

MINUTES

AMBIENT VINYL CHLORIDE STANDARDS COMMITTEE MEETING

Cleveland Office

February 6, 1974

PRESENT:

E. B. Katzenmeyer	H. Waltemate
B. M. G. Zwicker	W. J. Wilcox
C. R. Flynn	H. R. Rex
A. M. Fairlie	E. G. Schwaegerle
G. H. Metzger	E. W. Harrington
L. B. Crider	G. D. Schaaf

1. A request has been made to all plants to start monitoring immediately on a once per week basis the percent vinyl chloride on all the production PVC resins made in their plants. This data will then be submitted to Cleveland on a weekly basis and a summary report issued. The data is on finished product samples only.

As a part of the Code Zero program, Bob Toole will request the plants to obtain data on the vinyl chloride profile during the processing operations. These samples will have to be accumulated separately from the product samples.

Hank Rex from Sales indicated that we should use all speed to reach a safe and reasonable level for vinyl chloride in all our PVC products. Marketing is currently evaluating the resins manufactured and will advise which products go into critical applications. A temporary emergency standard of 1,000 parts per million will be instituted for all resins. Any resin which contains more than that quantity of vinyl chloride will have to be reviewed with Marketing personnel. Since some resins seem to be more sensitive from a Marketing standpoint than others, it was agreed to increase the frequency of testing of the following materials to twice a week: 103EP F-76, solution resins, and blending resins. The plants producing these resins will be so advised to increase the testing frequency.

L. B. Crider is looking at more rapid tests and different test methods to measure the vinyl chloride content in resins. He is looking at a Halogen analyzer which is very sensitive, and will indicate a reading even if you breathe on it.

Ed DeCapita is on the Industry Standards Committee to determine a test procedure for percent vinyl chloride in PVC resins.

2. Our present standards for poly cleaning by entry are: (a) HRC the poly before entry, and (b) the breathing air in the poly must be less than 50

NOTE: Underlining denotes "Action Items"

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parts per million maximum. The whole question of cleaning polys by entry was carefully reviewed. As a result of this review, the following proposed interim emergency standards for polymerizer cleaning by entry are attached (these standards were discussed at the Plant Managers' Meeting of February 7, 1974, and modified as noted in the Plant Managers' Minutes).

3. In Avon Lake ventilation design work is still proceeding on Building 451 and is being started in Building 461. Blend tank exhausts still have to be extended. In Louisville the heating coils in Building 15 are now being installed by Louisville personnel. The Engineering design is completed for Building 1 and almost completed for Building 111. The design work will now start for Building 121.

At Henry the major problem appears to be location of vent stacks and wind direction. In many cases with the East wind, the vinyl being vented out of the building is sucked back into the building through the air intakes. Therefore, all the vent stacks will have to be increased in height to overcome this problem. Ventilation work will proceed in the next several weeks at the Henry plant.

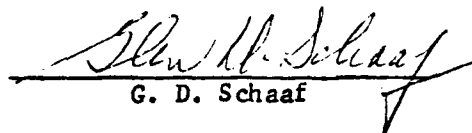
4. Agreement must be reached on what sort of data is required for our permanent record. It is quite important that we order and obtain a mini computer to provide this record. The same type of mini computers could then be purchased for all other plants and one program would suffice. The Standards Committee felt that the time weighted average of the working atmosphere on each floor must be definitely recorded and logged by the mini computer.
5. Bendix equipment delivery schedules have been delayed by a strike (now settled) at their plant. It is expected that the first Bendix including the recorder and sampling system will be delivered to the Louisville plant during the first week of March. It was agreed to send the first two sampling systems to Louisville which could be installed in Building 15 and Building 121. Six-point sampling systems may not provide enough data as indicated by the present OVA survey information. If we need more than six points, it is suggested that a second Bendix unit could be purchased and tied in with a second six-point sampling system. The \$2000 cost of the additional Bendix would provide more frequent monitoring.
6. MSA has the only NIOSH approved respirator for dust, mist, and organic vapors. We purchased 688 respirators to be used in the polymerization area from the Welsch Company because of better deliveries. Their cartridge is NIOSH approved for organic vapors, but not dust and mist. A test program has been set up to evaluate how long the cartridge can be used before changing. Temporarily, plants are requested to change the cartridge on a daily frequency.
7. It is desired to send some maintenance people to Bendix for training. Each Plant Manager should select a person in his plant who could make a specialty of maintaining the critical analytical systems which will be involved with Bendix and other instrumentations of this type. This man could then be sent to Bendix for training. Preferably, this person would be attached to the Technical Department and would be on salary. It is felt there would be enough instrumentation of this general type throughout the plant to keep one man busy on a full-time basis for most of our larger plants. Lou Salzer will check with Bendix to determine if some temporary help from their company could be used for the initial installation at Louisville if we so request.

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8. It was the opinion of the group that we should begin an immediate program in Buildings 15 and 121 to sample and analyze other components in the working environment. These components would be vinylidene, methanol, and acrylate. L. B. Crider will investigate the possibility of sending Ed DeCapita to Louisville to assist in this operation.
9. A. M. Fairlie reviewed the current status of the data collection. Most plant data is reported on the basis of arithmetic averages to obtain the average value on the floor. The arithmetic average at Avon Lake from a few sample points is generally equivalent to the overall floor average. Tentative math models have been developed for all polymerization buildings in all PVC plants. These models use from 6-11 points to predict building and floor averages. Andy has requested that all plants provide a log consisting of the trouble spots and the action taken to eliminate or reduce the residual vinyl chloride level. This then would provide a permanent record of what was being done on a day-to-day basis.

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Att. 2
2/13/74


G. D. Schaaf

cc: Attendees

A. Vittone	W. E. Brodine
R. D. Scott	R. M. Kreager
J. L. Nelson	R. J. Fawcett
R. N. Rylands	R. W. Strassburg
P. H. Lawrence	J. J. Bell
A. R. Webber	M. N. Johnson
C. B. Cooper	F. E. Krause
A. W. Clements	J. F. Malone
C. L. Woods	G. Pow
B. A. DiLiddo	P. J. Weaver
R. L. Toole	T. R. Linak

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A. PROPOSED INTERIM EMERGENCY STANDARDS FOR POLYMERIZER CLEANING BY ENTRY

1. Use air line mask for entry into all polymerizers. Herm Waltemate will be responsible to define standards for air quality.
2. Monitor quality of air inside polymerizer during cleaning operation.
3. Poly cleaners and maintenance personnel required to enter vessels will have the same requirements.
4. OVA analysis of the vapor must be obtained before entry.
5. Head covers are required to keep water and resin out of the hair.
6. No entry into a polymerizer, even with an air line mask, if the concentration is above 500 parts per million. This will constitute the abnormal vessel cleaning procedure to be followed.
7. We are starting investigation of impervious suits.

B. ABNORMAL VESSEL CLEANING IS DEFINED AS ANY CONDITION (INCLUDING, BUT NOT LIMITED, TO SOLID CHARGES) WHERE AFTER STANDARD PREPARATION THE POTENTIAL EXPOSURE COULD BE EXPECTED TO EXCEED 500 PARTS PER MILLION

1. Entry into such vessels should be avoided if at all possible. Use high pressure water lance for cleaning.
2. If entry is necessary:
 - a. Require a water-proof suit and footwear, approved gloves and headwear, in addition to the air line mask for all entries.
 - b. Monitor the vapor concentration during the time the man is in the vessel.
 - c. The man must be required to take a shower after this cleaning operation.

C. OTHER PROPOSED INTERIM WORK PRACTICE STANDARDS FOR PVC PLANTS

1. No food consumption in any process area, including the warehouse. OSHA standards must be complied with.
2. Respirators must be used for all concentrations of vinyl chloride monomer greater than 50 parts per million. A program will be specified concerning the frequency of changing respirator cartridges.
3. Dust masks must be worn in all dusty areas. The type of dust mask will be specified. An analytical program to measure dust concentrations will be started in the Louisville plant.

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D. ADDITIONAL PROPOSED STANDARDS

All polymerization vessels for PVC manufacture 2500 gallons or larger must have rupture disc - relief valve combination systems. Such systems must comply to our Engineering standards.

Ambient Vinyl Chloride Standards Committee

Recommended February 6, 1974

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