

COMPANY CORRESPONDENCE

RECEIVED BY
MAY 28 1974

J. M. QUINN

TO DIV: Industrial Chemicals
LOCATION: Norristown, N. J.
ATTN OF: Mr. J. M. Quinn
SUBJECT: BRNW ENVIRONMENTAL REPORT

FROM DIV: Industrial Chemicals
LOCATION: Baton Rouge North Works
DATE: May 23, 1974

Attached is copy of subject report for the
month of April, 1974.

P. B. Cornell
P. B. Cornell, Manager
Baton Rouge North Works

DLS/RNT:ef

Attach

cc: Mr. E. E. James
Mr. R. S. Christian

ENVIRONMENTAL SERVICES

	INFO	ACTION
JMQ	<i>[initials]</i>	<i>[initials]</i>
JMD	<i>[initials]</i>	
WFS		
GK		
LMF		
WCK		
CMM		
SK		

BJN ASI 00023685

LLS

F	WORKS	
I	PRODUCT	
L	TICKLE	
E	RET. TO	

Baton Rouge North Works
Environmental Report
April 1974

A. EMISSIONS (AIR)

1. Complaints

On April 3, the Works received a complaint from Kaiser Chemical on chlorine odors at their location. Investigation revealed that no chlorine had been released at the time of the complaint. However, HCl vapors were coming off the neutralization pond and the wind direction was such that the HCl vapors went in a northerly direction.

An employee of BRNW complained of dust in the VCM Complex on April 5. The dust was caused by Kaiser's dock unloading facilities. Kaiser was contacted on the matter.

On April 15, an employee of BRNW complained of an alumina dust cloud coming from Kaiser. Investigation revealed alumina dust on VCM equipment and on the concrete pads of the VCM operation. Mr. Eisenbach of Kaiser was contacted on the matter and said their emission was the result of equipment failure. No alumina was found in the north parking lot area.

2. Abnormal Emissions - There were none during the month.

3. Monitoring Equipment - No monitoring equipment in use.

4. Emission Data - Dustfall sampling discontinued due to concentration on VCM monitoring.

B. EFFLUENTS (WATER)

1. Complaints - None reported.

2. Abnormal Effluents

On April 5 a tank truck loaded with 50% caustic at BRNW was traveling down GS road and sprung a leak which resulted in a spill of about 200 gallons of caustic onto the side of the roadway. Environmental personnel from the Works and personnel from Exxon aided in the clean-up operation. The caustic was washed to the sewer with large amounts of water using the Exxon fire truck. Further neutralization steps were taken by washing down with diluted acetic acid. This spill was not reported to the La. Stream Control Commission because the sewer containing the wash water went through the Exxon waste sewer system.

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3. Monitoring Equipment

The lead pond and Bayou Hebert monitoring stations are operational. The other monitoring stations are still not operable due to high water backup

Monitoring of Bankston Ditch requires electricity; work order being processed.

4. Effluent Data - See Attachment B

C. REPORTS ON UPSUTS/BREAKDOWN CONDITIONS

There were none recorded.

D. INDUSTRIAL HYGIENE/OSHA

1. Daily spot check monitoring for total hydrocarbons in process areas, control room, and loading areas continues using the Century organic vapor analyzer. Four specific areas are being monitored for VCM, namely; loading, caustic scrubbers, VCM storages and bullets. Twelve other various points are monitored daily for total hydrocarbons. VCM was detected on three out of twenty-one monitoring days. Concentrations in specific VCM areas ranged from 40 to 400 ppm dependent upon sample locations. Background on the other eighteen days was <10 ppm with no loading or cleaning of tank cars recorded. Background ranges from 2 to 15 ppm as hydrocarbons in the immediate industrial complex, including public domain surrounding the industrial area.

<u>Date</u>	<u>VCM</u>	<u>Remarks</u>
4/1/74	300-400 ppm	Loading VCM tank cars, VCM detected downwind of loading area and increased to 400 ppm at loading area during hose disconnect.
4/2/74	<10 ppm	Not loading when sampled
4/3	<10 ppm	Not loading when sampled
4/4	<10 ppm	Not loading when sampled
4/5	<10 ppm	Not loading when sampled
4/8	<10 ppm	Not loading when sampled
4/9	<10 ppm	Not loading when sampled
4/10	10 - 40 ppm	Loading VCM tank cars. Venting thru dip sti
4/11	<10 ppm	Not loading when sampled
4/15	<10 ppm	Not loading when sampled
4/16	<10 ppm	Not loading when sampled
4/17	<10 ppm	Not loading when sampled
4/18	<10 ppm	Not loading when sampled
4/19	<10 ppm	Not loading when sampled
4/22	<10 ppm	Not loading when sampled
4/23	<10	Not loading when sampled
4/24	70 - 100 ppm	Loading VCM tank cars, VCM detected downwind of loading area. Some venting in progress.
4/25	<10 ppm	Not loading when sampled
4/26	<10 ppm	Loading, no venting
4/27	<10 ppm	Loading, no venting.
4/30	<10 ppm	Not loading when sampled

2. Additional ambient samples were taken, mainly during VCM loading, using evacuated gas collecting tubes and gas chromatography. Samples were taken at ground level beneath the VCM loading ramp. Samples were also taken on the loading ramp in the vicinity of the loaders.

<u>Date</u>	<u>VCM</u>	<u>Remarks</u>
4/22	No result	Trouble with G.C.
4/23	237 ppm	Loading and venting - loaders were upwind of vapors. Sample was taken downwind one tank car length below loading ramp at ground level.
4/24	<1 ppm	Loading VCM; no venting - ground level
4/25	1 ppm	Loading VCM - only venting was for about a five second duration thru dip tube. Loaders were upwind.
4/26	<1 ppm	Loading VCM - no venting
4/29	26 ppm	Loading VCM - Sample taken around dome of tank car
4/30	1 ppm	General tank area. Not loading when sampled.

Operating personnel are being supplied with air masks in the loading areas.

3. Potable water samples submitted to the state Health Department for bacteria count met potable water quality standards.
4. Personnel monitoring for asbestos in cell repair north continues with results below TLV.

E. VISITS

No visits during month.

F. STATUS OF CONTROL OBJECTIVES AND POLLUTION AUDITS

1. AIR

Soda Ash Audit No. 5 - P&L Dust system installation is complete and ready for start-up in May.

Soda Ash Audit No. 1 - The No. 3 elevator dust system is not operational because of the lack of water to the air compressor. An available booster

4/25 <1 ppm
1 ppm

4/26 <1 ppm
4/29 26 ppm

4/30 1 ppm

Loading VCM, no venting - ground level
Loading VCM - only venting was for about a
five second duration thru dip tube. Loaders
were upwind.
Loading VCM - no venting
Loading VCM - Sample taken around dome of
tank car
General tank area. Not loading when sampled.

Operating personnel are being supplied with air masks in the loading areas.

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bacteria count met potable water quality standards.
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Soda Ash Audit No. 1 - The No. 3 elevator dust system is not operational
because of the lack of water to the air compressor. An available booster
pump will be connected in May to supply water.

Lime Kiln Audit No. 1 - The PE-1 was approved on using the spare Ducon
gas scrubber for the lime kiln dust system.

EDC/VCM Audit No. 1 - C.O. for vinyl vapor recovery system in MTO for approval

Audit No. 2 - PE-1 for the lights condensate recovery system has
not been written. Quotes for the instrumentation
have not been received.

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EDC/VCM Audit No. 10 - An investigation has begun for reducing or eliminating HCl emission from the neutralization pond, which shows the following:

- a) The North pond requires rehabilitation and has been scheduled for last week of May.
- b) An additional water system (spray) may be required to quench the excess HCl after the north pond is put in operation; this will be determined after both neutralization ponds are in operation.

Caustic/Chlorine Audit No. 1 & 2 - Construction began on the three-pond system on April 23, 1974. The brine pond will not be built as part of the system as guidelines for total dissolved solids for best practical control technology have not been established for 7/1/77, however, 7/1/83 guidelines requirement is no effluent discharges.

Caustic/Chlorine Audit No. 1 & 2 - The lead pond continues to be fouled due to high alkalinity and brine. Lead effluent averaged 78 lbs. per day for the month. Weak liquor header replacements are still behind schedule due to slow deliveries.

Caustic/Chlorine Audit No. 3 - The Nalco feed pump, pH and conductivity meters have been installed and are in operation on the caustic cooling tower.

General Plant Audit No. 1 - Monitoring requirements for effluents are being developed for preparation of PE-1.

GENERAL Audit No. 11-Work on south lagoon has been completed. North lagoon not operational due to a leak in the east bank.

1. Regulations and Questionnaires

Some revisions of the Waste Water Conceptual Plan for the Works have been made and finalization continues.

The EPA received the Works Corps of Engineers permit for review.

The LACC requested by letter dated 4/16/74 further clarification of the Works Hydrocarbon Compliance Schedule. Areas of clarification were: storage tanks and percent reduction of reactive and non-reactive hydrocarbon.

2. Laboratories

Daily monitoring for VCM continues using the Century OVA Hydrocarbon analyzer.

The Environmental Control Gas Chromatograph has been standardized to measure vinyl chloride caught in glass collecting bulbs at various locations in the VCM plant. A daily ambient monitoring program has been established.

Equipment for personnel monitoring for vinyl chloride has been shipped. Expect delivery of material by mid May.

Quotations for a stationary vinyl monitoring system have been requested from several instrument manufacturers. We are awaiting quotes from these manufacturers before preparing any firm proposals.

3. Meetings

B. Boeneke and R. Lewandowski attended the Instrument Society of America display of monitoring equipment on April 26, 1974 in Baton Rouge.

ATTACHMENT B

RECEIPT DATA

WASTES DISCHARGED TO THE MISSISSIPPI RIVER

	Permit NT/Day	April-1974 NT/Day*
<u>SODA ASH</u>		
Suspended Solids	397	101
Dissolved Solids	3474	2732
Chlorides as Cl	2184	1611
Sulfates as SO ₄	273	-
Alkalinity as CaO	60	68
Dense Ash Sewer - Na ₂ CO ₃	-	18
Brine Plant Muds - NaCl	-	2.9
<u>ECS</u>		
NaOH	7.5	2.1
NaCl	13.0	87.0
CaCO ₃	0.24	-
HClO-HCl as Cl ₂	-	0.4
H ₂ SO ₄	-	1.0
Ca(ClO) ₂	-	4.7
CaCl ₂	-	3.7
Ca(OH) ₂	-	1.3
Lime Sands	-	0.5
<u>VCM-CHLORINE-CAUSTIC</u>		
HClO - HCl as Cl ₂	-	0.0
CaCl ₂	-	2.0
NaCl	19.6	116.0
NaOH	1.3	58.5
NaClO	3.46	3.5
Na ₂ SO ₄	3.1	6.1
Organics	7.0**	3.3
Fe(OH) ₃	-	0.1
HCl	-	0.1
Chromium	20.0#/day**	17 #/day
Copper	-	2.1 #/day
Lead	20.0#/day	78 #/day
<u>WASTE TO BAYOU BOURBEAUX</u>		
Brine Wells - NaCl	0.55	

MISSISSIPPI RIVER DATA

Flow, cu.ft./sec.	970,000
Intake water, P-reading-ppm equiv. CaCO ₃	0
Intake water, M-reading	96
Intake water, Hardness	133
Intake water, Chlorides	34

* Basis 30 fiscal operating days

** Commitments to Government

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