

File

BFGOODRICH CHEMICAL DIVISION

PEDRICKTOWN PLANT

OCT 02 1979

JULY - AUGUST, 1979

ENVIRONMENTAL STATUS REPORT

DISTRIBUTION

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NGC 14957

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B.F. GOODRICH CHEMICAL COMPANY MEETING REPORT

SUBJECT JULY/AUGUST ENVIRONMENTAL COMMITTEE MEETING		DATE
OUTSIDE ORGANIZATION INVOLVED		
MEETING PLACE Pedricktown, N.J.		MEETING DATE 8/14/79 and 9/7/79
SFG PARTICIPANTS K.L. Blanton T.D. Rings K.A. Jeffers J.M. Glickman J.A. Kiel C.J. Nosal W.A. Reed J.P. Moran	OTHER PARTICIPANTS (NO DISTRIBUTION)	ADDITIONAL COPIES TO: C.T.F.
RESULTS AND COMMITMENTS:		PERSON RESPONSIBLE:
1. <u>Reviewed status of 1979 established EPA-OSHA goals</u> Graphs reviewed are attached for the following areas: A. Mass Resin B. Suspension/Dispersion Resin C. Latex D. Compound The following was noted: A. Mass continues their on-going program to identify and correct relatively minor fugitive emission VCM leaks. A considerable amount of time is spent in this area by all area personnel. Problems have been occurring with the G.C. and Mass is considering expediting the conversion of their unit from the 7,000 series to the 9,000 series. B. Suspension/Dispersion continues to make improvements. Point 6 located on the 2nd. floor by Dispersion has accounted for approximately 35% of the readings > 1 ppm. C. Latex AN readings continue low. The AN training program was critiqued and found to be very beneficial. D. Compound noise personnel monitoring results continue to improve. The OSHA cuber room noise citation can be abated through the use of administrative controls; however, the approach is to utilize a combination of engineering controls and operational controls to abate the citation. A progress letter was sent to OSHA on 9/17/79. Compound toxic dust personnel monitoring area is very active. The lab AA unit is in operation and results are available in 24 hrs. This is extremely helpful for training and followup. Special self contained power ventilated combination hard hat/respirator have been received and experimented with. The equipment was very well accepted.		
REPORTED BY Jim A. Kiel/re		NGC 14959

2. Overall Status of EPA-NESHAP VCI Attainment Program

EPA-VCI Attainment Summary is attached:

EPA-VCI attainment has been excellent for both months. The semi-annual report was submitted to EPA.

The VGA back up incinerator installation is almost complete. Start up is scheduled for early October and a stack test is scheduled for October 18, 1979.

An extremely thorough review for all VCI handling systems that potentially could experience a reportable rupture disk/relief valve discharge continues. Selective BV type rupture disks will be replaced with S-90 type rupture disks. Several other alternatives are also under investigation including reactor RV, burp system modifications and power failure emergencies.

3. Complaints and Unusual Releases to the Environment

- A. One complaint was received during July (odor-Latex premix spill), and one complaint in August (noise-railroad tracks). There were four plant Ammonia odor complaints. Two unusual releases were acknowledged in July (Latex premix spill and suspension leaking change gasket). Eight unusual releases were acknowledged in August (3 to waste treatment, 2 - VCM fugitive, 2-PVC dusting, and 1 EPA reportable 3.4 lb RVCM recovery system).

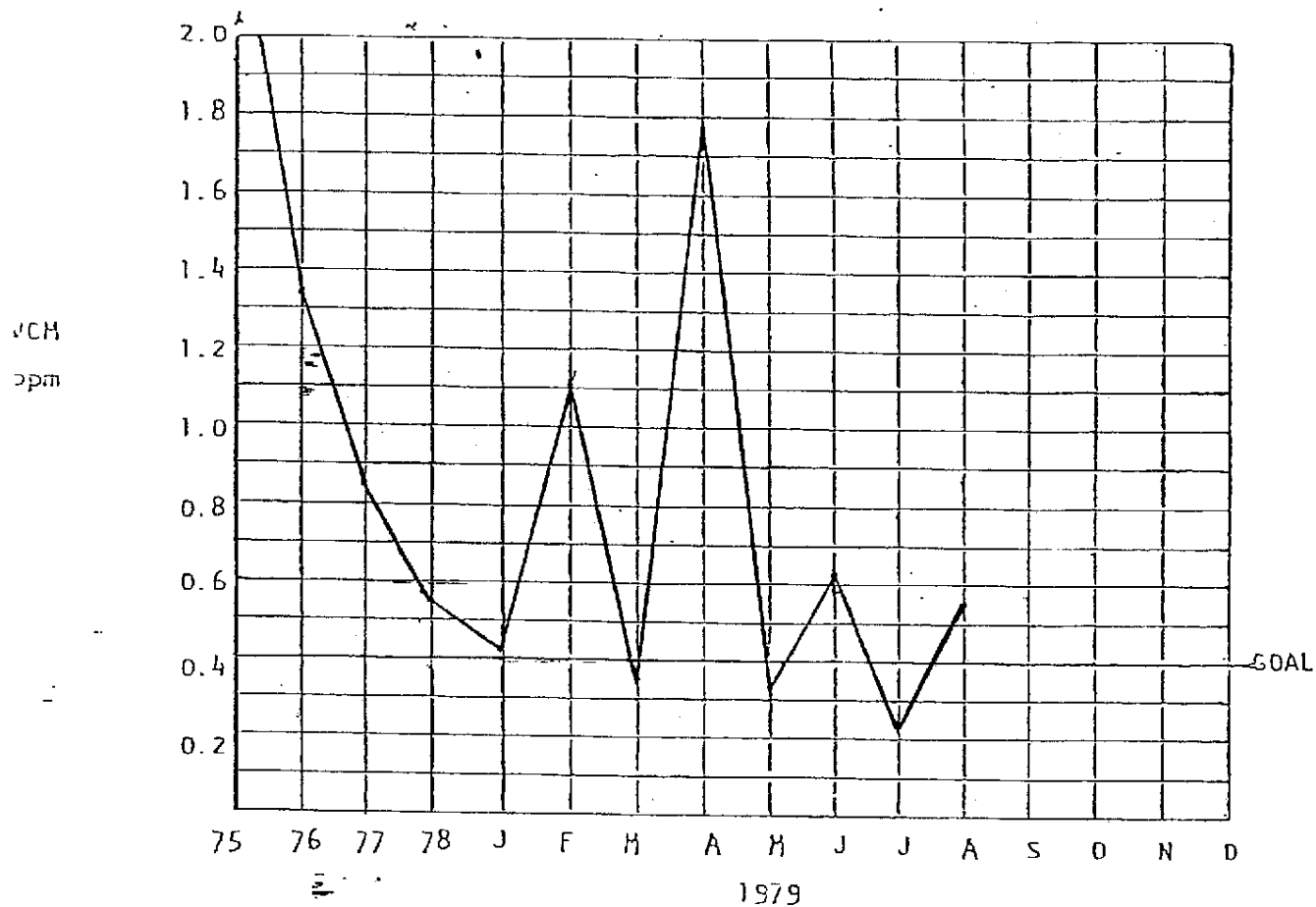
4. Pertinent Topics of Interest

- A. Reviewed status of proposed PVC expansion.
- B. Reviewed NJDEP petroleum and hazardous material spill control plan.
- C. Reviewed 1980 environmental project.
- D. Reviewed 9/5/79 Hurrican David and tornado near miss.

PERSONAL MONITORING RESULTS

VINYL CHLORIDE

MASS RESIN POLYMERIZATION - BLDG. 512



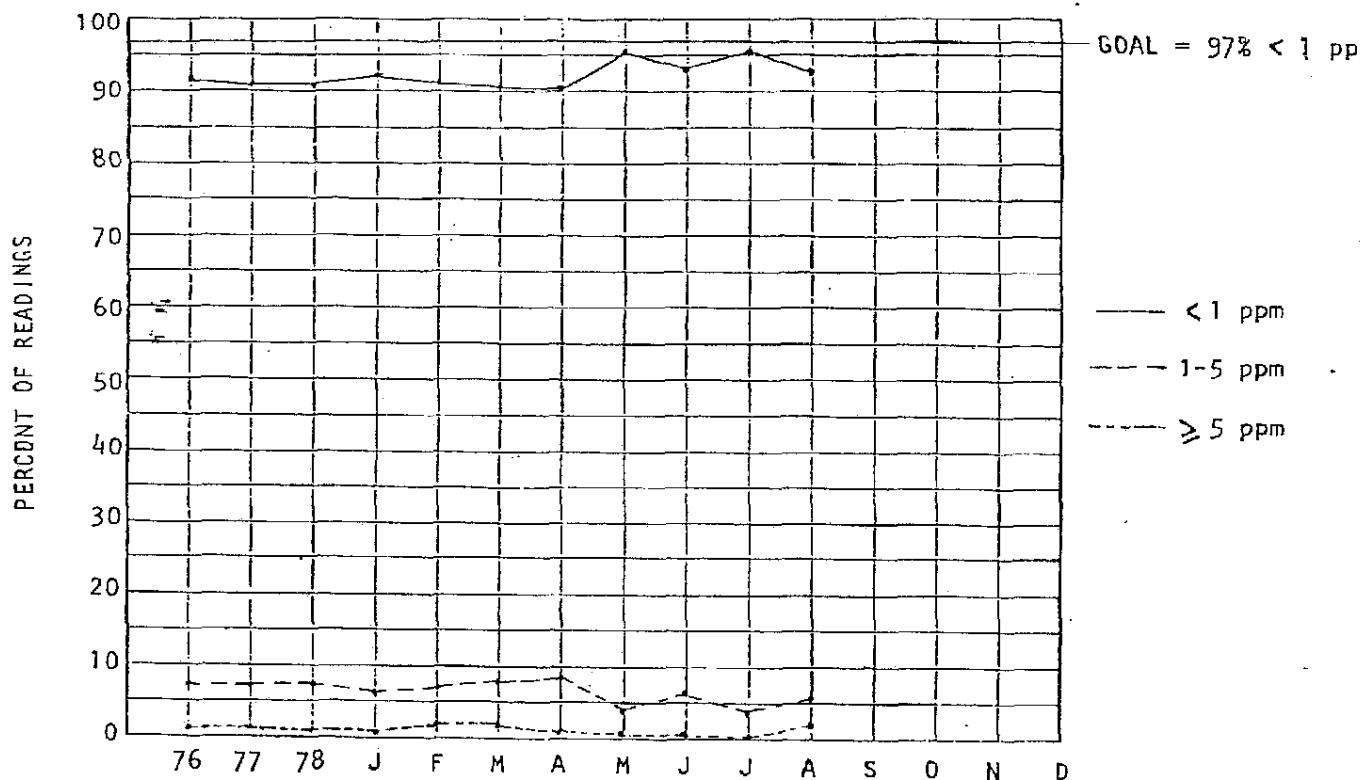
No. Samples	No. ≤ 0.5	$0.5 < \text{No.} \leq 1.0$	No. > 1.0	Range ppm	Average ppm Month	YTD	≤ 1.0 ppm Month	YTD
18	14	2	2	0.01-5.20	0.55	0.65	88.9	88.5

NGC 14961

BUILDING MONITORING RESULTS

VINYL CHLORIDE

MASS RESIN POLYMERIZATION - BLDG 512



	MONTHLY AVERAGE	YEAR TO DATE
< 1 ppm	92.30	92.67
1-5 ppm	5.68	6.18
5-100 ppm	1.84	1.07
≥ 100 ppm	0.19	0.07
average ppm * in building	1.83	1.14

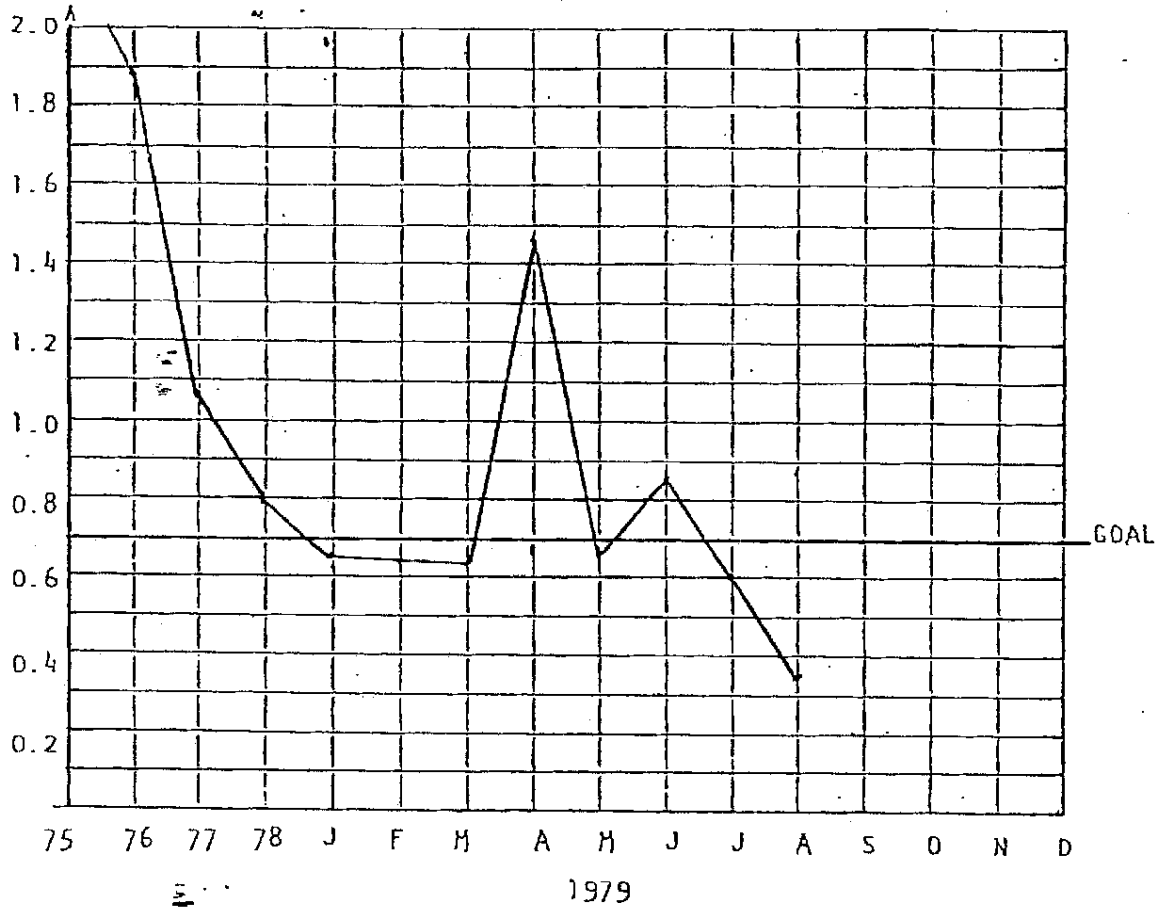
NGC 14962

* Average ppm in building is calculated using the following assumptions:
 any point less than 1 ppm = 0.5 ppm, any point between 1 and 5 ppm =
 2.5 ppm, any point between 5 and 100 ppm = 15 ppm, and any point greater
 than 100 ppm = 500 ppm. These assumptions are based on actual levels for
 a one week period.

PERSONAL MONITORING RESULTS

VINYL CHLORIDE

SUSPENSION/DISPERSION POLYMERIZATION - BLDG. 513



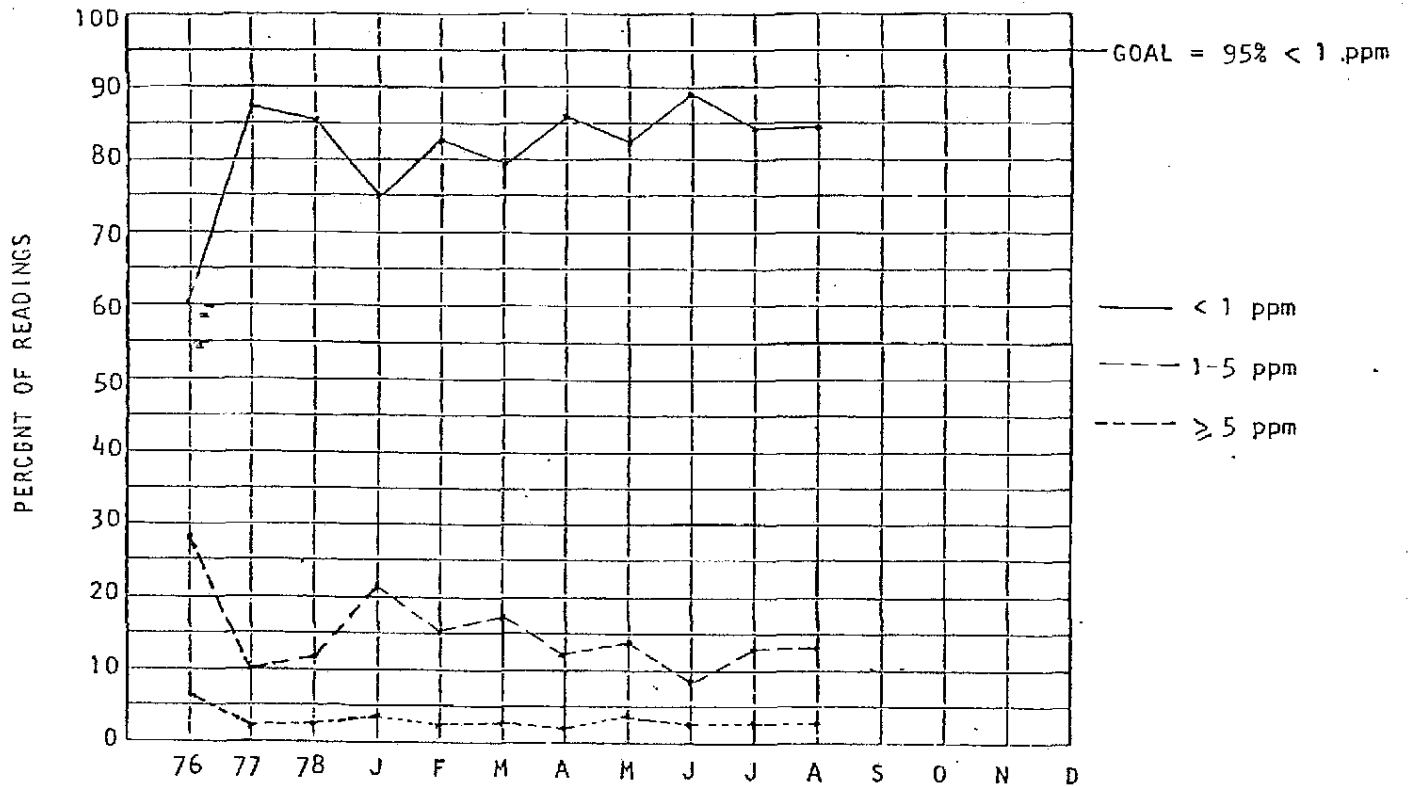
No. Samples	No.			Range ppm	Average ppm		≤ 1.0 ppm	
	≤ 0.5	$0.5 < \text{No.} \leq 1.0$	$\text{No} > 1.0$		Month	YTD	Month	YTD
25	20	1	4	0.01-2.07	0.35	0.74	84.0	79.8

NGC 14963

BUILDING MONITORING RESULTS

VINYL CHLORIDE

SUSPENSION/DISPERSION POLYMERIZATION.- BLDG 513



	MONTHLY AVERAGE	YEAR TO DATE
< 1 ppm	84.44	82.97
1-5 ppm	12.98	14.24
5-100 ppm	2.48	2.64
≥ 100 ppm	0.10	0.16
average ppm * in building	1.62	1.94

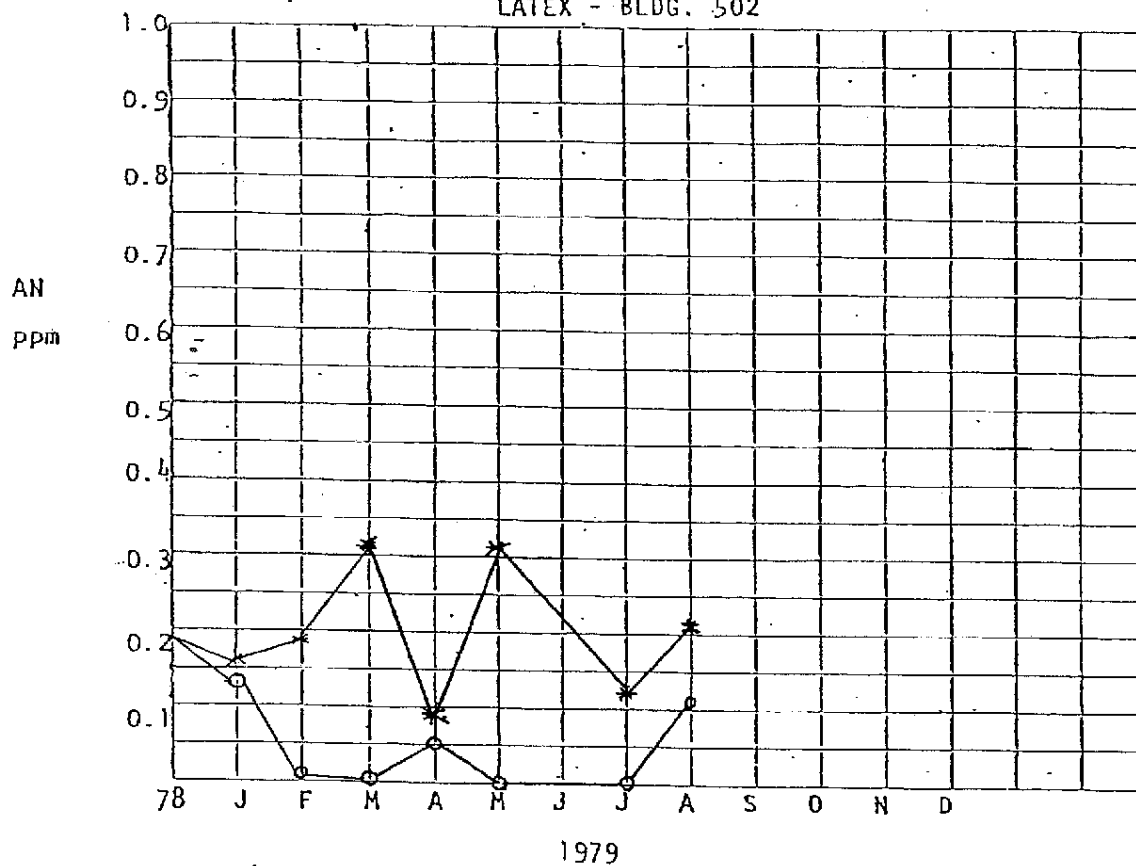
NGC 14964

* Average ppm in building is calculated using the following assumptions: any point less than 1 ppm = 0.5 ppm, any point between 1 and 5 ppm = 2.5 ppm, any point between 5 and 100 ppm = 15 ppm, and any point greater than 100 ppm = 500 ppm. These assumptions are based on actual levels for a one week period.

PERSONAL MONITORING RESULTS

ACRYLONITRILE

LATEX - BLDG. 502



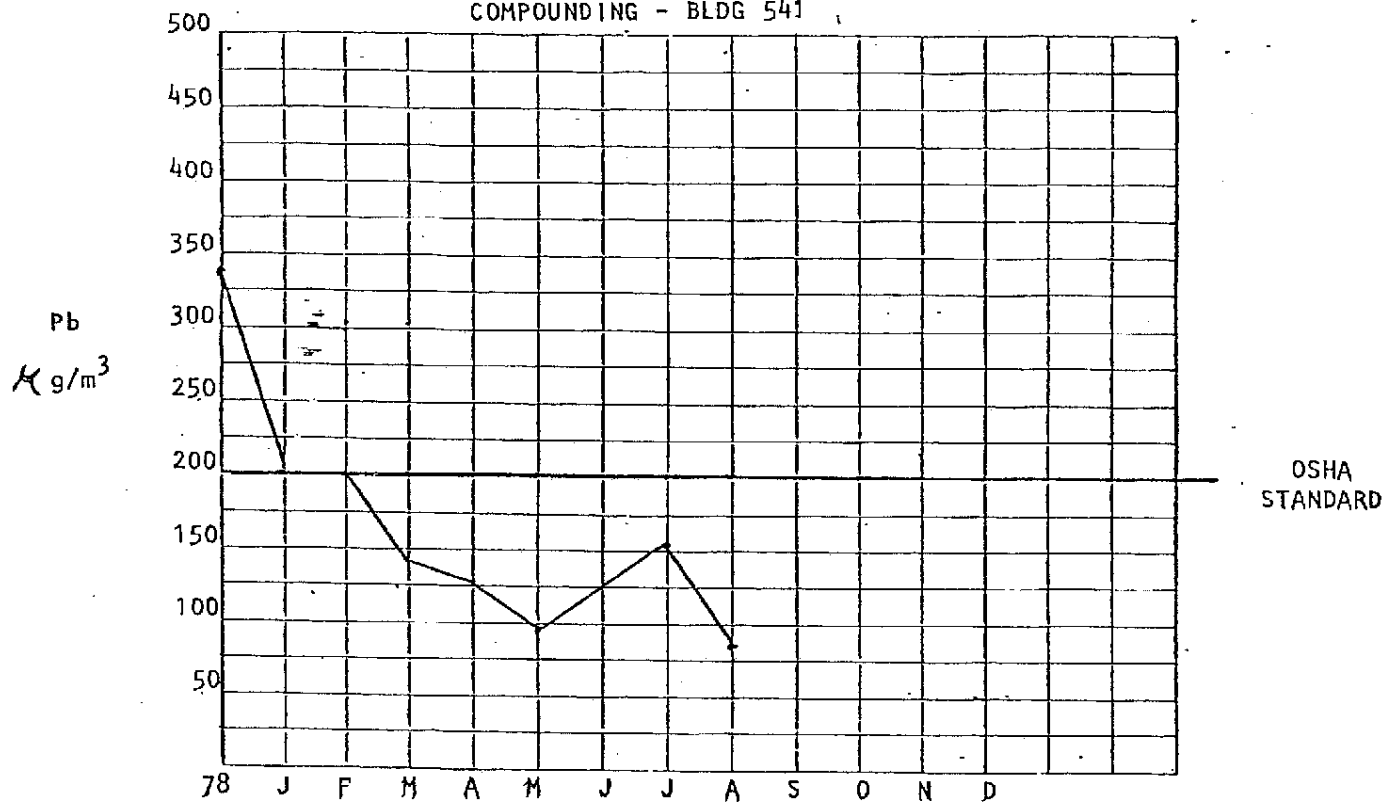
	No. Samples	No. ≤ 1.0	$1.0 < \text{No} \leq 2.0$	No. > 2.0	Range ppm	Average Month	ppm YTD	% ≤ 2.0 Month	ppm YTD
Reg	3	3	-	-	0.0-0.37	0.21	0.21	100	100
Non-Reg	8	8	-	-	0.0-0.44	0.12	0.08	100	100

NGC 14965

PERSONNEL MONITORING RESULTS

LEAD

COMPOUNDING - BLDG 541



1979

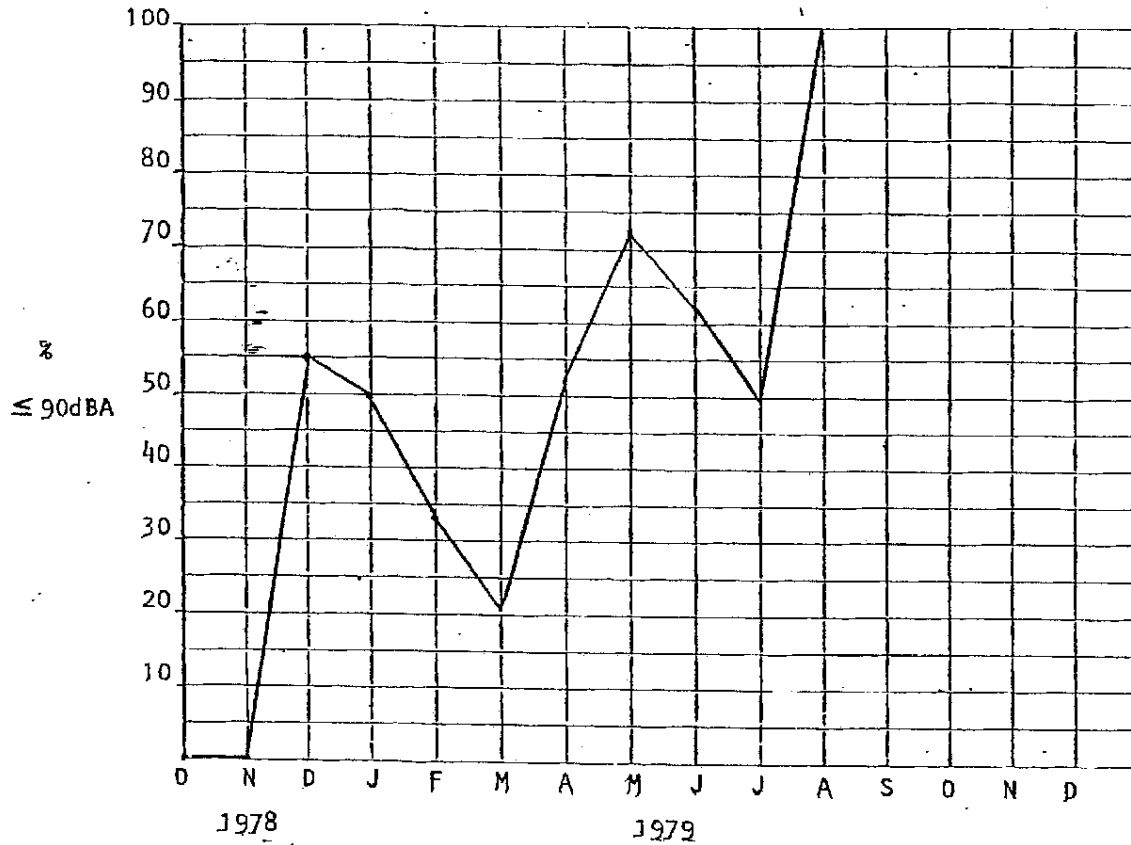
No. Samples	Average* $\mu\text{g}/\text{m}^3$		% $\leq 200 \mu\text{g}/\text{m}^3$	
	Month	YTD	Month	YTD
13	85.0	131.3	84.6	64.3

*The Averages are computed using the log-transformation technique.

NGC 14966

PERSONNEL MONITORING RESULTS
NOISE

COMPOUND MILL AREA - Bldg 541



No. Samples

6

≤ 90dBA
Month

6

% ≤ 90dBA
Month YTD

100

55.7

NGC 14967

EPA VC1 ATTAINMENT

	<u>July, 1979</u>	<u>SEMIANNUAL REPORT TO DATE</u>	<u>10/21/78 TO 02/28/79</u>
<u>REACTOR OPENING</u>			
PEARL			
No. of Non-attainments	1	2	16
No. of Openings	47	258	227
% Attainment	97.9%	99.2%	93.0%
PASTE			
No. of Non-attainments	0	1	64
No. of Openings	203	996	792
% Attainment	100%	99.9%	91.9%
MASS			
No. of Non-attainments	0	1	8
No. of Openings	326	1507	1125
% Attainment	100%	99.9%	99.3%
<u>RESIN STRIPPING</u>			
PEARL - % Attainment	100%	100%	99.2%
PASTE - % Attainment	100%	100%	96.8%
MASS - % Attainment	100%	99.0%	90.9%
<u>VENT ABSORBER</u>			
% Attainment	100%	99.8%	96.4%
<u>WASTEWATER STRIPPER</u>			
% Attainment	100%	100%	91.8%
<u>UNUSUAL DISCHARGES</u>			
Number of Unusual Discharges	0	2	2

NGC 14968

EPA VCI ATTAINMENT

	<u>AUGUST, 1979</u>	<u>SEMIANNUAL REPORT TO DATE</u>	<u>3/01/79- 7/31/79</u>
<u>REACTOR OPENING LOSS</u>			
<u>PEARL</u>			
No. of Openings	33	33	258
No. of Non-Attainments	0	0	2
% Attainment	100 %	100 %	99.2 %
<u>PASTE</u>			
No. of Openings	199	199	996
No. of Non-Attainments	0	0	1
% Attainment	100 %	100 %	99.9 %
<u>MASS</u>			
No. of Openings	296	296	1507
No. of Non-Attainments	0	0	0
% Attainment	100 %	100 %	100 %
<u>RESIN STRIPPING</u>			
Pearl - % Attainment	100 %	100 %	100 %
Paste - % Attainment	100 %	100 %	100 %
Mass - % Attainment	100 %	100 %	98.0 %
<u>VENT GAS ABSORBER</u>			
% Attainment	99.5 %	99.5 %	99.8 %
<u>WASTEWATER STRIPPER</u>			
% Attainment	100 %	100 %	100 %
<u>UNUSUAL RELEASES</u>			
No. of EPA-Reportable	1	1	2

KAJ/re

NGC 14969

DATE: JULY, 1979

WASTE TREATMENT	TS (ppm)	DS (ppm)	SS (ppm)	VSS (ppm)	COD (mg/l)	BOD ₅ (mg/l)	pH	PO ₄ (ppm)	NH ₃ (ppm)	TURB (JTU)	COLOR (APHA)	TEMP. (°F)
Influent	1638	762	876	749	938	294	8.9	-	-	-	-	-
Primary Effluent	1206	1166	40	26	357	224	6.6	2.8	3.8	-	-	-
Secondary Effluent	1145	1105	40	24	51	-	7.1	0.45	0.81	-	-	-
Lagoon	1200	1164	36	21	48	7	7.0	-	-	-	91	81
Sanitary				Industrial								
Activated Sludge	(SS) *	(VSS) *	(Cl) 10.2	(MLSS) 2566	(MLVSS) 1949	(DO) 4.8	(O ₂) 9	(SV) 137	(SVI) 55	(°F) 86	(RSS) 6441	(RVSS) 5049
Flow (MM)				Sludge			BOD/COD			% Removal		
Calculations	(EFF) 11.1	(Reuse) 4.5	(Total) 15.6	Prim. % 1.0	Thickened % 10.0	(Disposal) (Lbs. Dry) 263, 271	(Inf) 0.31	(Prim) 0.63	(Lagoon) 0.15	(SS) 96	(COD) 95	(BOD) 93

WATER TREATMENT	TS (ppm)	DS (ppm)	SS (ppm)	VSS (ppm)	COD (mg/l)	PO ₄ (ppm)	pH	Fe (ppm)	Cl (ppm)	TURB (JTU)	COLOR (APHA)	TEMP. (°F)
Recycle Reuse	-	-	-	-	-	-	-	-	3.0	-	-	-
Potable	-	-	-	-	-	-	7.0	1.0	0.42	-	-	65
Clarified	909	879	30	17	-	-	6.8	2.1	-	-	-	77

* Denotes tank out of service.

NGC 14970

DATE: AUGUST - 1979

WASTE TREATMENT	TS (ppm)	DS (ppm)	SS (ppm)	VSS (ppm)	COD (mg/l)	BOD ₅ (mg/l)	pH	PO ₄ (ppm)	NH ₃ (ppm)	TURB (JTU)	COLOR (APHA)	TEMP. (°F)
Influent	1752	635	1116	969	1044	238	8.6	-	-	-	-	-
Primary Effluent	936	908	29	18	300	186	6.5	2.7	4.7			-
Secondary Effluent	913	880	33	21	45	-	7.0	0.37	1.0			-
Lagoon	948	918	28	17	41	5	7.0	-	-		78	83
Activated Sludge	Sanitary			Industrial								
	(SS)	(VSS)	(Cl)	(MLSS)	(MLVSS)	(DO)	(O ₂ T)	(SV)	(SVI)	(°F)	(RSS)	(RVSS)
	-	-	7.8	2380	1785	3.9	11	105	45	91	6687	5158
Calculations	Flow (MM)			Sludge			BOD/COD			% Removal		
	(EFF)	(Reuse)	(Total)	Prim. %	Thickened %	(Disposal) (Lbs. Dry)	(Inf)	(Prim)	(Lagoon)	(SS)	(COD)	(BOD)
	14.7	4.5	19.2	1.2	8.6	250,208	0.23	0.62	0.12	97	96	98

WATER TREATMENT	TS (ppm)	DS (ppm)	SS (ppm)	VSS (ppm)	COD (mg/l)	PO ₄ (ppm)	pH	Fe (ppm)	Cl (ppm)	TURB (JTU)	COLOR (APHA)	TEMP. (°F)
Recycle Reuse	-	-	-	-	-	-	-	-	4.2	-	-	-
Potable	-	-	-	-	-	-	6.9	1.6	0.60			63
Clarified	844	817	27	16	-	-	6.8	1.8	-			81

NGC 14971

BFGoodrich

Chemical Division

Inter-Organization Correspondence

To WARREN REED	From JACOB GLICKMAN
Location	Location
Department	Department
Subject JULY PROGRESS REPORT	
Date 7/27/79	

SIGNIFICANT ACCOMPLISHMENTS

1. PERMITS FOR THE LARGE POLY AND PASTE EXPANSIONS WERE APPROVED BY THE STATE. THE FEDERAL EPA WILL BE REQUESTING INFORMATION REGARDING THESE PERMITS.
2. THE ATOMIC ABSORPTION SPECTROPHOTOMETER WAS SET UP ON 7/23. DUST MONITORING SAMPLES WERE ANALYZED ON 7/26.
3. ISSUED REPORT ON WASTE CHEMICAL PROCESSING AND TREATMENT FACILITY MONITORING WELL ANALYSIS.

GENERAL INFORMATION

1. CONDUCTED MONTHLY ENVIRONMENTAL MEETING.
2. SUBMITTED QUARTERLY SOLID WASTE MANIFEST SUMMARY TO THE STATE 7/18.
3. SURVEY OF REQUIREMENTS AND CONDITION OF DUMPSTERS COMPLETED AND ISSUED 7/20.
4. SUBMITTED RENEWAL FOR TAILINGS CONVEYING SYSTEM (BL-1J1/SE 1J1) CERTIFICATE #13280.
5. REORGANIZATION OF NJDEP PERMITS COMPLETED.
6. ANNUAL MONITORING WELL DATA SUBMITTED TO NJDEP.
7. VACATIONS: J.A. KIEL 7/16 - 8/5
J.M. GLICKMAN - 6/29 - 7/15

ACTIVE PROJECTS

1. NJDEP SPILL PLAN - CONTINUE TO PREPARE PLAN WHICH MUST BE SUBMITTED BY 9/1/79.
2. FUGITIVE PVC DUST CONTROL - REVIEW STATUS AND PRIORITIES ON ESTABLISHED LIST OF PROJECTS.
3. OSHA - LEAD PROGRAM - PERSONAL MONITORING RESULTS CONTINUE TO LOOK ENCOURAGING. CONSIDERABLE EMPHASIS HAS BEEN PLACED ON TRAINING AND DEVELOPMENT OF TECHNIQUE.

NGC 14972

PAGE 2.

ACTIVE PROJECTS (CONT.)

4. OSHA NOISE PROGRAM - SOUND ABSORBENT PANELS WERE INSTALLED ABOVE # 1 CUBER. IMPROVEMENT IN PERSONAL MONITORING RESULTS CONTINUE WITH IMPLEMENTATION ON REVISED PROCEDURES AND CURTAILMENT OF SECONDARY AIR BLASTER.
5. OSHA ACRYLONITRILE - ANNUAL TRAINING OF ALL APPROPRIATE PERSONAL COMPLETE.
6. VCM INCINERATOR - INCINERATOR RECEIVED AND SET. STARTUP SCHEDULED FOR LATE AUGUST.
7. REVIEW AND ORDER NECESSARY MATERIALS TO RECONDITION SANITARY SYSTEM.
8. COMPLETE INVESTIGATION WORK AND RECOMMEND CORRECTIVE ACTION ON CORRODED AERATORS.

OPERATIONAL

1. SANITARY SYSTEM TAKEN DOWN FOR REPAIRS.
2. SUBMITTED GPO FOR CONCRETE WORK.

GOALS

1. PREPARE ALTERNATE RR TRACK LAYOUTS SO AS TO FACILITATE MOVEMENT OF ADDITIONAL CARS ASSOCIATED WITH PROPOSED PVC EXPANSION AND MINIMIZE NEIGHBORHOOD TRAIN NOISE.
2. COMPLETE DRAFT ON NJDEP SPILL PLAN.
3. COMPLETE REVIEW AND ORDER NECESSARY MATERIALS TO RECONDITION SANITARY SYSTEM.
4. COMPLETE ENGINEERING LAYOUT WORK ON IDENTIFIED SAFETY AND HOUSEKEEPING PROJECTS.
5. COMPLETE OSHA PERSONAL MONITORING SUMMARY AND ISSUE SAME.
6. PREPARE NJDEP AIR PERMITS FOR NEW PRODUCT COLLECTOR ON TWO MASS PRODUCT TANKS AND FOUR SILOS 1-4J.
7. COMPLETE INVESTIGATION WORK AND RECOMMEND CORRECTIVE ACTION ON CORRODED AERATORS.
8. COMPLETE REORGANIZATION OF, AND REFILEING OF GENERAL ENVIRONMENTAL RECORDS.

NGC 14973

DISCONTINUED

Chemical Division

Inter-Organization Correspondence

To J. M. Fletcher

Location Pedricktown

Department

From J. A. Kiel

Location Pedricktown

Department

Subject AUGUST ENVIRONMENTAL PROGRESS REPORT

Date 8/29/79.

SIGNIFICANT ACCOMPLISHMENTS

1. NJDEP approved permits for the proposed phased PVC expansion were received. Additional information was submitted to the EPA to complete the PSD application. Approvability review will take a projected four (4) weeks or until 10/1/79. BFG attorney's reviewed the entire PSD applicability with respect to both the current regulations and proposed modification based on a recent court decision in Alabama. BFG contends that PSD does not apply.
2. Prepared and submitted NJDEP petroleum and hazardous substance spill control plan.
3. Issued NESHAP-VCM semiannual report.
4. Completed budget review for Department 5159.

GENERAL INFORMATION

1. Conducted monthly environmental meeting.
2. NJDEP obtained 24 hour waste water treatment influent and treated effluent sample on 8/8/79.
3. NJDEP inspected waste chemical processing and treatment facility on 8/27/79. Four (4) 55 gal drums of dried sludge was sent to Kentile for manufacture of experimental floor tiles.
4. Discussed NJDEP spill control program with prime contractor, Mid Atlantic Refinery Servicing and gave them a very brief tour of the plant.
5. Lester Stumpe, Cleveland Office, visited the plant for two days to review the NJDEP spill control plan and promulgated modification to the effluent permit program "NPDES".
6. Carl Reid and Pete Collee, Niagara Falls, visited the plant for two days to review waste water treatment operations.

NGC 14974

7. Reviewed waste water treatment plant operation with representation from Vineland Chemical Company.

ACTIVE PROJECTS

1. NJDEP Spill Plan - Plan complete and submitted on 8/31/79. To comply with provisions in plan, a very extensive training and engineering program will be required. It is anticipated that at least six (6) months of engineering will be required to comply with all provisions of the plan.
2. Fugitive PVC Dust Control - Received Torrid Dust Collector and Carter Day Dust Collector. Both units will be installed in Mass in September. The Torrid will be evaluated and if acceptable six (6) additional units will be ordered for Mass and suspension. Silo relief valves were rebuilt but baghouse back pressure still poses a problem. The new Torrid units will resolve this issued. Flush trenches will be installed by the silos to facilitate cleanup and a wind screen will be installed on the North side of the drier roof.
3. OSHA - Lead Program - The AAS unit is in operation and personal monitoring results are available on a 24 hour basis. New self contained positive flow hard hat/respirator units were received for experimentation. The compound area really likes them. They will comply with the OSHA standard and will result in a net cost savings over disposable 3M respirators. Experimentation continues with coated stabilizers with a much stronger involvement from Cleveland.
4. OSHA - Noise Program - Program continues with no major changes. It is strongly felt that compliance can be achieved under "no problem conditions", however, the plant approach is to reduce operator noise exposure under all normal and projected minor operational problem conditions.
5. OSHA-VCM Monitoring - All corrections were completed and the summary printout for 1978 monitoring results will be issued to each employee in September.
6. VCM Incinerator - Incinerator installation has been put on rush due to potential problems with the VGM. The installation is expected to be complete the week of 9/10/79. The unit will be test run the week of 9/17/79 and a stack test is scheduled for 9/26/79.
7. 129 Priority Pollutants - Review data and regulations with Chemical Group Task Force on 8/30/79.

8/29/79

1. An AR was prepared to replace the utility area interceptor pumps. Under current emergency conditions a pump will be relocated from the surface water runoff interceptor pump.
2. An AR was prepared to recondition the sanitary waste water treatment system. The system is currently down and materials are on order. The sanitary waste is being hyperchlorinated to 10 ppm and is pumped directly to the industrial waste equalization tank.
3. An AR was prepared to replace the industrial waste water treatment chemical flask mix tank. The tank currently has several emergency patches.
4. All concrete work for the safe handling of chlorine cylinders was completed. Material is on order to provide cylinder racks.
5. Evaluation continues on the corroded aerators. Special checks will be performed and a price for a replacement cone will be requested.

GOALS

1. Conduct a risk/benefit review of RR track modifications and day switching.
2. Complete sanitary system reconditioning.
3. Install and evaluate Torrid Dust Collector in Mass. Prepare NJDEP permits for four (4) additional units for Mass and two (2) for Pearl.
4. Prepare training and operational manual for incinerator. Assist in startup and shake down of system and conduct stack test.
5. Establish plant environmental goals for 1980.
6. Complete identifiable projects outlined in trial environmental surveillance.
7. Complete job description updates and all appropriate personal performance appraisals.

JJK:bjc

cc: C.N. Nosal
K.A. Jeffers
J.M. Glickman
E.C. Clegg
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