

File

B F GOODRICH CHEMICAL DIVISION
PEDRICKTOWN PLANT

FEBRUARY - 1979

ENVIRONMENTAL STATUS REPORT

Distribution

Environmental Committee

J. A. Kiel *Ed K*
J. P. Moran
C. E. McCann
C. G. Hertz
K. L. Blanton
K. A. Jeffers
J. M. Glickman

Pedricktown

C. J. Nosal
W. A. Reed
J. M. Smith
W. T. Kloepfer
J. M. Fletcher
T. S. Nasife
J. W. Goetsch

Cleveland

W. C. Holbrook
J. D. Fannin
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~~W. W. Wainwright~~
N. R. Aquino
A. W. Clements
W. E. Horton
G. F. Krcmar

C. Reid	-	Niagara Falls
R. D. Hardesty	-	ALTC
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C. B. Benedict	-	Akron
C. E. Titus	-	Brecksville
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L. Levi	-	Port Neches
J. W. Robben	-	Louisville
K. D. Konter	-	Henry

NGC 15034

I N D E X

1. Environment Committee Meeting Report
2. EPA - OSHA Goals
 - (a) Mass Resin - Personnel Monitoring VCM
 - (b) Mass Resin - Building Levels VCM
 - (c) Suspension/Dispersion - Personnel Monitoring VCM
 - (d) Suspension/Dispersion - Building Levels VCM
 - (e) Latex - Personnel Monitoring AN
 - (f) Compound - Personnel Monitoring Toxic Dusts
 - (g) Compound - Personnel Monitoring Noise
3. EPA - NESHAP VCL Compliance
4. Waste Water Treatment System Data Analysis
5. February Progress Report

B.F.GOODRICH CHEMICAL COMPANY MEETING REPORT

SUBJECT FEBRUARY - ENVIRONMENTAL COMMITTEE MEETING		DATE 3/15/79	
OUTSIDE ORGANIZATION INVOLVED			
MEETING PLACE Pedricktown		MEETING DATE 3/13/79	
BFG PARTICIPANTS K.L. Blanton J.M. Glickman K.A. Jeffers J.A. Kiel C.E. McCann J.P. Moran C.N. Nosal		OTHER PARTICIPANTS (NO DISTRIBUTION)	ADDITIONAL COPIES TO: C.T.F.
RESULTS AND COMMITMENTS:			PERSON RESPONSIBLE:
1. <u>Review Status of 1979 Established EPA - OSHA GOALS:</u>			
Graphs reviewed are attached for the following areas:			
(a) Mass Resin			JA Kiel
(b) Suspension/Dispersion Resin			JM Glickman
(c) Latex			KA Jeffers
(d) Compound			
The following was noted:			
(a) Mass resin personnel monitoring average was high (1.11 ppm) due to four monitoring results which were in excess of 1.0 ppm. All results greater than 1.0 ppm will be investigated and additional training and counseling as deemed necessary will be provided by a combination of the environmental department and the manufacturing area.			
(b) Suspension/dispersion building monitoring VCL results may be distorted due to current GC calibration problems. Engineering is actively working on this problem.			RM Meier
(c) AN personnel monitoring results were not available for the meeting. All analysis will be performed as soon as practicable after personnel monitoring in a timely fashion.			
(d) Brecksville has agreed to perform all toxic dust monitoring analysis on a monthly basis. Since early February, toxic dust personnel monitoring is only being conducted while toxic dusts are being handled so as to assure a more realistic useful data base.			
(e) Noise monitoring data will be reviewed in all future meetings.			
2. <u>Overall Status for EPA - NESHAP VCL Compliance Program:</u>			
Compliance chart reviewed is attached:			KA Jeffers
The narratives from the semiannual report due March 15, 1979, were reviewed.			
REPORTED BY <i>Ed Kiel</i>			

NGC 15036

2. Overall Status for EPA - NESHAP VCL Compliance Program: (Continued)

- (a) Vent gas absorber backup Incinerator. Incinerator on order with installation completion slated for July, 1979. KR
Bennett
KA
Jeffers
- (b) Vent gas absorber corrosion control. Corrosion studies continue. Moisture removal and neutralization technique have been used to reduce corrosion. Henry and ALGC are currently experiencing corrosion problems. Cleveland Engineering actively working on a solution. BB
Baker
- (c) Reactor opening (suspension/dispersion). Currently steam sweeping in and out of top of reactors, also applying resweep procedure whenever necessary. AR for backup steam jet and condenser submitted. R.O.L. attainment should approach 100% on all future reactor openings. JP
Moran
- (d) Waste water stripping. BB
Baker
Back up system currently being installed.

3. Complaints and Unusual Releases to the Environment

- (a) There were no complaints received in February. JA
Kiel
- (b) There were no EPA or OSHA reportable unusual releases to the environment in February.
- (c) Two unusual releases were received and reviewed .
 - (1) 2/12/79 50 lb. VCM gas spill in pearl/paste.
 - (2) 2/20/79 150 lb. Superlite emulsion spill in latex

4. Training Topic

The plant spill prevention control and countermeasure plan was reviewed. The plan will be reviewed in manufacturing department lead-technician meetings during March and April and will be posted in strategic locations around the plant.

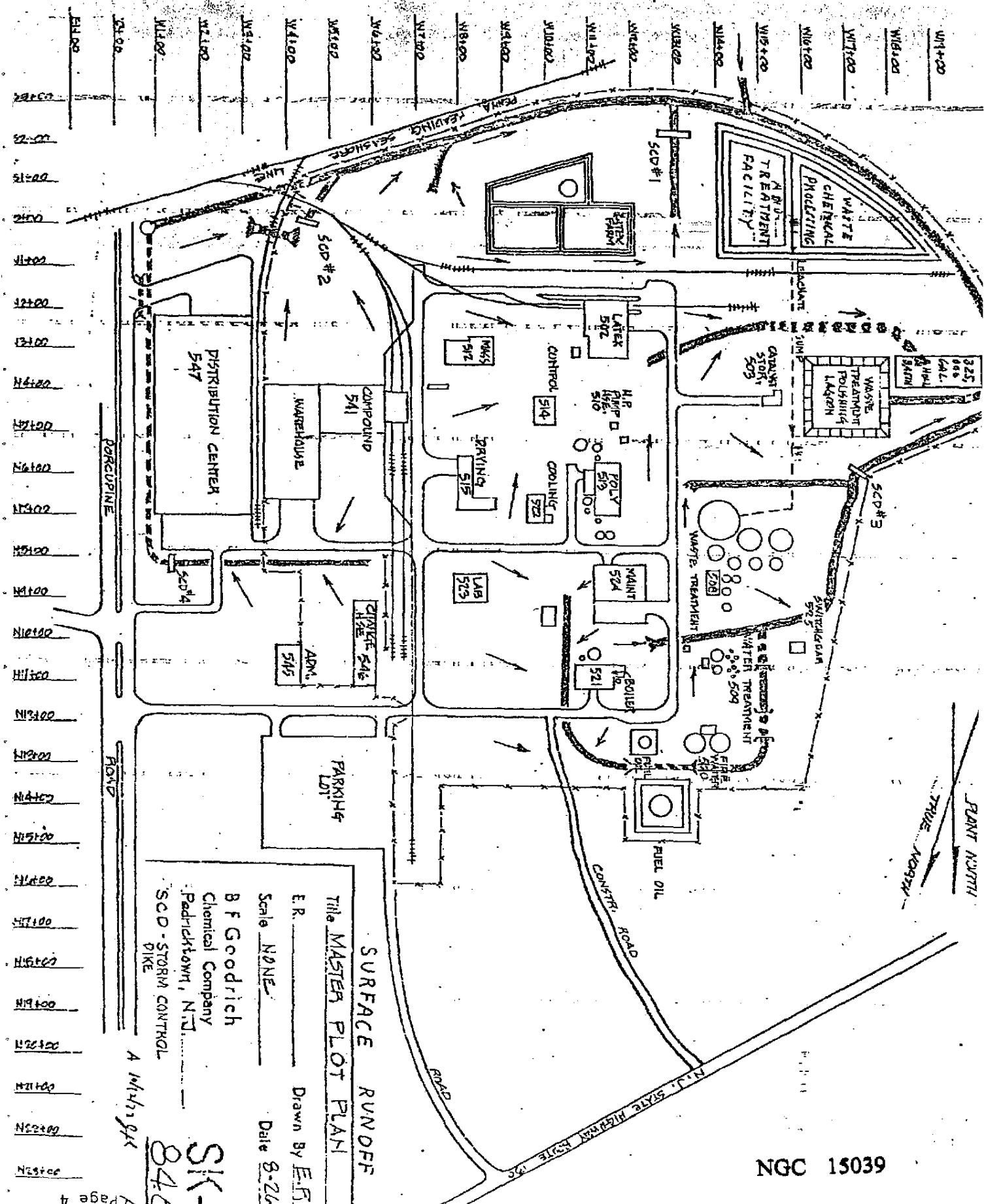
JA Kiel
KA
Jeffers

FEBRUARY - ENVIRONMENTAL COMMITTEE MEETING
3-13-79

5. Follow Up Pertinent Topics of Interest

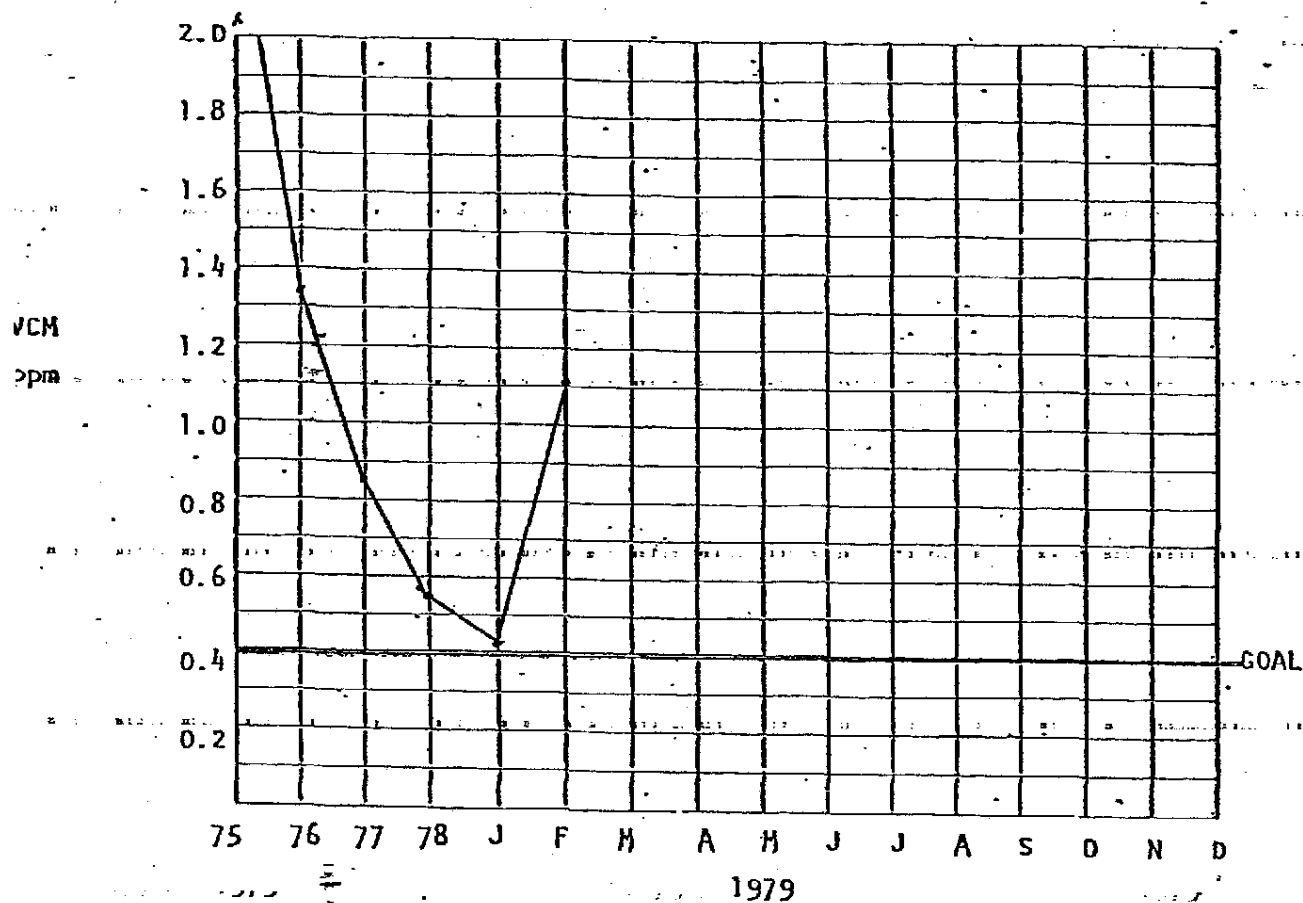
- (a) On 3/13/79 a meeting was held with OSHA to review the status of our current Noise Citation in compound and to request a 12-month extension. A 12-month extension was granted from 3/18/79 to 3/18/80. (see separate report).
- (b) On 3/14/79 the NESHAP VCL semiannual report was presented to EPA District II. The narration was reviewed and no major problems were acknowledged by EPA except for the period in November, 1978 when the vent absorber was down for a corrosion problem and the plant continued to operate. EPA indicated that enforcement action may be taken against BFG for this incident (see separate report).

NGC 15038



NGC 15039

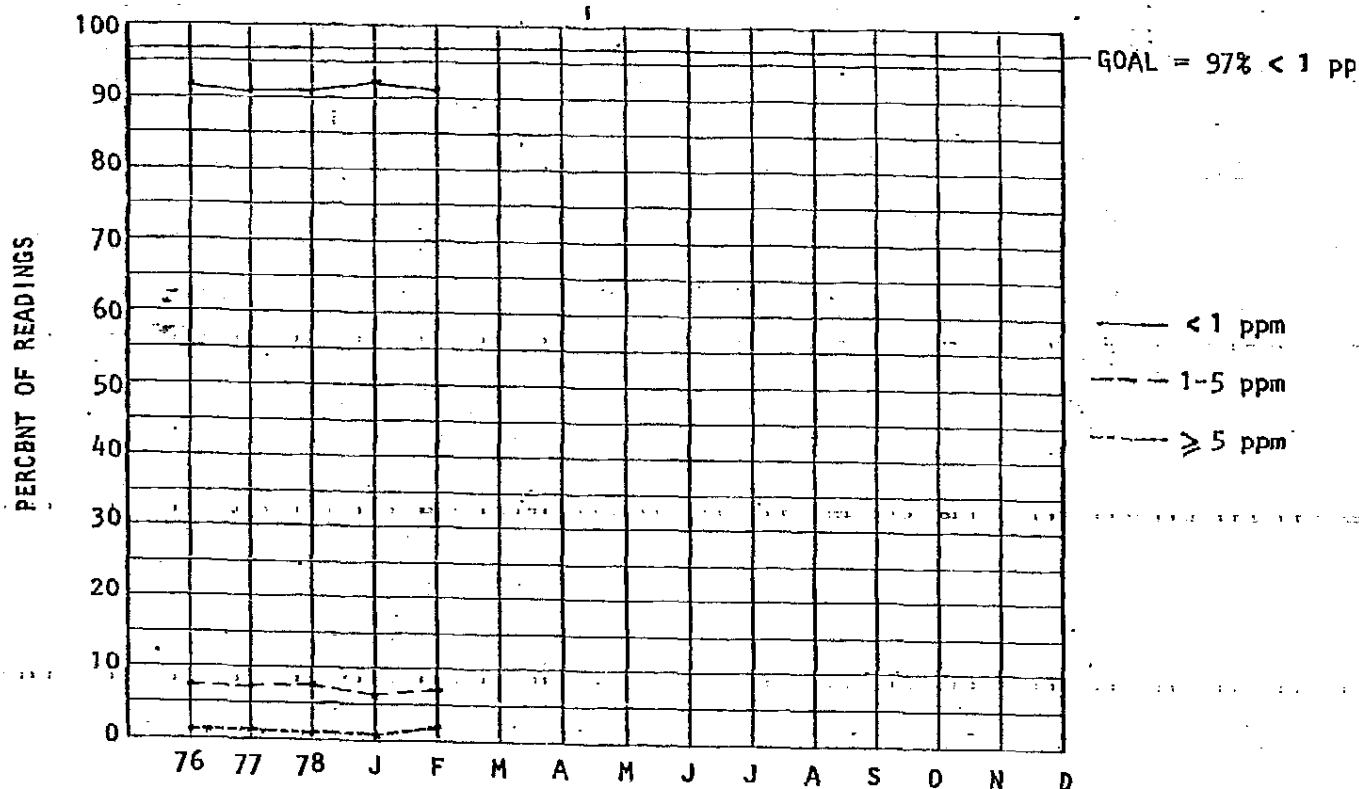
PERSONAL MONITORING RESULTS
 VINYL CHLORIDE
 MASS RESIN POLYMERIZATION - BLDG. 512



No. Samples				Range ppm	Average ppm		% ≤ 1.0 ppm	
No. ≤ 0.5	0.5 < No. ≤ 1.0	No. > 1.0			Month	YTD	Month	YTD
14	6	4	4	.05-6.27	1.11	0.79	71.4	80.7

NGC 15040

BUILDING MONITORING RESULTS
VINYL CHLORIDE
MASS RESIN POLYMERIZATION - BLDG 512



	MONTHLY AVERAGE	YEAR TO DATE
< 1 ppm	91.4%	91.9%
1-5 ppm	7.0%	6.7%
5-100 ppm	1.5%	1.3%
≥ 100 ppm	0.1%	0.1%
average ppm * in building	1.3 ppm	1.3 ppm

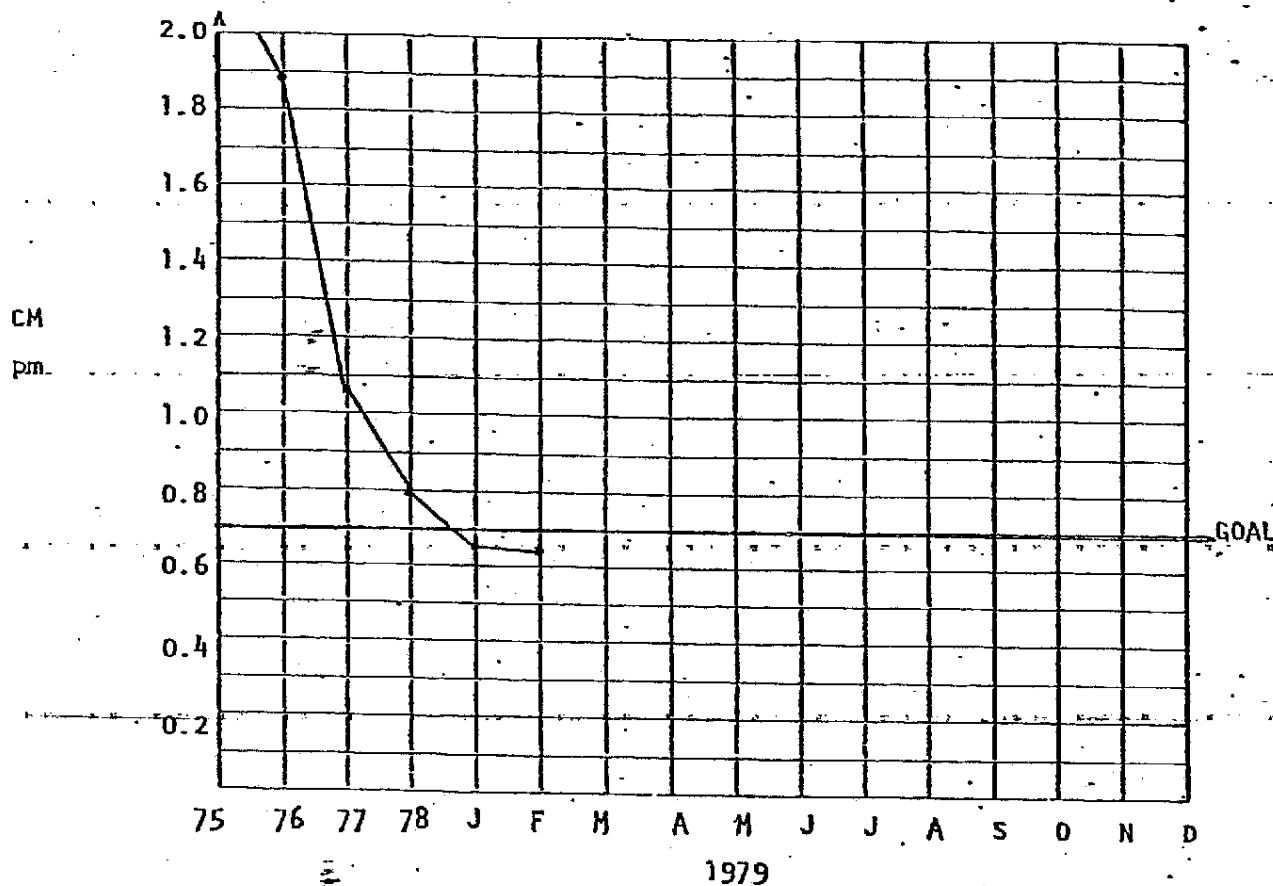
NGC 15041

* 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



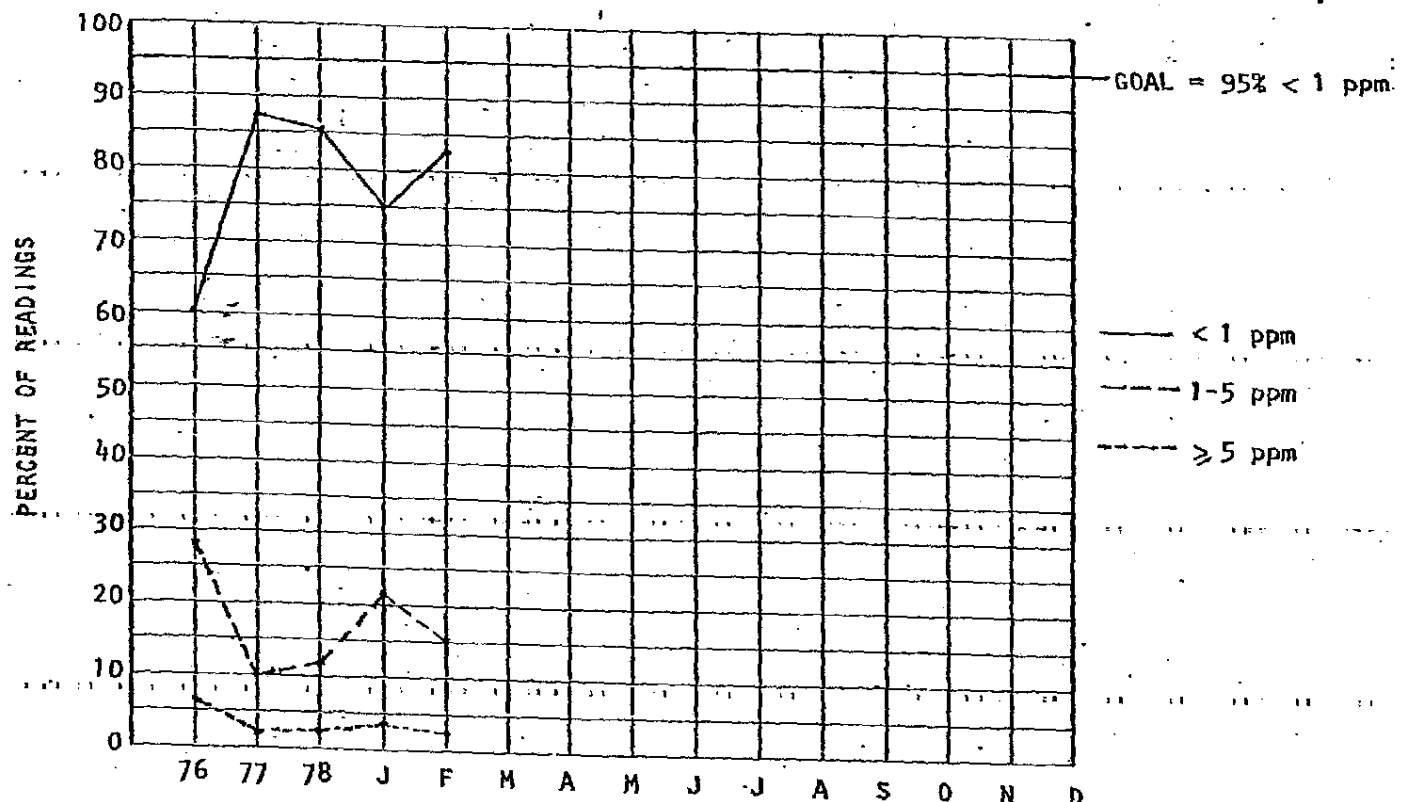
No. Samples	No ≤ 0.5	$0.5 < \text{No} \leq 1.0$	No > 1.0	Range ppm	Average ppm Month	YTD	≤ 1.0 ppm Month	YTD
23	11	6	6	.03-2.38	0.65	0.66	73.9	71.8

NGC 15042

BUILDING MONITORING RESULTS

VINYL CHLORIDE

SUSPENSION/DISPERSION POLYMERIZATION - BLDG 513



		MONTHLY AVERAGE	YEAR TO DATE
	< 1 ppm	82.3%	78.8%
	1-5 ppm	15.0%	18.1%
	5-100 ppm	2.6%	2.9%
	≥ 100 ppm	0.1%	0.2%
	average ppm * in building	1.9 ppm	2.2 ppm

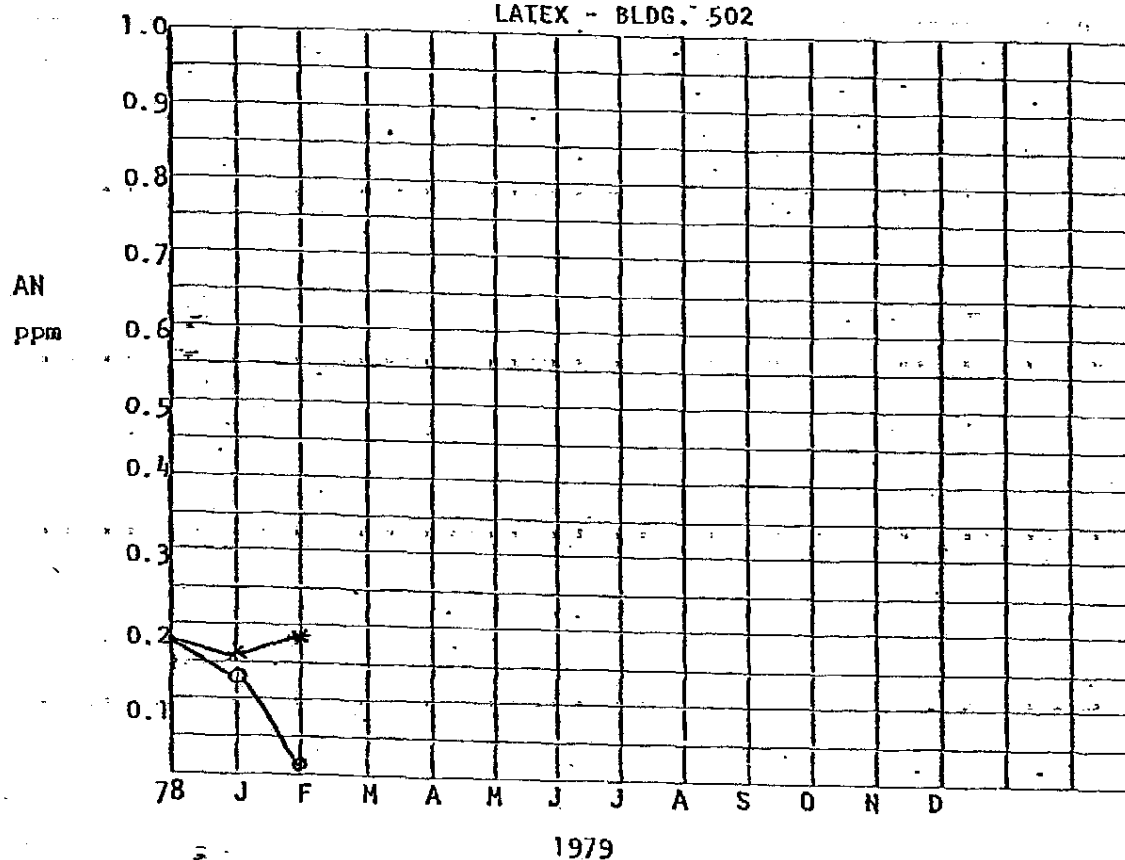
NGC 15043

* 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



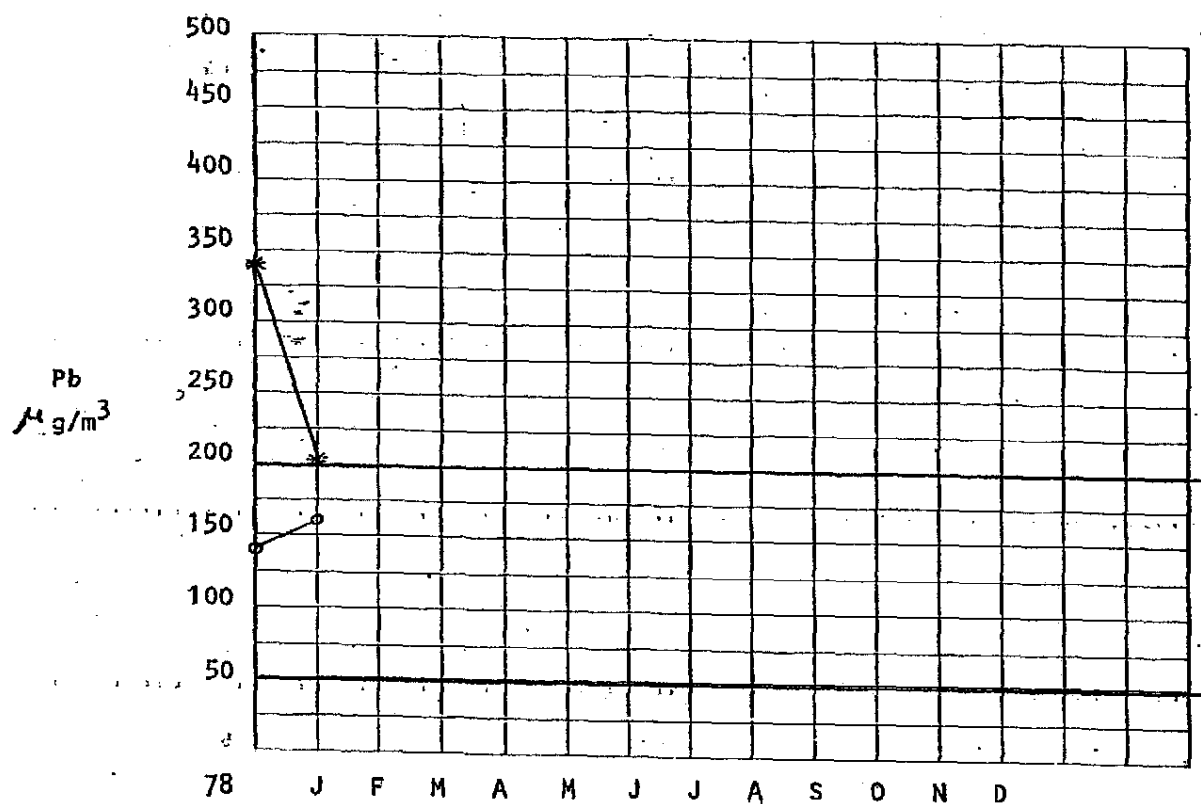
	No. Samples	No ≤ 1.0	$1.0 < \text{No} \leq 2.0$	No > 2.0	Range ppm	Average Month	ppm YTD	% ≤ 2.0 Month	ppm YTD
*Reg	3	3	0	0	.07-.31	0.19	0.17	100	100
0 Non-Reg	2	2	0	0	0.00-.03	0.015	0.11	100	100

NGC 15044

PERSONAL MONITORING RESULTS

LEAD

COMPOUNDING - BLDG 541



1979

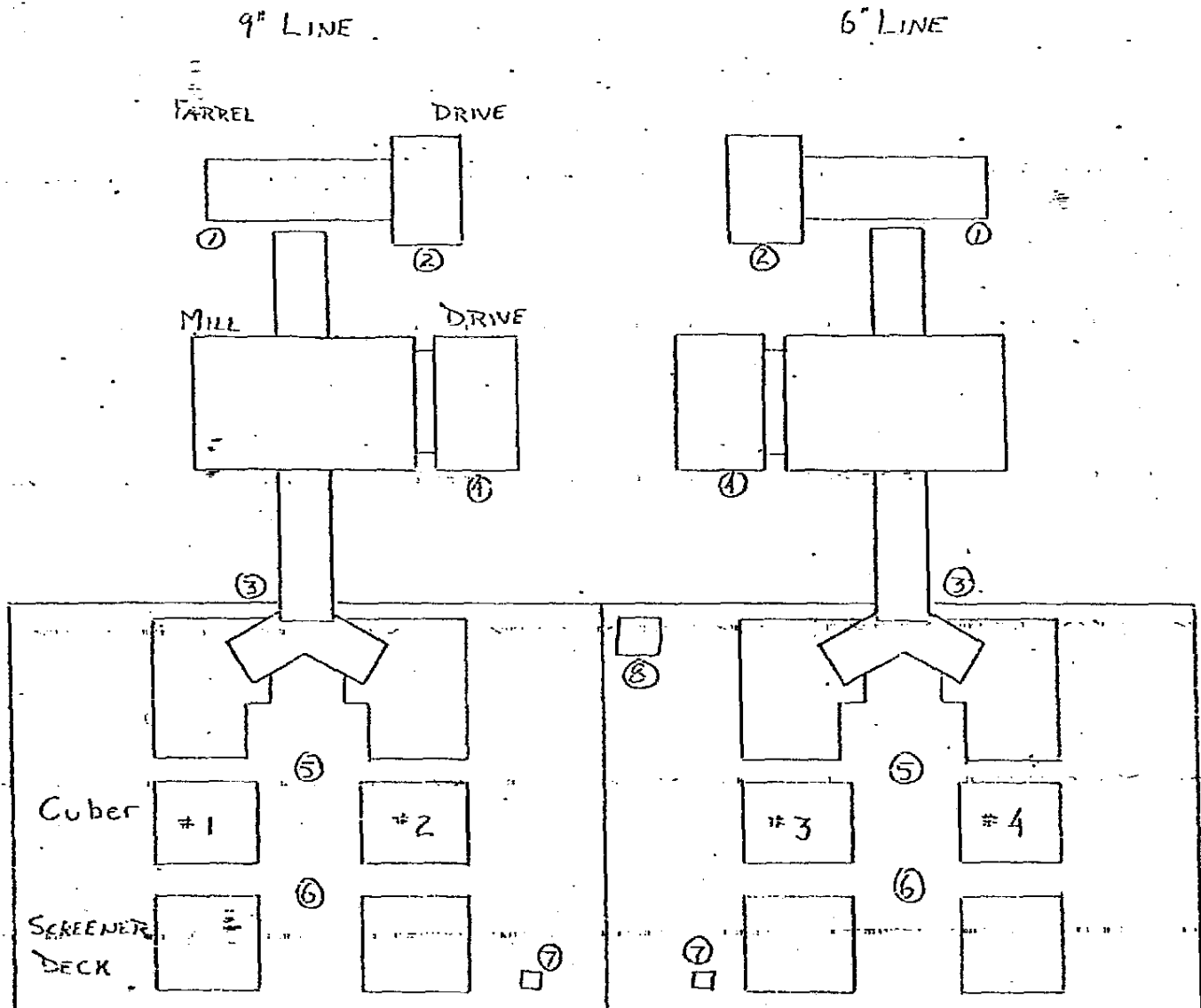
* Weighman

O Mixerman

NGC 15045

FREDERICKTOWN NOISE SURVEY
COMPOUND MILLING & CUBING AREA

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Location		Before Engineering Controls (dBA)	After Engineering Controls (dBA)
1	9" line	91	82
	6" line	90	81
2	9" line	93	85
	6" line	92	83
3	9" line	97	84
	6" line	93	84
4	9" line	99	86
	6" line	95	85
5	9" line	106	102
	6" line	105	
6	9" line	108	102
	6" line	107	
7	9" line	107	98
	6" line	105	

NGC 15046

EPA
VCL COMPLIANCE

	<u>FEBRUARY 1979</u>	<u>YEAR TO DATE 1979</u>	<u>OCT. 21-DEC. 31 1978</u>
<u>Reactor Opening</u>			
<u>Pearl</u>			
No. of Non-compliances	1	7	9
No. of openings	41	93	134
% of compliance	97.6%	92.5%	93.3%
<u>Paste</u>			
No. of Non-compliances	3	32	32
No. of openings	184	381	411
% of compliance	98.4%	91.6%	92.2%
<u>Mass</u>			
No. of Non-Compliances	0	1	7
No. of openings	236	493	632
% compliance	100%	99.8%	98.9%
<u>Resin Stripping</u>			
Pearl-% compliance	100%	98.3%	100%
Paste-% compliance	92.9%	94.9%	98.6%
Mass-% compliance	92.9%	94.9%	87.5%
<u>Vent Absorber</u>			
% compliance	98.8%	99.2%	94.1%
<u>Wastewater stripper</u>			
% compliance	97.0%	94.0%	90.0%

NGC 15047

DATE: February, 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	2349	706	1869	1511	1136	225	9.8	-	-	-	-	-
Primary Effluent	1047	1022	25	16	241	152	6.7	2.5	3.4			-
Secondary Effluent	1058	1026	32	23	56	-	7.0	0.33	0.61			-
Lagoon	1039	1013	26	19	49	9	7.1	-	-		100	48

Activated Sludge	Sanitary			Industrial							(°F)	(RSS)	(RVSS)
	(SS)	(VSS)	(Cl)	(MLSS)	(MLVSS)	(DO)	(O ₂)	(SV)	(SVI)				
	285	150	7.8	1515	1190	6.3	16	227	149	73	5018	3785	

Calculations	Flow (MM)			Sludge			BOD/COD			% Removal		
	(EFF)	(Reuse)	(Total)	Prim. %	Thickened %	(Disposal) (Lbs. Dry)	(Inf)	(Prim)	(Lagoon)	(SS)	(COD)	(BOD)
	14.9	4.0	18.9	1.7	6.7	243,229	.20	.63	.18	99	96	96

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	-	-	-	-	-	-	-	-	10.5	-	-	-
Potable	-	-	-	-	-	-	7.0	1.2	0.61			53
Clarified	989	719	21	14	-	-	7.0	1.5	-			55

SECRET

INTER OFFICE CORRESPONDENCE

CONFIDENTIAL

W.A. Reed	FIELD POINT OR DEPT. & BLDG. NO. Pedricktown	DATE YOUR LETTER
[REDACTED]	FIELD POINT OR DEPT. & BLDG. NO. Pedricktown	DATE THIS LETTER 2/28/79

SECRET

FEBRUARY PROGRESS REPORTSignificant Accomplishments

1. The waste water treatment system was reseeded on 1/26/79 and appears to be doing well. There is still biological filamentous growth but it has stabilized. Hydrogen peroxide was ordered and received to spot control the filamentous if required. We did not operate out of compliance during this time frame and Cleveland Environmental has been kept abreast of the situation.
2. A construction permit resubmittal to the NJDEP on the proposed expansion (all three phases) was made on 2/28/79. The expansion will come under the Federal Environmental Offset Policy. Fugitive emission reduction to 20% of NESHAPS will be used as offsets. In order to minimize offset requirements, the proposed large poly suspension process will be limited to 100 ppm RVCM.

A submittal to EPA was made on March 1, 1979, for evaluation of PSD applicability for vinyl chloride. Considerable effort has been spent in this preparation including a 3-day trip to Cleveland.

3. The environmental impact statement for dispersion debottleneck was prepared.

General Information

1. The suspension/dispersion area began to resweep reactors effective on February 16, 1979, in order to achieve virtually 100% reactor opening loss requirements. The effect of additional oxygen on the recovery system is unknown at this point, however Long Beach has experienced no problem to date. They have applied the resweeping procedure on approximately 1.5% of all reactors opened (5/month) since 1/1/79.
2. A composite environmental status report was issued after the plant environmental meeting. The environmental committee is scheduled to meet the 2nd Tuesday of every month.
3. A meeting on toxic dust handling for compound was held. A series of items for evaluation was established under the new lead standard.
4. An environmental procedural manual was developed to assist in the preparation of NJDEP permits and environmental impact statements (EIS). The manuals are located in engineering, environmental office and computer building.
5. All unusual discharges for plant since startup were summarized. This information was utilized in preparing statements concerning a liability suit.
6. Issued revised update of Unusual Discharge Procedure.
7. All measurable February goals were completed except for the finalization of procedures for the refrigeration equipment.

NGC 15049

FEBRUARY PROGRESS REPORT

2-28-79

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Active Projects

1. An incinerator was placed on order for Pedricktown. It will be #2 oil fired, located by the boiler house and have the ability to burn scrap liquid waste. It will also have a caustic scrubber. A NJDEP construction permit is currently being prepared.
2. Currently preparing NJDEP permits for 7 new proposed bag houses, i.e. 3 for mass transfer tanks and 4 for silos 1-4J. The existing baghouses are undersized for current operations.

Operational

1. Achieved one of highest rating in plant on January - Housekeeping Inspection.
2. B. Baeger began training in waste treatment area on 2/5/79 but returned to pearl/paste effective 2/26/79 because of medical considerations. The position was reported on February 27, 1979. D. Green is scheduled to begin training by mid April.

Goals

1. Prepare and submit EPA - semiannual report for VCL compliance. KAJ/JAK
2. Complete construction permit applications and submit to NJDEP for 7 baghouse replacements, styrene tank relocation, geon latex storage tank, and NBA storage tank. JMG
3. Implement spill prevention control and countermeasure plan. Plan to be reviewed at March Environmental Committee meeting. KAJ
4. Complete all job descriptions and performance evaluation. JAK
5. Develop departmental goals for 1979 and evaluate and prioritize design project requirements. JAK
6. Complete waste chemical processing and treatment facility, quarterly monitoring well analysis. EK/KAJ
7. Evaluate plant noise program to include a followup to the current OSHA noise citation in compound. JMG

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

J. A. Kie
J. A. Kie

JAK:rp

NGC 15050