OhioEPA
State of Ohio Environmental Protection Agency

Southeast District Office

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

September 11, 2007

Re: Jefferson County
Barium & Chemicals, Inc.
Compliance Evaluation Inspection
Correspondence (IWW)

Ms. Deborah A. Venci, Vice President
Barium & Chemicals, Inc.
515 Kingsdale Road
Steubenville, OH 43952

Dear Ms. Venci:

On September 4, 2007, Ohio EPA conducted a Compliance Evaluation Inspection at the Barium & Chemicals plant near Steubenville. The purpose of the inspection was to determine compliance with terms and conditions of National Pollutant Discharge Elimination System (NPDES) permit number 0IE00009*BD and evaluate the wastewater treatment systems performance. Overall the plant appeared to be operating in compliance.

The following list summarizes violations which have been reported though Monthly Operating Reports (MORs) since the effective date of the current permit (July 1, 2002) including current reported data:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00400	pH	1D Concentration	9	9.62	10/2/2002
001	00400	pH	1D Concentration	6.5	6.1	7/20/2003
001	00400	pH	1D Concentration	6.5	6.28	10/5/2003
001	00400	pH	1D Concentration	6.5	6.42	8/14/2005
001	00400	pH	1D Concentration	6.5	6.24	8/15/2005
001	00400	pH	1D Concentration	6.5	6.46	8/21/2005

As we have discussed, the permit is in the renewal process. A limits/monitoring table will be drafted once the process outfall at 001 is analyzed and the data reported.

With regards to the Pottery Addition sewer, Ohio EPA is preparing to address the situation with a formal enforcement action.

A copy of our inspection report is enclosed. The assistance and cooperation received during the inspection was appreciated. If you have any questions, please feel free to contact me at (740) 380-5272.

Sincerely,

Aaron Pennington
District Representative
Division of Surface Water

AP/mlm

Enclosure

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0IE00009*BD	OH0011886	September 4, 2007	C	S	2

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Barium & Chemicals, Inc. 515 Kingsdale Road Steubenville, Ohio 43952	10:00 a.m.	July 1, 2002
	Exit Time	**Permit Expiration Date**
	12:30 p.m.	June 30, 2007

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Deborah A. Venci, Vice President Bob Bowers	(740) 282-9776
Name, Address and Title of Responsible Official	**Phone Number**
Deborah A. Venci, Vice President	(740) 282-9776

C. AREAS EVALUATED DURING INSPECTION

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

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

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

See attached cover letter.

Aaron Pennington, Inspector, Ohio EPA, Southeast District Office — Date: 9-7-07

Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office — Date: 9/12/07

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[1]		
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: [1] Non-contact cooling water associated with Barium Nitrate contributes flow to outfall 004. In addition outfall 001 receives backwash flows from multi-media sand filter, softeners, and reverse osmosis water treatment systems.

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: Permittee is under a Federal Consent Decree w/US EPA regarding RCRA issues from previous operations at the site.

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained		Yes	No	N/A	N/E
a.	Standby power available:				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: # of shifts: 1 Days/Week: 5 M-F			X	
e.	Operator holds unexpired license of class required by permit Class: N/A			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 Number			X	
k.	Any hydraulic and/or organic overloads experienced since last inspection		X		

Comments:

Collection System		Yes	No	N/A	N/E
a.	Percent combined system: 0%			X	
b.	Any collection system overflows since last inspection (CSO ___ SSO ___)			X	
c.	Regulatory agency notified of overflow (SSOs)			X	
d.	CSO O and M plan provided and implemented			X	
e.	CSOs monitored and reported in accordance with permit			X	
f.	Portable pumps used to relieve system			X	
g.	Lift station alarm systems provided and maintained			X	
h.	Are lift stations equipped with permanent standby power or equivalent portable gen.			X	
I.	Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection			X	
j.	Any complaints received since last inspection of basement flooding			X	
k.	Are any portions of the sewer system at or near capacity			X	

Comments:

H. SLUDGE MANAGEMENT

a. Sludge Management Plan (SMP): _____ Submitted Date
_____ Approval Number
_____ Not submitted
X N/A

		Yes	No	N/A	N/E
b.	Sludge Management Plan current				X
c.	Sludge adequately disposed:	X			
d.	If sludge is incinerated, where is ash disposed of?				X
e.	Is sludge disposal contracted				X
f.	Has amount of sludge generated changed significantly since last inspection				X
g.	Adequate sludge storage provided at plant			X	
h.	Land application sites monitored and inspected per SMP			X	
I.	Records kept in accordance with state and federal law – Records since 1999	X			
j.	Any complaints received in last year regarding sludge		X		
k.	Is sludge adequately processed?	X[1]			

Comments: [1] Original design of septic system was reportedly sized for 350 employees. Current employment is at 35. Septic tanks are pumped once every 2 years.

I. SELF-MONITORING PROGRAM

Part 1 - Flow Measurement		Yes	No	N/A	N/E
a.	Primary flow measuring device properly operated & maintained. Type of device: __X__ ultrasonic & parshall flume _____ calculated from influent _____ weir _____ Other _____ ultrasonic & weir _____ Runtime meter on Influent Pumps	X			
b.	Calibration frequency adequate		X[1]		
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: __X__ Daily _____ Weekly _____ Monthly _____ Other				

Comments: [1] The last flow meter calibration shown was 10/21/04. Calibration should follow meter manufacturer's recommendation. Permittee should check Operations and Maintenance manual for the meter to adequately maintain calibration; at minimum, the meter should be calibrated annually. During the Inspection, the flow meter visibly appeared to be within reason.

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 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) Calibration logs are needing to be kept.	X			
f.	Adequate records maintained of sampling date, time, exact location, etc.				X[1]

Comments: [1] Chain of Custody forms (a copy of) are recommended to be kept with the owner. Please understand that the NPES permit places the responsibility of monitoring on the owner.

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 pH, Flow, T, Rainfall, CaO, $Ca(OH)_2$ 2. Lab name: Microbac	X			

Comments:

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[1]			
h.	Adequate records maintained	X			

Comments: [1] 001 has submersed inline pH/Temp and conductivity probes which lay on the downstream side of the flume. Unsure of the behavior of these probes during low flow conditions; probes may lose contact with water. The probes were reported to be calibrated frequently; both the probes were replaced on 3/13/07.

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	None	None	Slight	Yes	None	Clear	Bottom of PVC pipe had rust layer
002	None	None	Slight	Yes	None	Clear	Bottom of PVC pipe had rust layer
003							No flow. Clean pipe
004							No flow. Clean pipe

K. 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[1]			
f.	Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities?		X		

Comments: [1] Area near leach field, where washout of Pottery Addition's Storm Sewer has occurred, had sewerage flowing directly to the Ohio River. The newly formed drainage way had a white-blue color with tissue and other debris. Leach field that was affected by the washout was reportedly corrected. *The sewerage witnessed did not appear to be coming from the leach field, but rather a source* associated with the storm sewer. Previous correspondence suggests the sewerage is associated with Pottery Addition's sewer line. During this inspection, conditions were agreeable with previous correspondence.