



State of Ohio Environmental Protection Agency

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\*1PT0000320080310\*

MONTGOME NORTHMONT HS WWTP

SARLE, EDWARD

2008/03/10

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

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State of Ohio Environmental Protection Agency

Southwest District Office

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

March 10, 2008

Dr. Gale Mabry, School Superintendent  
Northmont Board of Education  
4001 Old Salem Road  
Englewood, Ohio 45322

Re: Montgomery County, Northmont Schools, Compliance Evaluation Inspection

Dear Dr. Mabry:

On March 4, 2008, I conducted a Compliance Evaluation Inspection at the waste water treatment plant (WWTP) serving this facility (NPDES Permit No. OH0036439; OEPA Permit No. 1PT00003\*ED). Representing Northmont was John Blessing, Jerry Green and Bob Gomez. A copy of my inspection report is enclosed.

The inspection report contains one unsatisfactory area. The Effluent / Receiving Waters section was rated unsatisfactory as a result of the numerous NPDES Permit violations. The violations have been occurring for over 20 years at this facility. Action must be taken immediately to eliminate these violations. A sanitary sewer appears to be available and accessible for this WWTP. Northmont must connect to this sanitary sewer as soon as possible but not later than December 31, 2008. The WWTP and tertiary lagoon must also be properly removed and disposed by August 31, 2009.

The areas noted in the report summary will require a written response by April 11, 2008. The response should include a description of the proposed actions and the dates for completion of these actions.

If you have any questions, please call me at (937) 285-6096.

Sincerely,

Ned Sarle  
Division of Surface Water  
Permits Section

Enclosure

cc: John Blessing, Northmont City School District  
Bob Gomez, Winelco, Inc.







State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PT00003*ED	OH0036439	3/4/2008	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Northmont Schools 4916 National Road Clayton, OH 45315	9:30 A.M.	8/1/2005
	Exit Time	Permit Expiration Date
	11:05 A.M.	7/31/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
John Blessing, Director of Operations	(937) 832 - 5050	
Jerry Green, Maintenance Manager	(937) 832 - 5073	
Bob Gomez, Winelco	(513) 755 - 8050	
Name, Address and Title of Responsible Official	Phone Number	
Dr. Gale Mabry, School Superintendent Northmont Board of Education 4001 Old Salem Road Englewood, Ohio 45322	(937) 832 - 5000	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	U	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
See Attached Summary of Findings / Comments.	
Inspector	Reviewer
<i>Ned Sarle</i> 3/10/08	<i>Martyn G. Burt</i> 3/10/08
Ned Sarle Permit Section Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

## **Summary of Findings / Comments**

### Areas Requiring a Response

A review of the Monthly Operating Reports (MORs) for August 2005 through January 2008 indicated numerous violations. These violations are listed on Attachment I. The Northmont City School District (Northmont) reported these violations in accordance to the NPDES Permit as detailed in Part III.12 titled "Noncompliance Notification". Future violations must continue to be reported as required by the NPDES Permit.

Northmont has been violating their NPDES Permit limits for over 20 years. The current WWTP was constructed in 1974 and is 34 years old. The treatment tanks are constructed of metal and are in very poor condition. Due to these facts, the current WWTP must be either replaced or eliminated. To replace this WWTP, the Ohio EPA would estimate the cost to be between \$300,000 and \$700,000. The annual O&M cost would remain the same as they currently are for Northmont.

Several years ago, the City of Clayton constructed a gravity sanitary sewer that is located within 100 feet of the package plant serving this facility. Northmont estimated that the connection cost would be \$164,000 and the annual O&M costs would be \$21,000. Based on this information, the sanitary sewer appears to be available and accessible for Northmont. The Ohio EPA considers a regional sewage collection and treatment system such as this system as the Best Available Technology. Therefore, the Ohio EPA would not be able to give a favorable recommendation for replacing the existing WWTP. The noted NPDES Permit violations must be immediately eliminated. Northmont must connect to the sanitary sewer as soon as possible but not later than December 31, 2008.

In addition, Northmont must properly abandon the WWTP and the tertiary lagoon. All wastewater and sludge in the old WWTP and tertiary lagoon must be properly disposed. The old metal tanks must also be removed from the site. Northmont must properly close this WWTP and tertiary lagoon as soon as possible but not later than August 31, 2009.

Storm water drainage is pumped into the tertiary lagoon. Discharging clean water into any portion of the WWTP is not acceptable. Northmont must indicate how all storm water drainage will be redirected from the WWTP.

The WWTP flow rate is required to be reported in gallons per day (gpd) instead of million gallons per day (MGD).

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The tertiary lagoon is used for a backup water system for the auditorium fire suppression system. In the past, the tertiary lagoon has also been proposed to be used as a water source for irrigating the athletic fields. The pump house for this system is still present at the WWTP. The Ohio EPA is not aware of any times this irrigation system has been used. Northmont must indicate when this system may have last been used. At this time, Northmont does not appear to have the necessary approvals for land applying this wastewater. To do so, Northmont would be required to comply with Ohio Administrative Code 3745-42-13. This law addresses land applying treated wastewater.

Finally, the Ohio EPA is currently investigating unsanitary conditions in the Village of Phillipsburg. The Ohio EPA is aware that the Phillipsburg Elementary School is located at 51 West Main Street, Phillipsburg, Ohio 45354. The Ohio EPA is requesting information about the sewage system serving this school. Please indicate the age and type of sewage system serving this school. In addition, a central sewage collection and treatment system would be the best long term solution for both the community and the school. The Ohio EPA encourages Northmont to support efforts to sewer this community. If you have any questions concerning our investigation into this community, please contact Joe Miller of this office at (937) 285-6109

#### Areas Not Requiring a Response

The WWTP serves the high school, middle school and stadium. The school has approximately 3000 students and 300 staff members.

The WWTP consist of 2 trash traps, an influent pump station that provides some flow equalization, an aeration tank, a clarifier, an aerated tertiary lagoon, and an aerated chlorine contact tank. Dechlorination tablet are also placed in the chlorine contact tank outlet chamber. The WWTP discharge was noted as being slightly green from the algae in the wastewater. An aerated sludge holding tank is also provided. The trash traps and aerated sludge holding tank are pumped out three times a year by Mike Sanitation.

The aeration tank contents had a weak color and white foam. These conditions are an indication that sludge is washing out of the aeration tank during high flows.

Winelco indicated that Northmont used to apply weed control chemicals to the tertiary lagoon. Please be advised that applying any chemicals to the tertiary lagoon without Ohio EPA approval is not acceptable.

The WWTP discharge flow rate is monitored using elapsed time meters for the influent pumps. The WWTP is designed for an average daily flow rate of 28,000 gpd. A review of the December 2006 through January 2008 MORs indicated that the average and peak daily flow rates for this period was 20,000 gpd and 130,000 gpd.

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The limits and monitoring requirements for winter ammonia were mistakenly not included in the latest NPDES Permit renewal. The Ohio EPA will be working on modifying the NPDES Permit to address this mistake. The monitoring and reporting requirements will be the same as the last NPDES Permit.

Northmont was requesting information about funding sewage disposal systems in the State of Ohio. One funding option may be the Rural Community Assistance Program. Please contact Mr. Wayne Cannon at (937) 393-2153 for information about this program. Their website can also be found at <http://www.qircap.org/> . Another funding option may be the Ohio School Facilities Commission. Information about this organization can be found at their website found at <http://www.osfc.state.oh.us/> .

Attachment I  
 Northmont Schools  
 Effluent Limit Violations for August 2005 through January 2008

Reporting Period	Parameter	Limit Type	Units	Permit Limit	Reported Value
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August 2005	Ammonia	Monthly	mg/l	2.0	2.1
September 2005	TSS	Monthly	mg/l	12	17
September 2005	TSS	Weekly	mg/l	18	32
September 2005	Ammonia	Monthly	mg/l	2.0	2.9
September 2005	Ammonia	Weekly	mg/l	3.0	3.3
September 2005	Fecal Coliform	Monthly	#/100ml	1000	1640
December 2005	CBOD5	Monthly	mg/l	10	14
December 2005	CBOD5	Weekly	mg/l	15	16
October 2005	Ammonia	Monthly	mg/l	2.0	3.5
October 2005	Ammonia	Weekly	mg/l	3.0	3.3
October 2005	Ammonia	Weekly	mg/l	3.0	3.8
May 2006	Ammonia	Monthly	mg/l	2.0	3.1
May 2006	Ammonia	Weekly	mg/l	3.0	3.1
November 2005	TSS	Monthly	mg/l	12	32
November 2005	TSS	Weekly	mg/l	18	52
November 2005	TSS	Weekly	mg/l	18	32
March 2006	TSS	Monthly	mg/l	12	16
March 2006	TSS	Weekly	mg/l	18	32
March 2006	CBOD5	Monthly	mg/l	10	13
March 2006	CBOD5	Weekly	mg/l	15	23
March 2006	CBOD5	Weekly	mg/l	15	20
April 2006	TSS	Monthly	mg/l	12	16
April 2006	TSS	Weekly	mg/l	18	36
April 2006	pH	Daily	S.U.	9.0	9.5
August 2006	Ammonia	Monthly	mg/l	2.0	3.8
August 2006	Ammonia	Weekly	mg/l	3.0	5.9
September 2006	Ammonia	Monthly	mg/l	2.0	6.4
September 2006	Ammonia	Weekly	mg/l	3.0	5.0
September 2006	Ammonia	Weekly	mg/l	3.0	7.8
September 2006	Chlorine	Daily	mg/l	0.019	0.05
September 2006	Chlorine	Daily	mg/l	0.019	0.05
September 2006	DO	Daily	mg/l	6.0	4.6
September 2006	DO	Daily	mg/l	6.0	3.5
July 2006	TSS	Weekly	mg/l	18	24
July 2006	Ammonia	Monthly	mg/l	2.0	5.9
July 2006	Ammonia	Weekly	mg/l	3.0	3.6
July 2006	Ammonia	Weekly	mg/l	3.0	8.2

Attachment I  
 Northmont Schools  
 Effluent Limit Violations for August 2005 through January 2008

Reporting Period	Parameter	Limit Type	Units	Permit Limit	Reported Value
July 2006	Fecal Coliform	Monthly	#/100ml	1000	1460
July 2006	CBOD5	Monthly	mg/l	10	12
July 2006	DO	Daily	mg/l	6.0	4.5
July 2006	DO	Daily	mg/l	6.0	2.0
July 2006	DO	Daily	mg/l	6.0	3.0
July 2006	DO	Daily	mg/l	6.0	4.2
January 2006	TSS	Monthly	mg/l	12	14
January 2006	TSS	Weekly	mg/l	18	20
January 2006	TSS	Weekly	mg/l	18	20
June 2006	DO	Daily	mg/l	6.0	4.3
October 2006	Ammonia	Monthly	mg/l	2.0	8.3
October 2006	Ammonia	Weekly	mg/l	3.0	7.3
October 2006	Ammonia	Weekly	mg/l	3.0	9.3
February 2006	TSS	Monthly	mg/l	12	33
February 2006	TSS	Weekly	mg/l	18	36
February 2006	TSS	Weekly	mg/l	18	24
February 2006	TSS	Weekly	mg/l	18	20
February 2006	TSS	Weekly	mg/l	18	52
February 2006	CBOD5	Monthly	mg/l	10	17
February 2006	CBOD5	Weekly	mg/l	15	21
February 2006	CBOD5	Weekly	mg/l	15	18
September 2007	Ammonia	Monthly	mg/l	2.0	2.3
September 2007	Chlorine	Daily	mg/l	0.019	0.24
January 2008	pH	Daily	S.U.	9.0	9.4
April 2007	TSS	Weekly	mg/l	18	19
August 2007	Chlorine	Daily	mg/l	0.019	0.07
December 2007	TSS	Monthly	mg/l	12	19
December 2007	TSS	Weekly	mg/l	18	35
December 2007	TSS	Weekly	mg/l	18	21
November 2007	pH	Daily	S.U.	6.5	6.4
May 2007	TSS	Monthly	mg/l	12	23
May 2007	TSS	Weekly	mg/l	18	56
May 2007	Ammonia	Monthly	mg/l	2.0	19
May 2007	Ammonia	Weekly	mg/l	3.0	24
May 2007	Ammonia	Weekly	mg/l	3.0	13
May 2007	Chlorine	Daily	mg/l	0.019	0.17
May 2007	Chlorine	Daily	mg/l	0.019	1.52

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Attachment I

Northmont Schools

Effluent Limit Violations for August 2005 through January 2008

Reporting Period	Parameter	Limit Type	Units	Permit Limit	Reported Value
May 2007	Chlorine	Daily	mg/l	0.019	0.06
October 2007	Ammonia	Monthly	mg/l	2.0	5.0
October 2007	Ammonia	Weekly	mg/l	3.0	6.6
October 2007	Ammonia	Weekly	mg/l	3.0	3.4
June 2007	Ammonia	Weekly	mg/l	3.0	5.0
June 2007	DO	Daily	mg/l	6.0	5.0
June 2007	DO	Daily	mg/l	6.0	3.9
July 2007	DO	Daily	mg/l	6.0	3.7



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