



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

FILE COPY

October 24, 2011

Mr. Tom Carpenter, President
Nissan North
8600 North High Street
Worthington, Ohio 43085

Re: **NPDES / Public**
Nissan North WWTP
Reconnaissance Inspection
Delaware County

Dear Mr. Carpenter:

This correspondence serves as a **Notice of Violation** for Significant Non-Compliance (SNC) with NPDES permit limits at the Nissan North, Inc. facility in Delaware County, Ohio.

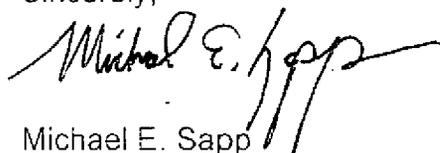
On October 5, 2011, a Reconnaissance Inspection was conducted at the wastewater treatment plant serving the Nissan North facility. Present for the inspection were John Kincaid, contract wastewater treatment plant operator representing Nissan North, Inc., and Kelly Thiel and myself of the Ohio EPA, Central District Office, Division of Surface Water. The purpose of the inspection was to evaluate the status of efforts to resolve issues of chronic non-compliance with the terms and conditions of your effective National Pollutant Discharge Elimination System (NPDES) permit. This facility is currently in SNC, due to the frequency and magnitude of ammonia violations.

The plant operator attributed the ammonia violations to high flows from inflow and infiltration (I/I) which washed-out solids from the plant. In order to reduce the influent flows new risers will be placed on the trash trap access ports and a dish will be installed in the manhole on the south side of the building. The operator anticipates that the proposed I/I removal efforts will be successful, and the facility will return to compliance with ammonia limits. Please be advised that in order to be removed from the SNC list you must maintain compliance with all ammonia limits for two successive quarters.

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Nissan North
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Enclosed is a copy of the NPDES Reconnaissance Inspection Report and attachments detailing the inspection that was conducted at the plant. Please be advised that the Nissan North facility will be prioritized for potential enforcement action if the proposed I/I reduction efforts are unsuccessful in resolving ammonia violations at this facility.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Sapp". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Michael E. Sapp
Environmental Specialist
Field Operations Unit
Division of Surface Water
Central District Office

Enclosures

c: John Kincaid, Kincaid Wastewater Services w/enclosures

ec: Mike Sapp CDO/DSW



NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Watershed
4PX00012*CD	OH0106194	10/5/11	R	S	Olentangy

SECTION B: FACILITY DATA		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Nissan North, Inc. 8645 North High St. Worthington, OH 43085	9:00 AM	October 1, 2006
	Exit Time	Permit Expiration Date
	10:20 AM	September 30, 2011
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
John Kincaid, Contract Operator	(740) 386-3768	
Name and Title of Responsible Official	Phone Number	
Tom Carpenter - President	(614) 846-8100	

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

SECTION D: SUMMARY OF FINDINGS
<p>Collection System – Unsatisfactory due to excessive I/I and impact of high flows on plant compliance.</p> <p>Effluent/Receiving Waters – Unsatisfactory due to significant non-compliance with ammonia limits.</p>

Signatures			
	10/13/11		10/14/11
Michael Sapp, Inspector Division of Surface Water Central District Office	Date	Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water Central District Office	Date

SUMMARY OF FINDINGS AND COMMENTS

Nissan North 4PX00012 - OH0106194

The wastewater treatment plant serving the Nissan North facility is located at 8645 North High Street in Worthington, Ohio and has a design treatment capacity of 2,000 gpd. The plant serves approximately 57 total employees from Nissan North and the Nissan Autobody facility. Effluent from this plant is discharged to an unnamed tributary to the Olentangy River. Wet stream processes provided at the facility include a trash trap, extended aeration, clarification, dosing, tertiary sand filters, chlorination and dechlorination. Liquid sludge is hauled to another facility for further processing.

1. At the time of the inspection, the following general observations were made regarding the operational practices at the plant:
 - The trash trap is pumped-out twice a year.
 - The floor drains in the shop were plugged and disconnected from the WWTP in 1997. A sweeper is used to clean and mop floors at this facility.
 - 30-minute settlability tests are performed twice a month.
 - John Kincaid performs analyses for pH, dissolved oxygen chlorine and temperature. Alloway Labs performs analyses for fecal coliform, ammonia, CBOD₅, and suspended solids.
 - The aeration blowers are operated on timers (one hour on followed by one hour off with extended off cycles at night).
 - The plant is not equipped with a flow equalization tank, however, the operator has throttled down the pumps in the main pump station to help equalize the influent flows.
 - Sludge is generally hauled from the plant in the spring and fall by Suburban.
 - The operator is adding 12-13 pounds of bicarbonate every week to provide alkalinity for nitrification.
 - The hour readings from the time-elapsed meters are read daily by personnel in the parts department.
 - Several holes were observed in the effluent weir. The operator will replace the weir within the next week. The sand filter walls will also be rehabilitated to preclude the entry of surface waters.

2. The average daily flow at outfall 001 for the time period from November 2008-October 2011 was 1271 gpd (see attached table). Several high flow events over 4000 gpd (e.g. 6888 gpd) were recorded during this period. The plant operator suspects that the majority of I/I is coming from a manhole on the south side of the building which sits in a low lying area. A dish will be installed on this manhole and risers will be reinstalled on the trash trap to keep out surface water.
3. The attached table contains a list of NPDES permit violations for the time period between November 2008 – August 2011. The operator attributed the ammonia violations to high flows which washed-out the plant and the nitrifiers. The operator anticipates that the proposed I/I removal efforts will be successful and the facility will return to compliance with ammonia limits. No violations have been reported since May 2011.
4. Nissan North washes approximately 20 cars/day in a dedicated wash bay. Wash waters are directed to a central sump where they are conveyed to a peat biofilter system prior to discharge. At the time of the inspection, there appeared to be standing water on the surface of the peat bed indicating slow filtration through the media. Please monitor the filtration rate of this unit and replace the peat if the flow rate through the media is excessively slow:

NPDES Permit Violations at the Nissan North Facility from November 2008 – August 2011

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value
January 2009	001	Nitrogen, Ammonia (NH3	30D Conc	6.8	13.4
January 2009	001	Nitrogen, Ammonia (NH3	7D Conc	10.2	13.4
January 2009	001	Nitrogen, Ammonia (NH3	30D Qty	0.06	.06391
February 2009	001	Nitrogen, Ammonia (NH3	30D Conc	6.8	22.5
February 2009	001	Nitrogen, Ammonia (NH3	7D Conc	10.2	22.5
February 2009	001	Nitrogen, Ammonia (NH3	30D Qty	0.06	.06438
September 2009	001	Nitrogen, Ammonia (NH3	30D Conc	3.3	6.16
September 2009	001	Nitrogen, Ammonia (NH3	7D Conc	4.9	6.16
April 2011	001	Nitrogen, Ammonia (NH3	30D Conc	6.8	14.1
April 2011	001	Nitrogen, Ammonia (NH3	7D Conc	10.2	14.1
April 2011	001	Nitrogen, Ammonia (NH3	30D Qty	0.06	.12488
April 2011	001	Nitrogen, Ammonia (NH3	7D Qty	0.08	.12488
May 2011	001	Total Suspended Solids	30D Qty	0.09	.11813
May 2011	001	Nitrogen, Ammonia (NH3	30D Conc	3.3	4.49
May 2011	001	Nitrogen, Ammonia (NH3	30D Qty	0.03	.08555
May 2011	001	Nitrogen, Ammonia (NH3	7D Qty	0.04	.08555
May 2011	001	Fecal Coliform	30D Conc	1000	2400.
May 2011	001	Fecal Coliform	7D Conc	2000	2400.

Flow Data for Nissan North Inc between 11/1/2008 and 8/30/2011

	Date	Flows (GPD)
Ten Highest Flows	9/9/2009	10710
	5/27/2011	6888
	4/5/2011	5985
	4/6/2011	5985
	5/4/2011	5034
	4/15/2009	4914
	5/25/2011	4836
	5/3/2011	4658
	4/21/2009	4536
	5/24/2011	4416
Average Flow Rate		1271