1/2004
2PR00174*AD	April 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	6.05	4/1/2004
2PR00174*AD	April 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	6.05	4/1/2004
2PR00174*AD	May 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	10.2	5/1/2004
2PR00174*AD	May 2004	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	10.2	5/8/2004
2PR00174*AD	December 2004	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	4.05	12/1/2004
2PR00174*AD	March 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	7.8	3/1/2005
2PR00174*AD	March 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	7.8	3/1/2005
2PR00174*AD	April 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	11.75	4/1/2005
2PR00174*AD	April 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	11.75	4/8/2005
2PR00174*AD	May 2005	001	00530	Total Suspended Solids	30D Conc	12	21.	5/1/2005
2PR00174*AD	May 2005	001	00530	Total Suspended Solids	7D Conc	18	21.	5/8/2005
2PR00174*AD	May 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	13.25	5/1/2005

2PR00174*AD	May 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	13.25	5/8/2005
2PR00174*AD	June 2005	001	00530	Total Suspended Solids	30D Conc	12	21.	6/1/2005
2PR00174*AD	June 2005	001	00530	Total Suspended Solids	7D Conc	18	21.	6/8/2005
2PR00174*AD	June 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	9.6	6/1/2005
2PR00174*AD	June 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	9.6	6/8/2005
2PR00174*AD	February 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	13.5	2/1/2005
2PR00174*AD	February 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	13.5	2/1/2005
2PR00174*AD	July 2005	001	00530	Total Suspended Solids	30D Conc	12	55.	7/1/2005
2PR00174*AD	July 2005	001	00530	Total Suspended Solids	7D Conc	18	55.	7/1/2005
2PR00174*AD	July 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	4.98	7/1/2005
2PR00174*AD	July 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	4.98	7/1/2005
2PR00174*AD	July 2005	001	31616	Fecal Coliform	30D Conc	1000	4650.	7/1/2005
2PR00174*AD	July 2005	001	31616	Fecal Coliform	7D Conc	2000	4650.	7/1/2005
2PR00174*AD	February 2003	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	3.43	2/1/2003
2PR00174*AD	February 2003	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.17	25965.1	2/1/2003
2PR00174*AD	February 2003	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.25	25965.1	2/22/2003
2PR00174*AD	September 2005	001	00530	Total Suspended Solids	30D Conc	12	73.	9/1/2005
2PR00174*AD	September 2005	001	00530	Total Suspended Solids	7D Conc	18	73.	9/1/2005
2PR00174*AD	September 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	7.45	9/1/2005
2PR00174*AD	September 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	7.45	9/1/2005
2PR00174*AD	June 2003	001	00530	Total Suspended Solids	30D Qty	0.68	7570.	6/1/2003
2PR00174*AD	June 2003	001	00530	Total Suspended Solids	7D Qty	1.02	7570.	6/8/2003
2PR00174*AD	June 2003	001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.06	757.	6/1/2003
2PR00174*AD	June 2003	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.08	757.	6/8/2003
2PR00174*AD	June 2003	001	80082	CBOD 5 day	30D Qty	0.57	6056.	6/1/2003
2PR00174*AD	June 2003	001	80082	CBOD 5 day	7D Qty	0.85	6056.	6/8/2003
2PR00174*AD	October 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.55	10/1/2005
2PR00174*AD	October 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.55	10/8/2005
2PR00174*AD	November 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.95	11/1/2005
2PR00174*AD	November 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.95	11/8/2005
2PR00174*AD	December 2005	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	27.75	12/1/2005
2PR00174*AD	December 2005	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	27.75	12/8/2005
2PR00174*AD	March 2007	001	00530	Total Suspended Solids	30D Conc	12	20.	3/1/2007
2PR00174*AD	March 2007	001	00530	Total Suspended Solids	7D Conc	18	20.	3/8/2007
2PR00174*AD	March 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	6.48	3/1/2007
2PR00174*AD	March 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	6.48	3/8/2007
2PR00174*AD	May 2006	001	00530	Total Suspended Solids	30D Conc	12	26.	5/1/2006

2PR00174*AD	May 2006	001	00530	Total Suspended Solids	7D Conc	18	26.	5/8/2006
2PR00174*AD	May 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	4.1	5/1/2006
2PR00174*AD	May 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	4.1	5/8/2006
2PR00174*AD	February 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	7.7	2/1/2007
2PR00174*AD	February 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	7.7	2/1/2007
2PR00174*AD	March 2006	001	00530	Total Suspended Solids	30D Conc	12	22.	3/1/2006
2PR00174*AD	March 2006	001	00530	Total Suspended Solids	7D Conc	18	22.	3/1/2006
2PR00174*AD	March 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	7.75	3/1/2006
2PR00174*AD	March 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	7.75	3/1/2006
2PR00174*AD	April 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.28	4/1/2006
2PR00174*AD	April 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.28	4/8/2006
2PR00174*AD	January 2007	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	5.75	1/1/2007
2PR00174*AD	January 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.75	1/1/2007
2PR00174*AD	January 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	22.75	1/1/2006
2PR00174*AD	January 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	22.75	1/1/2006
2PR00174*AD	October 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	10.	10/1/2006
2PR00174*AD	October 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	10.	10/8/2006
2PR00174*AD	September 2006	001	00530	Total Suspended Solids	30D Conc	12	16.	9/1/2006
2PR00174*AD	September 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	6.7	9/1/2006
2PR00174*AD	September 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	6.7	9/8/2006
2PR00174*AD	June 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.8	6/1/2006
2PR00174*AD	June 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.8	6/8/2006
2PR00174*AD	August 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.01	8/1/2006
2PR00174*AD	November 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	21.25	11/1/2006
2PR00174*AD	November 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	21.25	11/8/2006
2PR00174*AD	February 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	13.75	2/1/2006
2PR00174*AD	February 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	13.75	2/1/2006
2PR00174*AD	December 2006	001	00530	Total Suspended Solids	30D Conc	12	20.	12/1/2006
2PR00174*AD	December 2006	001	00530	Total Suspended Solids	7D Conc	18	20.	12/1/2006
2PR00174*AD	December 2006	001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	40.75	12/1/2006
2PR00174*AD	December 2006	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	40.75	12/1/2006