

VC Monitor
INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS

RIVER ROAD, BOUND BROOK, NEW JERSEY 08805

To (Name) Mr. R. L. Kisker
Division Chemicals and Plastics
Location Bound Brook, New Jersey

Date January 23, 1975
Originating Dept. Safety and Environmental
Protection
Answering letter date

Copy to Mr. R. A. DeCoudres - BB
Mr. R. E. Peele - SCTC
Mr. E. B. Sharp - BB
Mr. R. N. Wheeler - SC

Subject Inspection for VC

Mr. J. D. Devlin phoned me January 21, 1975 advising that he would like to monitor Building 105 calender line, foam line and laboratory operations for vinyl chloride during the week of March 10, 1975. He is employed by Bendix Launch Support Division under contract by NIOSH to monitor typical PVC plants for VC. Devlin took "grab" samples from these operations October 15, 1974. (Report of results attached.)

I stated that we have been operating on a limited basis and could not assure that all operations of interest would be running. I also stated that he should apply to Bob DeCoudres and submit proper credentials to clear the way for his program.

A handwritten signature in cursive script that reads "W D Neal".

W. D. Neal

WDN:mts
Attached

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UNION CARBIDE CORPORATION - CHEMICALS AND PLASTICS

Bound Brook, New Jersey

October 17, 1974

To: Mr. R. B. Baird/C. R. Schwartz
Mr. J. D. Baker
Mr. R. A. DeCoudres
Mr. N. H. Ketcham - SCTC
Mr. R. L. Kisker
Mr. R. E. Peele/R. E. Graebert - SCTC
Mr. E. B. Sharp

Report of Bendix Inspection - Vinyl Chloride
Bound Brook Plant

Time:

October 15 - 9:30 AM - 4:30 PM

Visitor:

James B. Devlin, Principal Investigator, Bendix Corporation, Launch Support Division, Cocoa Beach, Florida 32931 - Contractors for N.I.O.S.H.

Purpose:

Mr. Devlin collected eight (8) grab samples using MDA evacuated metal cans; three (3) from the Foam Line, and four (4) from the Line 2000 Calender Line in Building 105. Parallel monitoring with a Century Organic Analyzer resulted in predictions of no more than 5 ppm vinyl chloride for two of the samples, and less than 1 ppm for the balance of six samples.

Conclusions:

The particular sample points and conditions selected by Mr. Devlin are not areas where the higher vinyl chloride concentrations have been measured by our previous test results. In my opinion, it is questionable whether the anticipated low values of vinyl chloride will generate sufficient interest to justify a larger-scale sampling program.

Discussion:

Through prior arrangements and approvals, the Bound Brook Vinyl Fabrics plant was selected by Bendix as a large polyvinyl chloride fabricating plant for gauging vinyl chloride exposure. N.I.O.S.H. has commissioned Bendix to survey representative monomer, polymer and polyvinyl chloride fabricating plants in order to gather data indicative of the vinyl chloride problem. Evidently N.I.O.S.H. requires further data than that gathered through OSHA inspections or prefers gathering their own data. The plan consists of a preliminary survey by grab-sampling to determine what types of interferences may be present at the sampling sites, and the level of vinyl chloride in order to predetermine sampling times and flow rates for a later more detailed survey by SKC charcoal tubes and Sipin pumps.

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Mr. Devlin was shown a schematic flow sheet of the typical calender line on which was noted the complete range of vinyl chloride concentrations measured from previous monitorings (90 samples to date). He was also shown the results of the June 28, 1974 OSHA inspection which yielded values in the 1 to 3 ppm range. He did not record any of the data nor comment. He was later given a copy of a flow sheet and material samples.

Using eight (8) "Vacu-Samplers," aerosol-type cans each capable of inhaling 123 cc of sample over a period of ten (10) seconds, Mr. Devlin collected samples from the following points, while I followed the sampling with a Century Organic Analyzer.

<u>Sample Sequence</u>	<u>Can Number</u>		<u>PPM*</u>	<u>Bendix PPM</u>
1	24	Foam Mix Room, North Mixer, While dumping bags of Marvinol PVC resin.	0	0
2	25	L-2000 Calender, Upper Platform	1	-
3	26	L-2000 Royle Extruder Discharge, Directly over "ropa."	0	-
4	27	Blender Messamine, Four feet from No. 3 blender, L-2000, hatch closed.	5-10	-
5	28	L-2000 Calender, Over embossing roll.	5-10	0.4
6	29	Large Vacuum Former in QC Lab, Eighteen inches over sheet at maximum temperature (320°F).	3-6	0.3
7	30	Foam Line, Between foam coater and gel oven.	0	0
8	31	Foam Line, At No. 4 oven outlet.	0	0

*Total hydrocarbons above ambient by Century Organic Analyzer.

Mr. Devlin's assignment included the completion of a questionnaire calling for general statistical data and provision for checking off the type of fabrication inspected, viz. - bonding, calendering, foaming, extrusion, thermal-forming, etc. He checked all of these and sampled accordingly, including the QC Lab vacuum forming test.

Devlin's samples will be run by Bendix personnel using gas chromatography. He agreed to send test results to me. He also stated that if Bendix recommends Bound Brook for further sampling, and N.I.O.S.H. agrees, it will probably take place in January and be done by he and Mr. Dennis Smoot, Bendix Chemist, under supervision of Mr. Lee Barnhard, Project Manager.

During his visit, Mr. Devlin was introduced to Messrs. R. A. DeCoudres, R. L. Kisker, R. B. Baird, G. R. Schwartz and S. G. Molnar.

W.D. Neal
W. D. Neal

WDN:mts

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