

B F GOODRICH CHEMICAL DIVISION
PEDRICKTOWN PLANT

File

APR 30 1979

MARCH, 1979

ENVIRONMENTAL STATUS REPORT

Distribution

Environmental Committee

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C. G. Hertz
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guk

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R. W. Birch	-	Long Beach
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L. Levi	-	Port Neches
J. W. Robben	-	Louisville
K. D. Konter	-	Henry

NGC 15015

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. March Progress Report

NGC 15016

B.F. GOODRICH CHEMICAL COMPANY MEETING REPORT

SUBJECT <u>March - Environmental Committee Meeting</u>		DATE <u>4/19/79</u>
OUTSIDE ORGANIZATION INVOLVED		
MEETING PLACE <u>Pedricktown</u>		MEETING DATE <u>4/10/79</u>
BFG PARTICIPANTS J.W. Goetsch J.M. Glickman K.A. Jeffers J.A. Kiel C.E. McCann J.P. Moran W.A. Reed	OTHER PARTICIPANTS (NO DISTRIBUTION)	ADDITIONAL COPIES TO C.T.F.
RESULTS AND COMMITMENTS:		PERSON RESPONSIBLE: ENV DEPT
1. <u>Reviewed Status of 1979 Established EPA-OSHA</u> Goals: 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 resin personnel monitoring results dropped down below the goal of 0.4 ppm. One key area currently under investigation is the necessity to swing the autoclave hammer blind for every charge. This operation frequently results in minor VCM leaks which have been detected by both personnel monitoring and building monitoring systems. B. Suspension/dispersion building monitoring VCI results were higher than actual in the earlier part of the month. The calibration problem was finally resolved around mid month. C. AN personnel monitoring results for regulated tasks show a slight increase; however, they are well within the 2 ppm permissible level and 1 ppm action levels. The training slide program currently being prepared by corporate should be available by May. D. Toxic dust monitoring analysis is now being received on a monthly basis from Brecksville. Current task monitoring results indicate we still have occasional exposures to lead in excess of $200 \mu\text{g}/\text{m}^3$. Compound is currently experimenting with teflon coated lead stabilizers. E. Current dosimeter readings in the compound cuber area are primarily below 90 dbA when the secondary air blaster is off.		
REPORTED BY J.A. Kiel/re		NGC 15017

2. Overall Status for EPA-NESHAP VCI Compliance Program:

KAJeffers

EPA-VCI attainment chart attached

EPA-NESHAP VCI attainment has been excellent. The only non attainments reported in March were 3 hours on the Vent Gas Absorber and 1 Mass reactor opening.

The status on current major projects is as follows:

- A. Vent Gas Absorber backup incinerator. Incinerator on order with completion slated for August, 1979.
- B. Vent Gas Absorber corrosion control - drying and neutralization of the feed stream were found to be necessary in order to minimize corrosions. A temporary caustic scrubber is currently installed and it is felt that corrosion has been tremendously reduced. Investigation on a type of drying system continues.
- C. Wastewater stripper: Backup system currently being installed.

3. Complaints and Unusual Releases to the Environment:

- A. Five complaints were received in March.
 - 1. 3/13/79 - Mr. Shoemaker - odor
 - 2. 3/25/79 - Mr. Gross - PVC dust
 - 3. 3/27/79 - R.R. - EA odor
 - 4. 3/31/79 - Mrs. Shoemaker - PVC dust and odor
 - 5. 3/31/79 - Mrs. Alloway - PVC dust and odor

There were no unusual discharges reported to the NJDEP during the month of March. After an investigation of each of the complaints, it was felt that no significant amount of material, if any, left the plant site. The EA odor complaint reported by the RR was the result of a leaking bottom valve on a full EA car. The plant is currently formulating a series of projects which will minimize or reduce current nuisance dusting sources.

- B. One EPA reportable unusual release to the environment occurred in March. On 3/20/79, the rupture disc on a stripper vessel in the dispersion resin manufacturing area failed.
- C. Four unusual releases were acknowledged during the month. All were of a relatively minor nature.

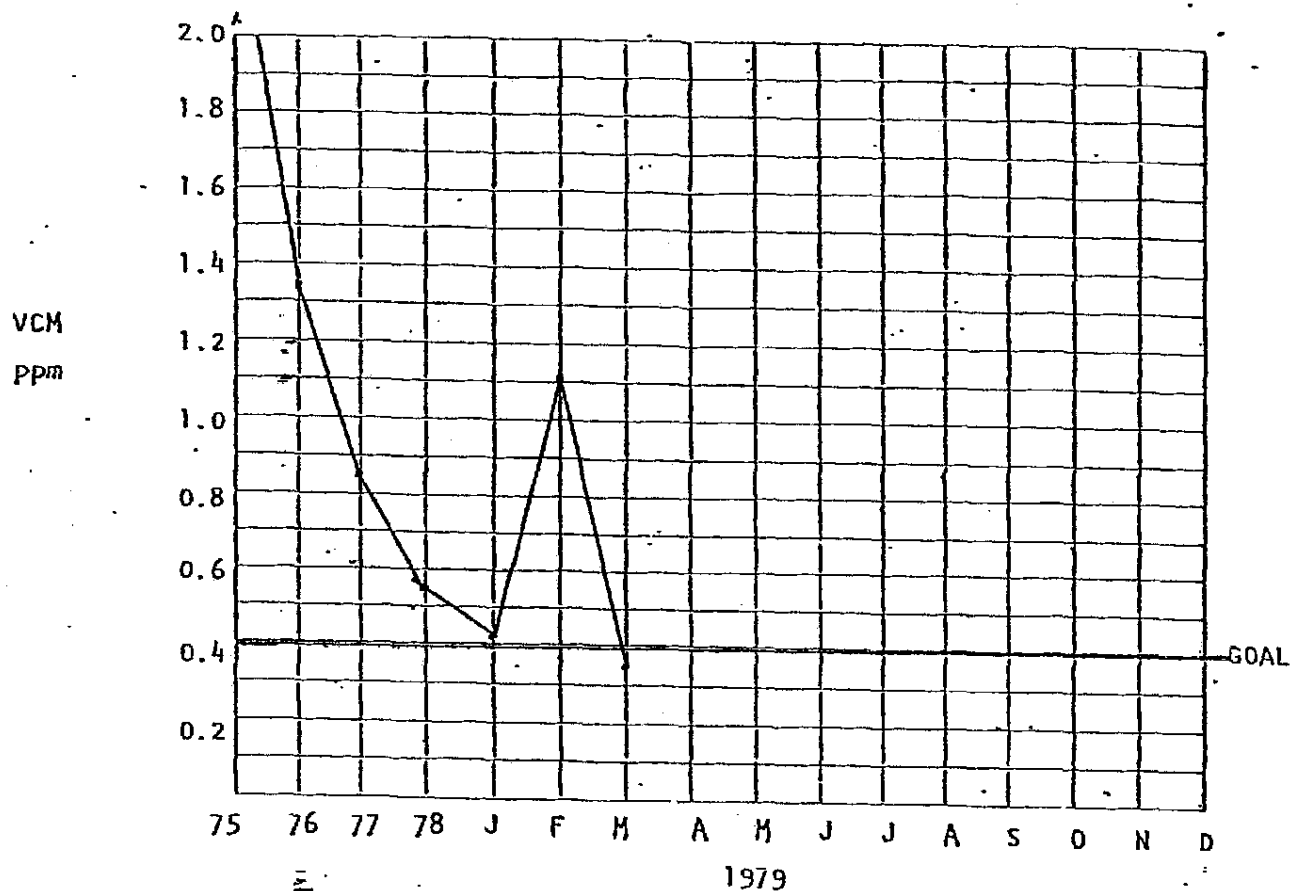
4. Training Topic

The plant neighbor complaint procedure was reviewed in detail. Each manufacturing area was requested to update their surveillance check sheet if necessary. The procedure will be up dated and re-issued as soon as all manufacturing input is received.

5. Pertinent Topics of Interest

- A. Con-Nosal re-emphasized the importance of a plant wide environmental awareness program. Prevention of unusual discharges (specifically VCI) should take top priority over everything else except for personal safety. Isolation of sources of unusual discharges and appropriate clean up procedures should also take extremely high priority.
- B. A plant environmental surveillance will be conducted by corporate on May 3rd and 4th.
- C. USEPA Clean Air Act proposed enforcement regulations and appropriate fine schedule was reviewed.

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



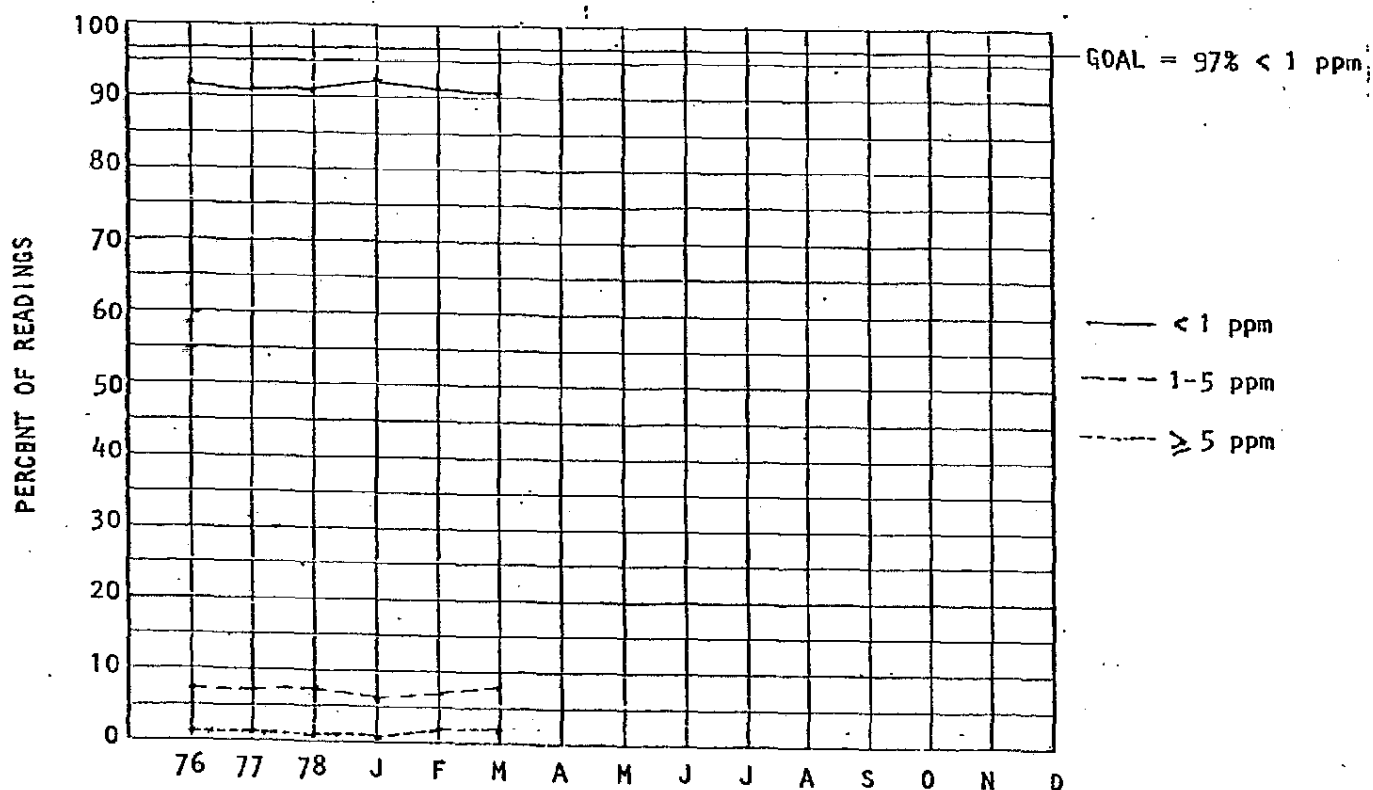
No. Samples	No. ≤ 0.5	$0.5 < \text{No.} \leq 1.0$	No. > 1.0	Range ppm	Average ppm		% ≤ 1.0 ppm	
					Month	YTD	Month	YTD
14	10	3	1	.03-1.31	0.36	0.64	92.9	85.0

NGC 15020

BUILDING MONITORING RESULTS

VINYL CHLORIDE

MASS RESIN POLYMERIZATION - BLDG 512



	MONTHLY AVERAGE	YEAR TO DATE
< 1 ppm	90.7	91.4
1-5 ppm	8.0	7.2
5-100 ppm	1.2	1.3
≥ 100 ppm	0.1	0.1
average ppm * in building	1.3	1.3

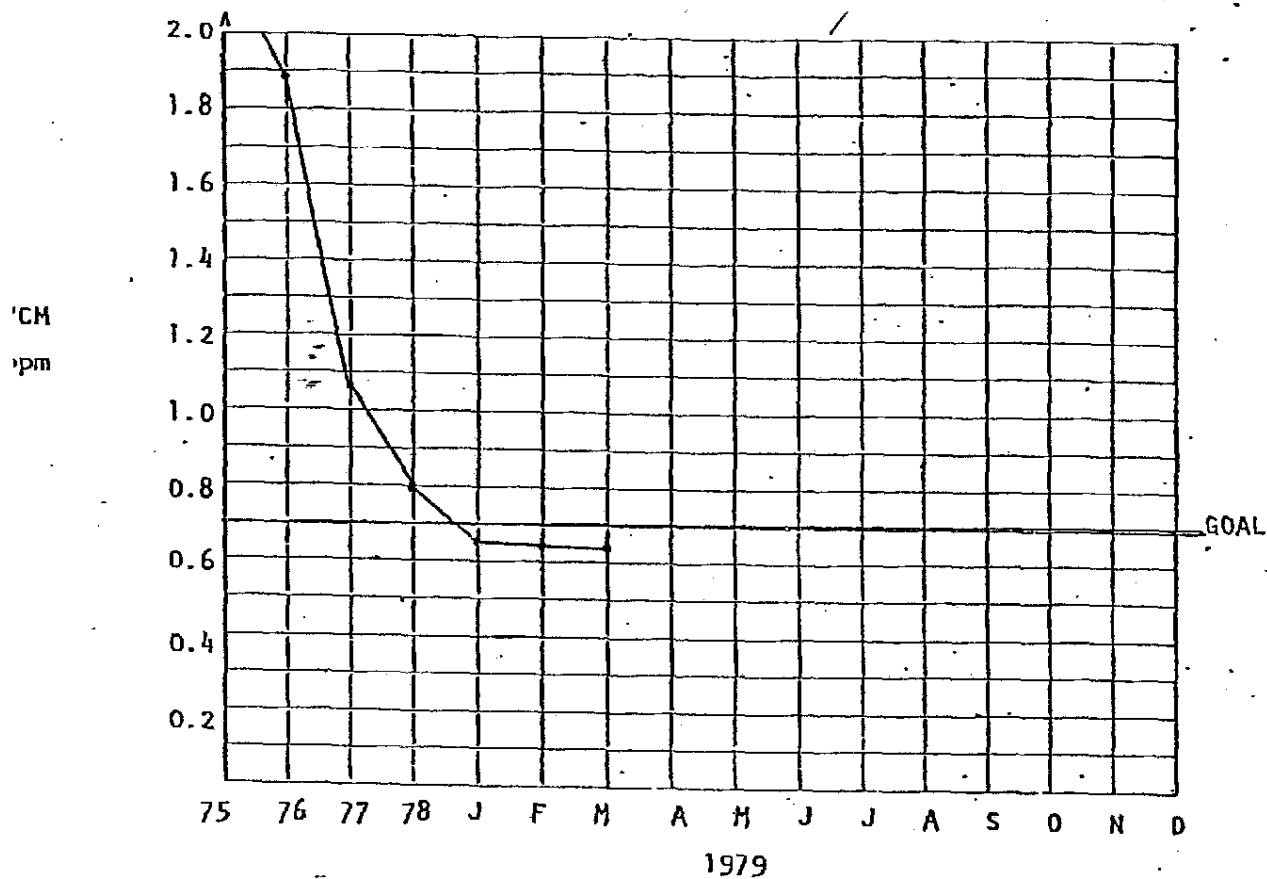
NGC 15021

* 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



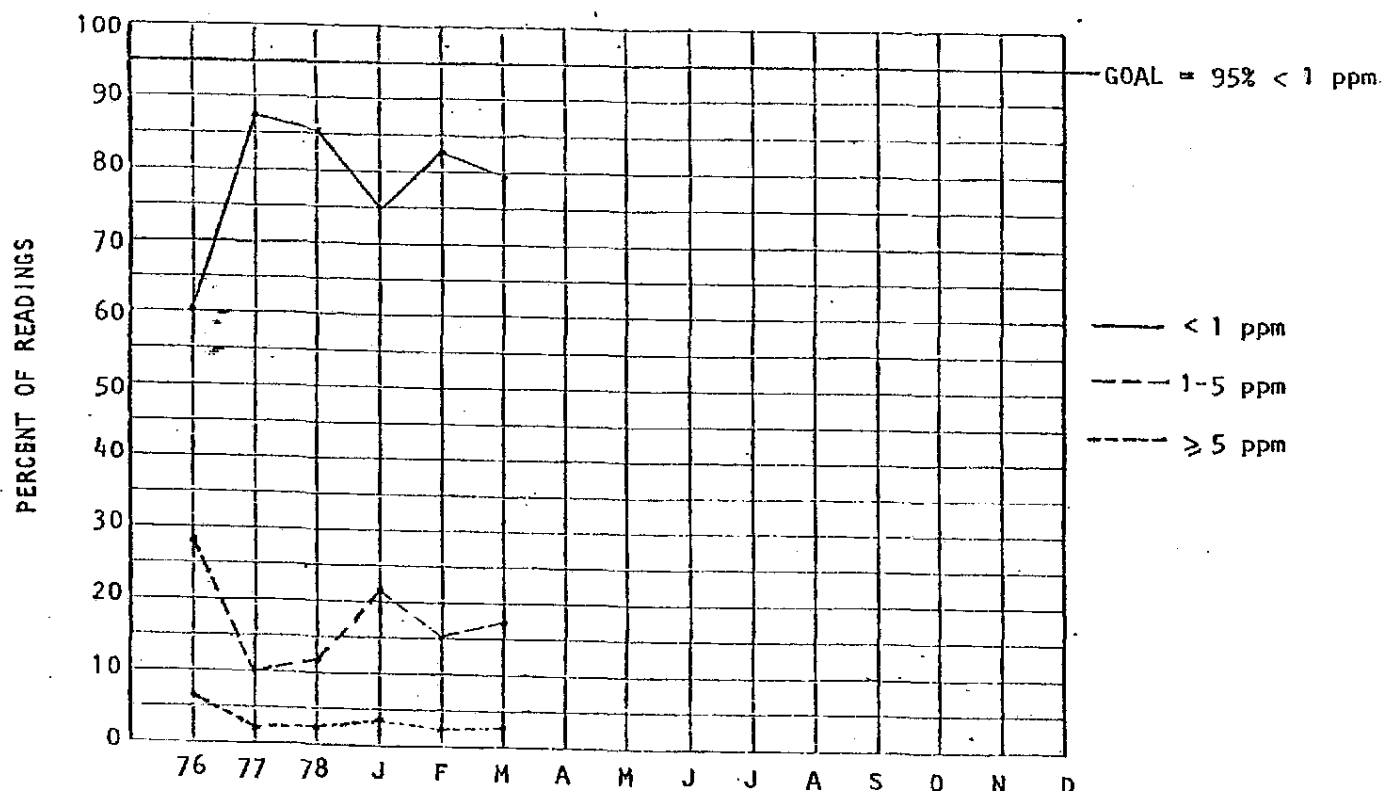
No. Samples	No. ≤ 0.5		0.5 < No. ≤ 1.0		No. > 1.0		Range ppm		Average ppm		% ≤ 1.0 ppm	
	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD
13	8		3		2		.03-3.16		0.63	0.65	84.6	74.6

NGC 15022

BUILDING MONITORING RESULTS

VINYL CHLORIDE

SUSPENSION/DISPERSION POLYMERIZATION - BLDG 513



	MONTHLY AVERAGE	YEAR TO DATE
< 1 ppm	79.5	79.0
1-5 ppm	17.6	17.9
5-100 ppm	2.6	2.8
≥ 100 ppm	0.4	0.3
average ppm * in building	3.2	2.6

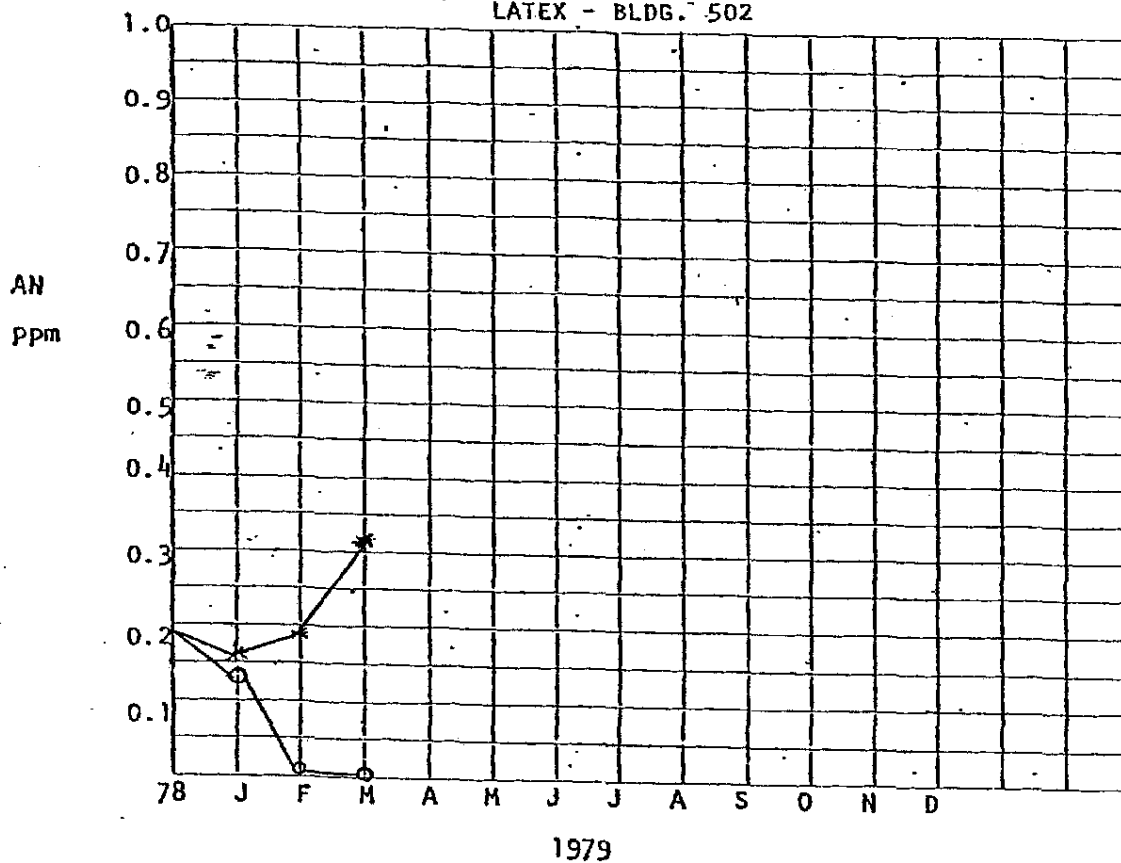
* Average ppm in building is calculated using the following assumptions: any point less than 1 ppm = 0.5 ppm, any point between 1 and 5 ppm = 2.5 ppm, any point between 5 and 100 ppm = 15 ppm, and any point greater than 100 ppm = 500 ppm. These assumptions are based on actual levels for a one week period.

NGC 15023

PERSONAL MONITORING RESULTS

ACRYLONITRILE

LATEX - BLDG. 502

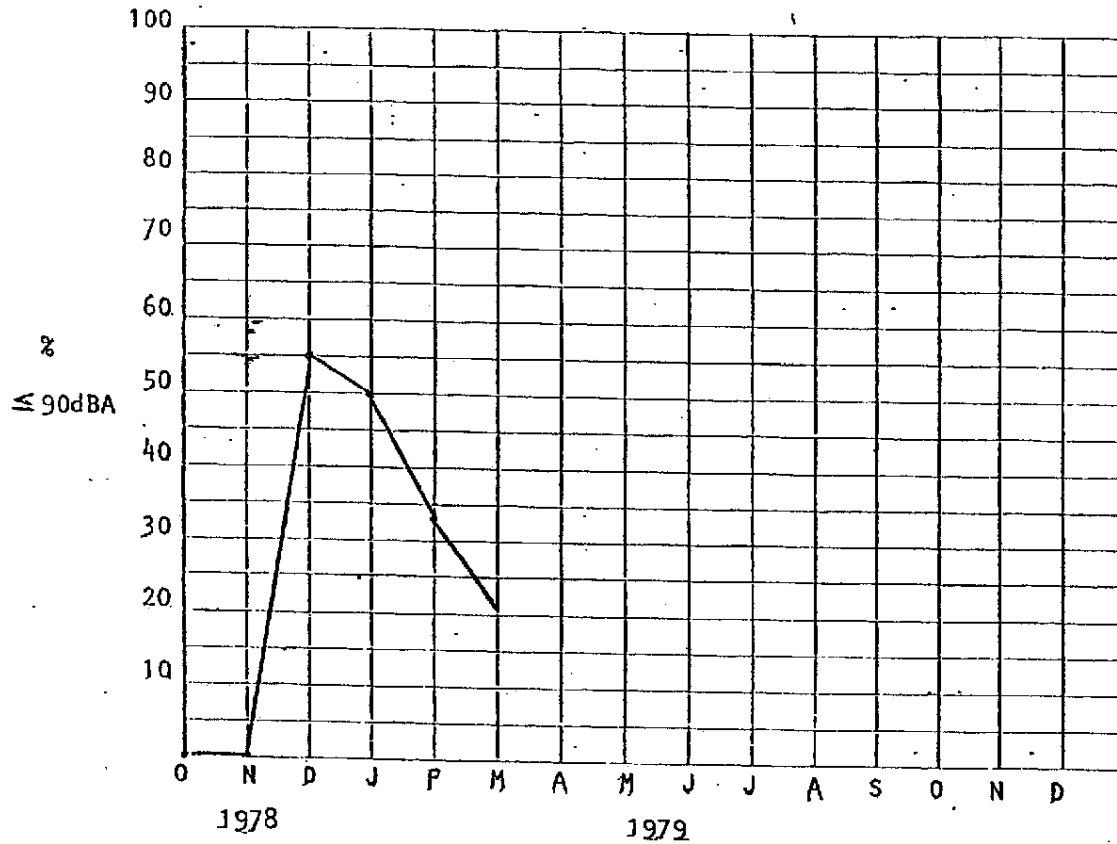


	No. Samples	No ≤ 1.0	$1.0 < \text{No} \leq 2.0$	No > 2.0	Range ppm	Average Month	ppm YTD	% ≤ 2.0 Month	ppm YTD
eg *	4	3	1		0-1.07	0.32	0.22	100	100
Non-Reg 01	4	4			0.0	0.00	0.08	100	100

NGC 15024

PERSONNEL MONITORING RESULTS
NOISE

COMPOUND MILL AREA - Bldg 541



No. Samples

14

≤ 90dBA
Month

3

% ≤ 90dBA
Month YTD

21.4 29.6

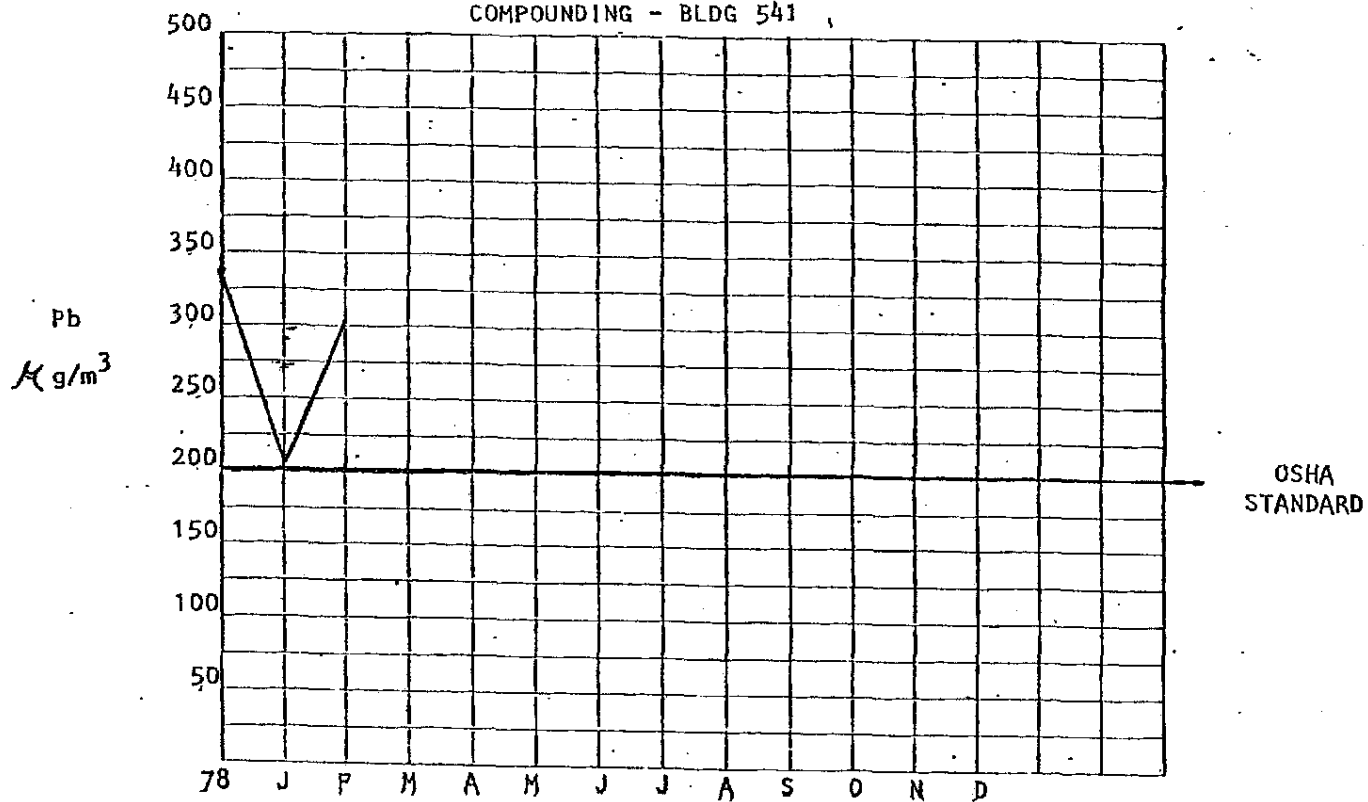
The data presented here reflects the evaluation of several procedures and controls.

NGC 15025

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
5	302	258	60.0	55.6

NGC 15026

EPA VCI ATTAINMENT

	<u>MARCH</u> <u>1979</u>	<u>SEMI-ANNUAL</u> <u>REPORT TO</u> <u>DATE</u>	<u>10/21/78</u> <u>to</u> <u>2/28/79</u>
1. <u>Reactor Opening</u>			
<u>Pearl</u>			
No. of non-attainments	0	0	16
No. of openings	49	49	227
% attainment	100 %	100 %	93.0 %
<u>Paste</u>			
No. of non-attainments	0	0	64
No. of openings	207	207	792
% attainment	100 %	100 %	91.9 %
<u>Mass</u>			
No. of non-attainments	1	1	8
No. of openings	227	227	1125
% attainment	99.6 %	99.6 %	99.3 %
2. <u>Resin Stripping</u>			
Pearl - % attainment	100 %	100 %	99.2 %
Paste - % attainment	100 %	100 %	96.8 %
Mass - % attainment	100 %	100 %	90.9 %
3. <u>Vent Absorber</u>			
% attainment	99.6 %	99.6 %	96.4 %
4. <u>Wastewater Stripper</u>			
% attainment	100 %	100 %	91.8 %

NGC 15027

DATE: MARCH, 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	1900	869	1031	934	858	192	9.6	-	-	-	-	-
Primary Effluent	1135	1105	30	21	229	144	6.5	1.6	4.7			-
Secondary Effluent	1136	1096	40	29	48	-	6.8	0.19	1.1			-
Lagoon	1099	1067	32	21	40	6	7.2		-		81	61
Activated Sludge	Sanitary			Industrial								
	(SS)	(VSS)	(Cl)	(MLSS)	(MLVSS)	(DO)	(O ₂ ↑)	(SV)	(SVI)	(°F)	(RSS)	(RVSS)
	500	384	6.1	2137	1659	5.5	8	211	98	78	6036	4618
Calculations	Flow (MM)			Sludge			BOD/COD			% Removal		
	(EFF)	(Reuse)	(Total)	Prim. %	Thickened %	(Disposal) (Lbs. Dry)	(Inf)	(Prim)	(Lagoon)	(SS)	(COD)	(BOD)
	12.5	4.5	17.0	1.0	7.8	213,034	0.22	0.63	0.15	97	95	97

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	-	-	-	-	-	-	-	-	4.7	-	-	-
Potable	-	-	-	-	-	-	7.2	1.0	0.86			56
Clarified	924	898	27	19	-	-	7.0	1.8	-			64

NGC 15028

TO	W.A. Reed	FIELD POINT OR DEPT. & BLDG. NO.	DATE YOUR LETTER
FROM	J.A. Kiel	FIELD POINT OR DEPT. & BLDG. NO.	DATE THIS LETTER
SUBJECT			3/28/79

MARCH PROGRESS REPORTSignificant Accomplishments

1. The EPA-NESHAP VCI semi-annual report was prepared, reviewed, and presented to USEPA-Region II on 3/14/79.
2. A one year extension from 3/18/79 to 3/18/80 of our current OSHA Noise Citation in the compound cuber area was requested and granted on 3/13/79.
3. Prepared EIS on proposed large poly expansion.
4. Implemented spill control and counter-measure plan (secondary containment systems), throughout plant. Specific plans reviewed with Latex and Mass. Plans to be reviewed with Compound, and Pearl/Paste in April. Engineering to prepare plot plan maps which will be posted throughout the plant.

General Information

1. Issued monthly environmental committee meeting minutes and environmental status report.
2. EPA-NESHAP VCI compliance for the month of March has been very good.
3. Prepared NJDEP permit for relocated styrene storage tank. Currently preparing permit for DM water degassifier and VGA backup Incinerator.
4. Held meeting on compound noise citation and developed action plan to implement and evaluate a series of both engineering and administrative controls.
5. Developed a series of specific departmental goals and also prioritized the departmental backlog of Safety, Housekeeping, and operational projects. The environmental departmental members plan to take a more active role in the design engineering aspects of the departments operational responsibilities in the future.

Active Projects

1. Developing a plan to clearly define level of VCM Fugitive Emissions in PVC polymerization areas. Also developing a specific list of projects which have reduced fugitive emission levels to 20% of EPA's projections.
2. Providing process engineering input on VGA backup Incinerator. Incinerator is on order and is projected for delivery in May.
3. Preparing Inventory of all drummed materials in the plant. All material will either be worked away to waste treatment, disposed of at an acceptable environmental facility or be stored in an appropriate location.

Page 2:

4. Completed or developed plans for completion of all OSHA Acrylonitrile standard related projects. Compliance in this area remains excellent.

Operational

1. Achieved "exceeds requirements" rating in all areas of March Safety and Housekeeping inspection.
2. Developed and implemented plan to control waste activated sludge based on sludge age. This control parameter was recommended by Cleveland and appears to be effective thus far.
3. Started training Dick Green, new environmental technician on 3/29/79.
4. Completed monitoring well testing for waste chemical processing and treatment facility.

Goals

1. Complete and submit to NJDEP Air pollution permit applications for styrene tank relocation, geon latex storage, degassifier vacuum pump, incinerator, NBA storage tank, and 7 proposed new PVC resin baghouses. JMG/KAJ
JAK
2. Complete drum inventory and disposal recommendations and future storage area designations. KAJ
3. Complete implementation of spill control plan and develop PM program. Finalize format for NJDEP plan and review with Cleveland. KAJ/EC
4. Review departmental goals with W. Reed JAK
5. Issue OSHA personal monitoring 1978 summary to all monitored personnel. JMG

JAK
JAK/re

NGC 15030