M I N U T E S

AMBIENT VINYL CHLORIDE STANDARDS COMMITTEE MEETING

Cleveland Office

February 20, 1974

PRESENT:

E. W. Harrington
H. R. Rex
A. M. Fairlie
John Gressler
H. Waltemate
L. B. Crider
G. H. Metzger
C. R. Flynn
G. D. Schaaf

1. To clear up any misunderstanding, the following units of measure are defined:

   A. The residual vinyl chloride in PVC resins is measured and reported in weight percent.

   B. The OVA and Bendix readings are measured and recorded in volume percent of vinyl chloride in air. The OSHA standards for gases in air for time weighted average and TLV are also expressed in volume percent in air.

2. The amount of residual vinyl chloride level in our finished products was reviewed with H. R. Rex from Sales. The data to date indicated a problem (above 1,000 parts per million) with solution resins and Geon 202. G. D. Schaaf will review with the plants what can be done on a short-term basis to reduce this level. Marketing will prepare a position paper for review with the BMG. All resins must be reduced to the lowest residual vinyl chloride content possible, consistent with our current processing conditions. A list of resins for critical applications has been prepared by Marketing and is attached to these minutes. Manufacturing and Marketing will review what should be done with hi temp resin and compound which contains sizeable quantities of residual carbon tetrachloride.

3. Ventilation is proceeding on a design basis for 6, 12, and 20 interchanges at all plant locations. At the Henry plant it may be necessary to provide two ducts for air intake; one to the North and one to the South. This system then would be used with a damper depending upon the wind direction.

4. Herm Waltemate reviewed his discussions with the NIOSH representatives at the Pedricktown plant. He will prepare a set of revised guidelines as a result of

---

NOTE: Underlining denotes "Action Items"

22852001

this discussion. In general they were convinced that we could use a throw-away suit for dry poly entry. In case of a entry into a wet poly, we would have to use an impervious suit or one similar to rain gear. A wet poly is defined as a vessel in which the operator would be likely to come in contact with slurry or water.

The NIOSH representatives were quite impressed with the housekeeping at the Pedricktown plant and they felt the operators were not exposed to as much dust as the operators are in the Louisville plant.

Mr. Harrington said that as a result of a meeting with management on the 16th, all plants have been requested to implement the NIOSH standards, and to identify what problems are created as a result of this order. A routine report will be issued by each plant showing their compliance with the NIOSH standards in their progress toward that goal.

5. It was recommended that Ed Katzenmeyer get together with NIOSH representatives in Cincinnati to obtain their guidelines on measurement of dust. It appears they have some information that would be useful in our plants.

6. L. B. Crider summarized the results of the tests with the cartridges from our respirators supplied by Welsch. The preliminary information indicates that vinyl chloride concentrations as high as 100 parts per million can be protected against for one hour in normal breathing operations (30 liters per minute). Work will now be done to identify the breakthrough point at 500 parts per million. It appears that we can use the respirator cartridges for one shift before discarding under present conditions. More data will be supplied later.

7. The background level of our OVA's range from 5-7 parts per million. Currently, we cannot subtract this from our OVA reading since we do not know what is the cause of the background. It is possible the background is caused by measuring residual carbon in the air of the normal environment or the background can be caused by some problems in the instrument itself. L. B. Crider will work on this problem to define the causes of the background level. The problem with the use of the Bendix is not severe, since we have a completely enclosed sampling system and always have a constant source of air for calibration and no changing of cylinders is required such as with the OVA which could contribute to a variation in background levels.

8. Currently there are five sampling systems on order from Bendix to be used with the total carbon analyzers. It was agreed to purchase six more sampling systems so that the plants would have them in time to use with their Bendix instrument.

9. Ed DeCapita has been sent to Louisville to monitor the concentration of vinylidene chloride in Building 15 on an interim basis. He will set up a plan whereby the gas in the building is sampled and taken to the laboratory for analysis in the chromatograph. Next week we will then set up an infrared unit in the building to monitor for vinylidene chloride on a continuous basis.

2285202

BFG22808

10. Mr. Harrington requested that OVA readings be taken in the Paste Drier Building since there is quite a bit of dust in that area. This will start at Louisville immediately.

11. A. M. Fairlie presented the data requirements for the mini computer. A letter formulating these requirements will be sent out to all plants for their review. Mark Forsythe and Bob Carroll will review the requirements and recommend the type of computer system required. We want to provide a system that can store data so we can get a monthly report which can then be saved for at least twenty years to meet OSHA requirements. A sample data sheet is attached to this report.

G. D. Schaaf

GDS/cls
Atts.
2/25/74

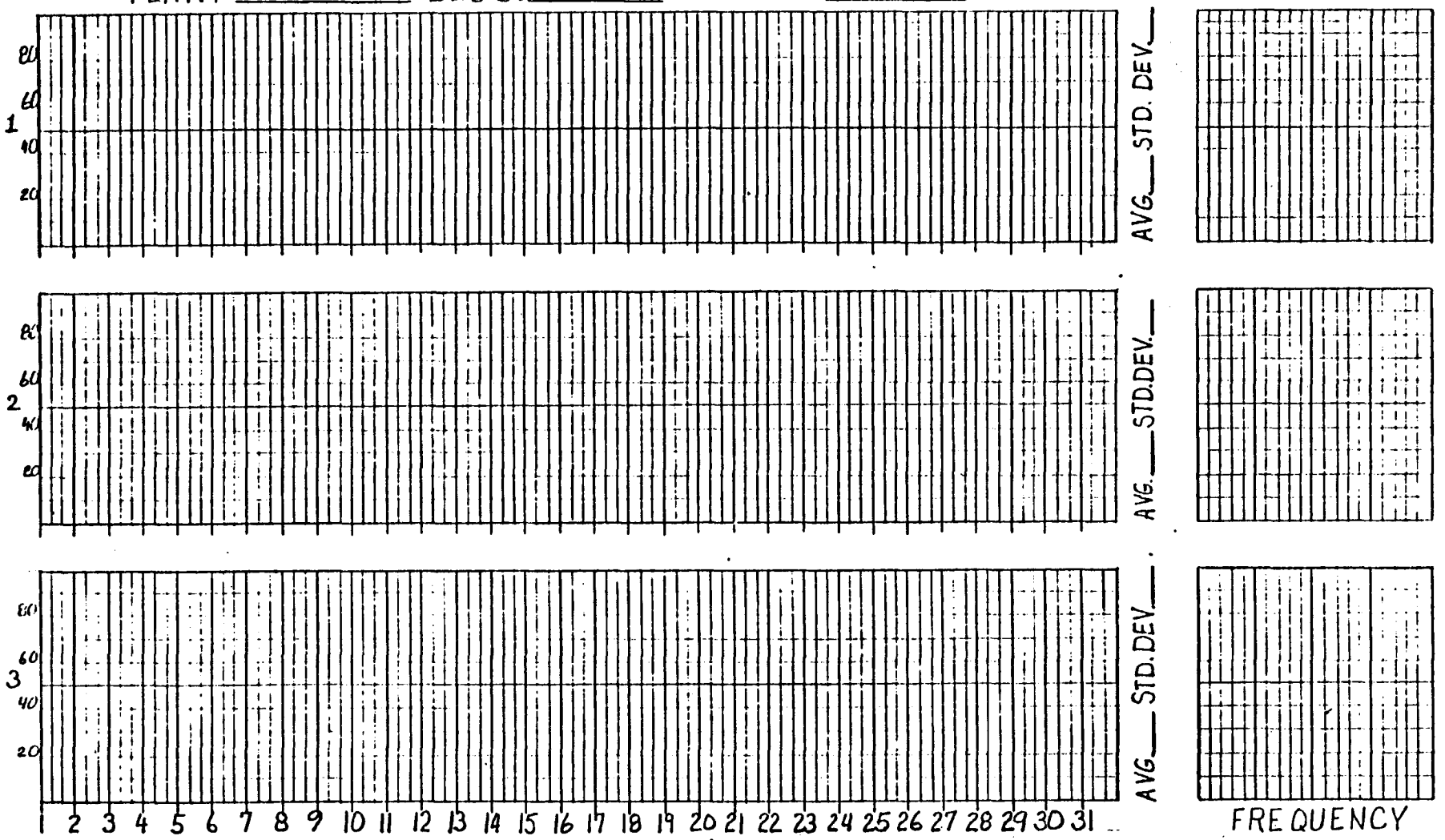
CC: Attendees
E. B. Katzenmeyer
B. M. G. Zwicker
W. J. Wilcox
E. G. Schwaegerle
A. Vittone
R. D. Scott
J. L. Nelson
R. N. Rylands
P. H. Lawrence
A. R. Webber
C. B. Cooper
A. W. Clements
C. L. Woods
T. R. Linak
R. M. Kreager
R. J. Fawcett
R. W. Strassburg
F. E. Krause
J. F. Malone
G. Pow
P. J. Weaver

2285203

22852004

AMBIENT VCI VAPOR AVG., PPM

PLANT _____ BLDG. _____ MONTH _____



BFG22810

TO	FIELD POINT OR AKRON DEPARTMENT & BLDG. NO.	DATE YOUR LETTER
J. F. Malone	Cleveland D/5401	
FROM	**FIELD POINT OR AKRON DEPARTMENT & BLDG. NO.**	**DATE THIS LETTER**
H. R. Rex	Cleveland D/5401	2/21/74

SUBJECT

Critical Uses of PVC Resin

The table below summarizes data submitted by Product Managers concerning criticality of end-use applications in terms of possible residual monomer in applicable resins. The original reports are attached. The figures are volumes used in packaging and toy applications. Whether or not the critical share of a given resin total sales volume can be isolated out is not known at this time.

PVC VOLUME IN VCM - CRITICAL USES
(M lbs)

Resin/PMG	I	II	III	IV
103EP	3.0	Ham wrap, bottle closures		
92	6.0	Cap liners		
103F76		*		
80 X 5		Gloucester		
202			3.2	(46% of 7 M lbs; 40% Pkg., 6% Toys)
121			10.08	(21% of 48 M lbs; 13% Pkg., 8% Toys)
126F1			2.88	(100%, all in Pkg.)
80 X 5			3.42	(18% of 19 M lbs. for Film and Sheet)
128			2.16	(11% of 19.6 M lbs; 1% Pkg., 10% Toys)
222			0.19	(5% of 3.8 M lbs; all Pkg.)
140 X 31			0.93	(35% of 2.65 M lbs; all Pkg.)

Harold R. Rex

HRR/cjb

Attachments

cc: G. F. Cohan
D. D. Ditmer
D. G. Kuharik
R. W. MacCuspie
R. W. Tannehill

*Pipe: Very large volume, much of which must be looked upon as critical. However, specific customers might be isolated who can tolerate VCM levels "somewhat over" the critical spec.

2285205

BFG22811

2285300

VCI SURVEY STATUS

~~12-5~~ 2-6-74
AM7

AVON LAKE

	OVA CALIB	#PTS SPLD.	SPLG FREQ	HI PT LOG	HOW SPLD.	AVG CALC METH.	COMMENTS
B464 GEAST	1/DAY	9	2/SHFT		GNL AREA	AS RQD	RAN SPECIAL MIXING STUDY WITH FANS.
B463 LATEX	"	4	3/SHFT		"	" "	
B451	"	10	3/SHFT		"	" "	USE MATH MODEL TO CALC. VCI AVG IF NEEDED. OTHERWISE ARITH AVG CALCULATED.
B461	"	11	3/SHFT		"	" "	

HENRY

PEN BLDG	1/DA	22	≥ 1/SHFT	NO	GNL AREA	ARITH	SEE ATTHMT. - USING OFT. AREAS + 10 MORE, INCL VENTS

LONG BEACH (BASED ON 1/25 PM CONTACT)

ROUTINE	1/SHFT	7	3/SHFT	?	GNL AREA	?	SURVEY CONTD. ON DAILY BASIS TO X-CK POINTS + TROUBLESHOOT
SURVEY	"	32	1/DAY	?	PTS + VENTS	?	

LOUISVILLE

B1	1/3 DAY	23	1/SHFT		GNL AREA	ARITH	SOME B4 SPLG DONE - TO BE STEPPED UP.
B15	"	20	"		"	"	
B111	"	24	"		"	"	RUNNING SPECIAL STUDY AT POLY TURNAROUND 1/SHFT
B121	"	28	"		"	"	XCK ORIG SOLNS.

PEDRICKTOWN

PASTE & PRL.	1/WK?	27	ABT 5/DA	?	GNL AREA	ARITH	MOST POINTS ARE GENL AREA THO SOME SEEM SPECIFIC
MASS	"	17	"		"	"	
DRYER BLDG	"	7	"		"	"	RECORD HI PTS BUT NOT FORMAL LOG THAT WE KNOW OF.
CENTFUGE	"	1	"		"	"	

BFG22812