OhioEPA
State of Ohio Environmental Protection Agency

Southeast District Office

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

March 24, 2009

Re: Perry County
Oglebay Norton Glass Rock Plant
(dba Carmeuse Industrial Sands)
Compliance Evaluation Inspection
NPDES Permit 0IJ00000*ED
Correspondence (IWW)

Mr. Tom Himes, EHS Manager
Oglebay Norton - Glass Rock Plant
2446 Glass Rock Road
Glenford, Ohio 43739

Dear Mr. Himes:

On February 26, 2009, I conducted a compliance evaluation inspection of your Glass Rock facility. Tim Campbell and Aaron Wolfe, also of the Division of Surface Water Southeast District Office, accompanied me. You represented Oglebay Norton. The purpose of the inspection was to assess your facility's compliance with the NPDES discharge permit referenced above, and also for renewal of the NPDES permit, and to review any stormwater related compliance issues.

Quarry No. 8 was observed, and the sedimentation pond serving it **(outfall 0IJ00000*009)** was inspected. The storm runoff from this quarry is reportedly acidic due to a pyritic material present in the overburden above the sandstone, and caustic soda was being manually applied at the influent ditch leading to the pond. Iron precipitation was observed at the influent to the pond as well as iron staining of the outfall ditch. The pond effluent was clear. The pond appeared to be undersized and this is a likely reason for the TSS effluent violations at this outfall. It appears that there is a considerable volume of storm water from undisturbed areas being routed to this pond. The drainage footprint for this pond should therefore be studied and reduced as much as possible.

The sedimentation pond **(outfall 0IJ00000*008)** which served Quarry No. 7 was inspected. The effluent appeared clear and of good quality. The pond was observed to be filling with cattails, particularly at the upper end. The mined area above this pond was nearly entirely reclaimed with the exception of the conveyor area. There is a plan to dismantle the conveyor system. It appears that much clean stormwater is routed to this pond, including water from the public roadway. Again, the drainage footprint leading to this pond could be smaller, and it may be possible to eliminate the pond eventually.

The tailings pond and outfall **0IJ00000*001** were inspected. The water level was relatively low in the pond. The effluent appeared to be slightly cloudy.

The settling pond near the plant **(0IJ00000*002)** was inspected. This pond had a considerable amount of sediment in it. The effluent from the pond was slightly white in color and there was sand getting into the receiving stream. You reportedly intend to route the water from this pond into the tailings pond, and discharge from this pond only when absolutely necessary. A permanent change in this routing will require a Permit to Install (PTI).

The **south end of the plant grounds** had much stockpiled sand to the east of the plant entrance road. Much sand was observed on the plant access road. This area does not drain to a sediment pond, and therefore represents an unpermitted discharge of potentially sand laden storm water. Unpermitted discharges are in violation of Ohio Revise Code Chapter 6111 and subject Carmeuse to significant monetary penalties. This area and any areas around the plant which do not drain to a sediment pond and have the potential to contain sand or solids must be routed to a sediment pond for treatment prior to discharge to waters of the state. The truck scale area, which does not drain to a sediment pond must have runoff diverted to a treatment pond. Possibly sumps with pumping will be necessary for this. Revised NPDES permit applications and PTI applications must be submitted as soon as possible.

Regarding storm water in general, all treatment pond drainage areas should be assessed for the potential removal of flows that do not require treatment. Also, you must obtain a general construction storm water permit from Ohio EPA for any construction work associated with a PTI or modification at the site that disturbs more than one acre of ground.

Flow monitoring is accomplished at the tailings pond outfall 001 by measuring the height over the spillover wall at the plunging pool. This method needs to be refined, since there is no sharp weir edge and little drop over this point. The method of flow measurement for the other pond outfalls (which have round outfall pipes) is an estimate based on flow cross-sections. This too needs to be refined. The renewed permit will require an estimate of flow rates rather than a 24 hr. total.

A review of the Discharge Monitoring Reports (DMR's) for the period January 2008 through December 2009, revealed the following violations:

January 2008	009	Total Suspended Solids	30D Conc	30	58.	1/1/2008
January 2008	009	Total Suspended Solids	1D Conc	45	70.	1/7/2008
January 2008	009	Total Suspended Solids	1D Conc	45	46.	1/28/2008
February 2008	009	Total Suspended Solids	30D Conc	30	47.5	2/1/2008
February 2008	009	Total Suspended Solids	1D Conc	45	69.	2/11/2008
February 2008	009	pH	1D Conc	6.5	5.86	2/11/2008
February 2008	009	pH	1D Conc	6.5	6.48	2/25/2008
March 2008	001	Total Suspended Solids	30D Conc	30	48.	3/1/2008

March 2008	002	Total Suspended Solids	30D Conc	30	41.5	3/1/2008
March 2008	009	Total Suspended Solids	30D Conc	30	51.5	3/1/2008
March 2008	009	Total Suspended Solids	1D Conc	45	62.	3/10/2008
March 2008	009	pH	1D Conc	6.5	6.21	3/10/2008
March 2008	001	Total Suspended Solids	1D Conc	45	60.	3/24/2008
March 2008	002	Total Suspended Solids	1D Conc	45	48.	3/24/2008
March 2008	009	pH	1D Conc	6.5	6.39	3/24/2008
April 2008	009	Total Suspended Solids	30D Conc	30	54.	4/1/2008
April 2008	009	Total Suspended Solids	1D Conc	45	54.	4/7/2008
May 2008	002	Total Suspended Solids	30D Conc	30	218.75	5/1/2008
May 2008	002	Total Suspended Solids	1D Conc	45	718.	5/5/2008
May 2008	002	pH	1D Conc	6.5	6.25	5/5/2008
May 2008	009	pH	1D Conc	6.5	6.25	5/5/2008
May 2008	002	Total Suspended Solids	1D Conc	45	74.	5/15/2008
May 2008	002	Total Suspended Solids	1D Conc	45	52.	5/19/2008
May 2008	009	pH	1D Conc	6.5	4.56	5/19/2008
May 2008	009	pH	1D Conc	6.5	5.82	5/23/2008
June 2008	001	Total Suspended Solids	30D Conc	30	41.5	6/1/2008
June 2008	001	Total Suspended Solids	1D Conc	45	62.	6/23/2008
June 2008	009	Total Suspended Solids	1D Conc	45	46.	6/23/2008
July 2008	001	Total Suspended Solids	30D Conc	30	52.	7/1/2008
July 2008	002	Total Suspended Solids	30D Conc	30	38.	7/1/2008
July 2008	001	Total Suspended Solids	1D Conc	45	48.	7/7/2008
July 2008	009	pH	1D Conc	6.5	3.77	7/7/2008
July 2008	009	pH	1D Conc	6.5	5.67	7/18/2008
July 2008	001	Total Suspended Solids	1D Conc	45	56.	7/21/2008
July 2008	002	Total Suspended Solids	1D Conc	45	56.	7/21/2008
July 2008	009	pH	1D Conc	6.5	6.22	7/21/2008
July 2008	009	pH	1D Conc	6.5	5.32	7/31/2008
August 2008	001	Total Suspended Solids	30D Conc	30	31.	8/1/2008
August 2008	002	Total Suspended Solids	30D Conc	30	45.	8/1/2008
August 2008	009	pH	1D Conc	6.5	5.51	8/4/2008
August 2008	002	Total Suspended Solids	1D Conc	45	69.	8/18/2008
October 2008	002	Total Suspended Solids	30D Conc	30	39.5	10/1/2008
October 2008	002	Total Suspended Solids	1D Conc	45	68.	10/6/2008
November 2008	002	Total Suspended Solids	30D Conc	30	41.	11/1/2008
November 2008	009	pH	1D Conc	6.5	6.04	11/24/2008
December 2008	002	Total Suspended Solids	1D Conc	45	95.	12/1/2008
December 2008	002	Total Suspended Solids	30D Conc	30	65.	12/1/2008
December 2008	009	pH	1D Conc	6.5	4.22	12/29/2008

Oglebay Norton/Carmeuse
Limit Violations for the period January 2008 through December 2008

On October 31, 2008, Oglebay Norton submitted **amended DMR's** for the period January 2004 through June 2008, which included misreported or omitted data from the original submittals. Oglebay Norton brought this situation to our attention after a plant

ownership change occurred and the new company management became aware of it. This new data was entered into our database and the violations list above is based on the updated record.

The **NPDES permit renewal application** did not contain a water flow balance diagram for the facility. Please submit such a diagram based on your current best estimates of the various flows. Also, it appears the Form 2F information was not based on wet weather sampling. Please conduct wet weather sampling and resubmit this information as soon as possible.

Overall, the facility was found to be out of compliance with the terms and conditions of the NPDES permit due to the number of effluent violations. We intend to refer the case to our Central Office enforcement unit for a possible enforcement action. You should expedite your plan to have an engineer study the water uses and water treatment systems at the facility to enable you to make the corrections necessary to bring the facility into compliance.

Please reply in writing to this letter within 14 days. If you have any questions, please contact me at (740) 380-5218.

Sincerely,

Dan Messerly
District Staff Engineer
Division of Surface Water

DM/dh

Enclosure

c: Larry Reeder, DSW, CO
c: Joe Laughery, DAPC, SEDO

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0IJ00000*ED	OH0005541	February 26, 2009	C	S	2

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Oglebay Norton, Glass Rock Plant (dba Carmeuse Natural Chemicals Glass Rock Operation) 2446 Glass Rock Road Glenford, Ohio 43739	8:45 a.m.	June 1, 2003
	Exit Time	**Permit Expiration Date**
	4:00 p.m.	May 31, 2008

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Tom Himes, EHS Manager	(740) 342-8708
Name, Address and Title of Responsible Official	**Phone Number**
Doug Snider, Plant Manager 2446 Glass Rock Road Glenford, Ohio 43739 Oglebay Norton Co., 1001 Lakeside Ave., 15th Floor, Cleveland, OH 44114	(740) 342-8705 (740) 659-2241 (office)

C. AREAS EVALUATED DURING INSPECTION

M	Permit	M	Flow Measurement	N/A	Pretreatment
N	Records/Reports	N	Laboratory	N/A	Compliance Schedules
M	Operations & Maintenance	U	Effluent/Receiving Waters	S*	Self-Monitoring Program
S	Facility Site Review	N/A	Sludge Storage/Disposal		Other
N/A	Collection System				

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

D. SUMMARY OF FINDINGS/COMMENTS (attach additional sheets if necessary)

*See letter regarding reporting problems under prior ownership.
See attached letter.

Dan Messerly

Dan Messerly, Inspector, Ohio EPA, Southeast District Office

3-24-09
Date

Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

3/25/09
Date

Sections E through K: Complete on all inspections as appropriate (N/A = Not Applicable N/E = Not Evaluated)

E. PERMIT VERIFICATION

Inspection Observations Verify the Permit	Yes	No	N/A	N/E
a. Correct name and mailing address of permittee	X			
b. Correct name and location of receiving waters	X			
c. Product(s) and production rates conform with permit application (industries)			X	
d. Flows and loadings conform with NPDES permit			X	
e. Treatment processes are as described in permit application/briefing memo	X			
f. New treatment process(es) added since last inspection		X		
g. Notification given to state of new, different, or increased discharges			X	
h. All discharges are permitted		X		
i. Number and location of discharge points are as described in permit	X			

Comments: h. See letter.

F. COMPLIANCE SCHEDULES/VIOLATIONS

	Yes	No	N/A	N/E
a. Any significant violations since the last inspection	X			
b. Permittee is taking actions to resolve violations	X			
c. Permittee has compliance schedule		X		
d. Compliance schedule contained in: _____			X	
e. Permittee is meeting compliance schedule			X	

Comments:

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator: _____ Dual Feed: _____			X	
b. Adequate alarm system available for power or equipment failures			X	
c. All treatment units in service other than backup units			X	
d. Sufficient operating staff provided: No. of shifts: 2 Days/Week: 5	X			
e. Operator holds unexpired license of class required by permit Class: _____			X	
f. Routine and preventive maintenance schedule/performed on time		X		
g. Any major equipment breakdown since last inspection		X		
h. Operation and maintenance manual provided and maintained			X	
i. Any plant bypasses since last inspection			X	
j. Regulatory agency notified of bypasses: _____ on MORS _____ 800 No.			X	
k. Any hydraulic and/or organic overloads experienced since last inspection	X			

Comments: d. Ball mill runs 24 hrs/5 days; 30 employees total; 2 shifts; 4 people work second shift
f. Outfall 002 pond needs cleaned out.
k. See letter regarding ponds.

H. SELF-MONITORING PROGRAM

Part 1 – Flow Measurement		Yes	No	N/A	N/E
a.	Primary flow measuring device properly operated & maintained. Type of device: _____ ultrasonic & parshall flume _____ calculated from influent 001 weir _____ other _____ ultrasonic & weir specify: 002, 008, 009 *				
b.	Calibration frequency adequate (date of last calibration: _____)			X	
c.	Secondary instruments (totalizers, recorders, etc.) properly operated and maintained			X	
d.	Flow measurement equipment adequate to handle expected ranges of flows	X			
e.	Actual flow discharged is measured		X		
f.	Flow measuring equipment inspection frequency: 001, 002 Daily _____ Weekly _____ Monthly 008, 009 Other (2x/week)				

Comments: *round pipe/flow cross section
See letter regarding flow measurement

Part 2 – Sampling		Yes	No	N/A	N/E
a.	Sampling location(s) are as specified by permit	X			
b.	Parameters and sampling frequency agree with permit	X			
c.	Permittee uses required sampling method	X			
d.	Sample collection procedures are adequate	X			
	i. Samples refrigerated during compositing			X	
	ii. Proper preservation techniques used			X	
	Conform with 40 CFR 136.3			X	
e.	Monitoring records (e.g., flow, pH, D.O., etc.) maintained for a minimum of three years including all original strip chart recordings (e.g., continuous monitoring instrumentation, calibration, and maintenance records)	X			
f.	Adequate records maintained of sampling date, time, exact location, etc.	X			

Comments:

Part 3 – Laboratory, General		Yes	No	N/A	N/E
a.	EPA approved analytical testing procedures used (40 CFR 136.3)	X			
b.	If alternate analytical procedures are used, proper approval has been obtained			X	
c.	Analyses being performed more frequently than required by permit	X			
d.	If (c) is yes, are results reported in permittee's self-monitoring report	X			
e.	Commercial laboratory used: 1. Parameters analyzed by commercial lab: all except Carmeuse does pH at 008, 009 2. Lab name: Coshocton Env. Testing	X			

Comments: c. occasionally

Part 3 – Laboratory, Quality Control/Quality Assurance		Yes	No	N/A	N/E
f.	Quality assurance manual provided and maintained		X		
g.	Satisfactory calibration and maintenance of instruments and equipment	X			
h.	Adequate records maintained				X
i.	Results of latest U.S. EPA quality assurance performance sampling program:			X	
	Date: _____	_____ Satisfactory _____ Marginal _____ Unsatisfactory			

Comments: f. Carmeuse has Standard Operating Procedures outline for sampling personnel.

I. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	None	None	Slight	None	None	Slight gray	
002	None	None	Slight	None	None	Slight white	sand could be seen
008	None	None	None	None	None	Clear	
009	None	None	None	None	None	Clear	*

Comments: *009, there was light orange staining of base of receiving ditch.

J. MULTIMEDIA OBSERVATIONS

		Yes	No	N/A	N/E
a.	Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories				X
b.	Do you notice staining or discoloration of soils, pavement, or floors		X		
c.	Do you notice distressed (unhealthy, discolored, dead) vegetation		X		
d.	Do you see unidentified dark smoke or dustclouds coming from sources	X			
e.	Do you notice any unusual odors or strong chemical smells		X		
f.	Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities				X

If any of the above are observed, ask the following questions:

1. What is the cause of the conditions?
2. Is the observed condition or source a waste product?
3. Where is the suspected contaminant normally disposed?
4. Is this disposal permitted?
5. How long has the condition existed and when did it begin?

Comments: d. facility had white cloud discharge to air.