



**Roy T. Gottesman**  
Executive Director

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January 27, 1986

To: Vinyl Institute Executive Board  
Vinyl Institute Manufacturing Practices Committee

Subject: Formosa Plastics

The enclosed letter was received today from Larry Peyton, the plant manager of the Formosa Plastics Delaware City plant. It obviously is their response to my January 8 letter to Governor Castle.

I hope Peyton takes greater care about how his plant is operated than he did about proof-reading this letter. Even the Governor's first name is misspelled!

I don't think we are particularly interested in sharing their experiences. I don't think Vinyl Institute members are interested in learning how to do things wrong!

We have not had any response from the Governor's office as yet.

As usual, your comments and thoughts will be appreciated.

*Roy*

RTG:g

Enc.



**FORMOSA PLASTICS CORPORATION DELAWARE**

P.O. BOX 320 • DELAWARE CITY, DELAWARE 19706 • TEL (302) 834-4575

January 17, 1986

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JAN 21 1986

ROY T. GOTTESMAN

Roy T. Gottesman  
The Vinyl Institute  
355 Lexington Avenue  
New York, NY 10017

Dear Sir:

Although I am not personally aware of the charter of the Vinyl Institute we are very impressed with your offer for assistance. We are also concerned about your fears that solutions agreed to with the DNREC and their consultants would be "unreliable or unproven".

Formosa Plastic corporation is a member of the Vinyl Chloride Safety Association (VSCA) and has been for some years. Many if not all the members you mentioned are associated with VSCA. The purpose of this group as you know is to help improve the safety and minimize the environmental impact of member plants. We value this association greatly.

You may rest assured that the "containment system" concept is not unproven technology. This approach coupled with the use of "short stop agents" (which have been in use at this facility since the early 1970's), system assurance programs and good preventative maintenance should reduce the probability of a relief valve discharge and thus reduce possible pollution problems.

We also subscribe to the idea that good positive criticism creates improvement. One of the very positive aspects of this 1985 experience has been a new direction and dedication to achievement for Formosa Plastics.

We are willing to share our experiences with you which have been very valuable to us. If you feel that we may be of assistance to help you avoid similar problems please don't hesitate to let us know.

Sincerely,



Larry Peyton

LGP/bs

cc: The Honorable Micheal N. Castle  
John E. Wilson III  
Thomas P. Eichler  
Robert Chou  
Charles H. McAuliffe

VVV 000004640

# minutes

SI

## VINYL INSTITUTE HEALTH, SAFETY, & ENVIRONMENT COMMITTEE

The Marriott City Center Hotel  
100 West Trade Street  
Charlotte, North Carolina 28202

Thursday/Friday  
July 17-18, 1986  
8:00 a.m.

### Attendees:

W. C. Holbrook, Chairman - BFGoodrich  
A. S. Baker - Dow Chemical  
J. T. Barr - Air Products & Chemicals  
N. M. Blackman - Borden Chemical  
F. E. Borrelli - Georgia Gulf  
C. A. Gellner - CertainTeed  
J. Kachtick - Occidental Chemical (7/18 only)  
J. A. King - Occidental Chemical  
J. Ledvina - Vista Chemical  
O. T. Sandberg - Borden Chemical (7/18 only)  
H. Waltemate - BFGoodrich  
S. L. White - PPG Industries  
J. E. Wyche III - PPG Industries  
E. J. Zeringue - Georgia Gulf  
P. de la Cruz - Keller and Heckman  
R. T. Gottesman - Vinyl Institute

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### 1. Self-Introduction and Approval of Minutes.

Following self-introductions, the minutes of the May 27th meeting of the Committee held in Washington were distributed. Later Mr. Barr moved, Mr. Blackman seconded, and the minutes were approved as received.

### 2. Discussion on EDC Ground Water Considerations.

Those company representatives having experience with underground water contamination from EDC discussed their own situations. Generally, in the first RCRA ground water monitoring, contamination by EDC was found. In several situations, the underground liquids were mined, the organics separated and the water layers steam-stripped before being discharged through a permitted NPDES outfall. Neither the states of Louisiana or Texas have issued regulations, but are getting reports on what is being carried out.

There has been no determination of what constitutes sufficient clean-up, i.e., "how clean is clean", but in a number of cases, the company representatives indicated that they expected to continue the pumping and steam-stripping of water for some time to come.

3. Discussion of Inadvertent PCB Generation in EDC/VCM Manufacture.

In a round robin discussion, company representatives mutually informed each other regarding their situations on the inadvertent generation of PCB. Mr. Ledvina of Vista indicated that they had found PCB in the heavy ends of their VCM plant. They have carried out registration under TSCA as an inadvertent generator. Mr. Ledvina indicated that they had not found any PCB's in any wastewater streams and that water from the incinerator is now being analyzed.

Mr. Baker of Dow indicated in their Louisiana and Texas operations involving direct chlorination, they are finding PCB's in the heavy ends which are mixtures of heavy chlorinated materials and vinyl tars. They also have one stand alone EDC plant where they have found PCB's. Heavy ends are disposed of by incineration under a non-commercial permit. Dow has registered all of its three plants as PCB generators although Mr. Baker indicated that oxy-chlorination does not appear to generate PCB's. They are currently using GC/Mass Spec for analysis, but they are trying to develop a new method due to noise and interference with the GC/Mass Spec procedures. Materials which are extracted in the analysis other than PCB lead to analytical interferences.

Mr. Holbrook reported that one monomer plant is registered as a PCB generator with EPA. At a second Goodrich monomer plant they are not registered under TSCA. PCB's are found in the heavy ends from EDC cracking. Goodrich has not found PCB generation in the direct chlorination process. Analyses are done in-house by GC/Mass Spec.

Mr. White of PPG reported that they have found inadvertent PCB formation in the cracking and in the heavy chlorinated materials in the direct chlorination process. They have not found PCB's in other hydrocarbon chlorination processes, but do find them when co-mingling with vinyl chloride monomer process streams. PPG is on a track to get a PCB permit for their incinerators. They are registered as an inadvertent generator because of the large water flow volume being discharged from the incinerators where, because of the detection limits, they would exceed 10 pounds per year. PPG incinerates their heavy ends at a temperature of 1800-2200 degrees F. PPG is interested in sharing analytical techniques and methods with the other member companies.

Mr. Zeringue of Georgia Gulf indicated that they had sampled at 3 or 4 places in their Plaquemine operation and samples were sent to TMS in Indianapolis for Mass Spec and to one other laboratory. Analytical results indicated PCB's in the direct chlorination, but nothing downstream. They believe that PCB's are concentrating in the reactor. Georgia Gulf is registered as an inadvertent PCB generator under TSCA. They concentrate the PCB materials and they dispose of the materials off site. Both Georgia Gulf and Dow indicate that they have had TSCA inspections in relation to their filings as inadvertent generators.

4. Update on EPA's EDC Hazardous Air Pollutant Regulatory Developments.

Mr. de la Cruz reported that they had had recent contact with Bob Shell at EPA, Janet Meyer at EPA/Research Triangle Park, David Beck in the EPA counsel's office, and Bob Romano at CMA. He has learned that EDC will probably be regulated by July 1987 as a hazardous air pollutant along with ethylene oxide and butadine. Mr. de la Cruz noted that EPA is trying to develop a generic NESHAPS standard. Such a standard would involve incinerator vents, storage vessels, fugitive controls, normal inspection, monitoring, repairs, and air oxidation vents. A meeting is being held with CMA representatives at Research Triangle Park on July 24th, where EPA will provide a briefing on its action plan. The CMA contact on this is Alice Mayer.

Mr. de la Cruz noted that a NAPTAC Meeting is scheduled for September 17th and 18th. Mr. Ledvina will be attending this meeting and will report to the Health, Safety, and Environment Committee at its next meeting on this.

Action: Mr. Ledvina to report on September 17-18 NAPTAC Meeting at next Health, Safety, and Environment Committee Meeting.

Mr. Ledvina and Mr. Holbrook advised that they have received questionnaires concerning EDC under Section 114 of the Clean Air Act. These were received in mid-July and are due by July 25th. The main subject the Agency appears to be addressing is waste water and essentially they have asked for a material balance around the biological treatment plants.

5. Update on EPA's VCM Hazardous Air Pollutant Regulatory Developments.

Mr. de la Cruz reported that based on a contact with Fred Dimmick at EPA, the EPA proposal of January 1985 is in red border review and Dimmick expects to see it issued in a few months - i.e., August or September 1986. Mr. de la Cruz expressed skepticism that this date will be met. He also reviewed the history behind the NRDC suit, and the proceedings in the DC Circuit Court. He noted that a decision can be out any time and he would expect one by September because circuit court judges like to issue decisions on cases heard before they change law clerks.

6. Discussion of VCM, PVC, and PVC Compound Labeling.

Company representatives discussed their company practices with regard to labels and material safety data sheets. These are summarized in Table I for VC, Table II for PVC Resin and Table III for PVC Compounds.

TABLE I  
 VINYL CHLORIDE LABELING PRACTICES\*  
 VI MEMBER COMPANIES MANUFACTURING VCM

| Company      | Does Tank Car Carry A DOT Label? | Does Tank Car Carry An OSHA "Cancer Suspect Agent" Label? | Is MSDS Sent With Tank Car? | Comments                                                                     |
|--------------|----------------------------------|-----------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------|
| PPG          | YES                              | YES                                                       | YES                         | Product information label put on tank car.                                   |
| DOV          | YES                              | YES - On materials shipped out of plants                  | YES                         |                                                                              |
| BORDEN       | YES                              | YES                                                       | YES                         | Tank cars as received carry OSHA "Cancer Suspect Agent" label.               |
| BFGOODRICH   | YES                              | YES - Welded inside dome of tank car.                     | NO                          | Are considering whether to put "hazards from fire" information on tank cars. |
| VISTA        | YES                              | YES                                                       | NO                          |                                                                              |
| GEORGIA GULF | YES                              | YES                                                       | YES                         |                                                                              |

\*Information received 7/17/86 at VI Health, Safety & Environment Committee Meeting.

A copy of the PPG product information label on vinyl chloride is attached to these minutes.

VVV 000004644

VI Health, Safety, & Environment Committee Meeting Minutes  
 July 17-18, 1986  
 Page Five

TABLE II  
 PVC LABELING AND MSDS PRACTICES\* (RESIN)  
 VI MEMBER COMPANIES MANUFACTURING PVC RESIN

| Company      | LABEL ON RESIN                                                                                 |                                           |                                                 | MATERIAL SAFETY DATA SHEETS                             |                                   |                                     | Comments                                                                                      |
|--------------|------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------|---------------------------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------|
|              | Does Label Carry An OSHA "Cancer Suspect Agent" Label?                                         | Does Label Carry Notation Regarding Dust? | Does Label Carry Notation Re Fire/Comb. Hazard? | Does MSDS Include VC- "Cancer Suspect Agent" Statement? | Notation Re Dust As A "Nuisance"? | Notation Re Fire/Combustion Hazard? |                                                                                               |
| AIR PRODUCTS | YES - On bags, bulk cars and silos.                                                            | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 |                                                                                               |
| CERTAINTED   | YES                                                                                            | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 |                                                                                               |
| GEORGIA GULF | YES - On bags, bulk cars                                                                       | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 | Currently evaluating whether to put decomp. Has. Statement on MSDS.                           |
| OCCIDENTAL   | YES - If > 1ppm RVCM<br>NO - If < 1ppm RVCM                                                    | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 |                                                                                               |
| BORDEN       | All bags, bulk cars and silos are so labeled. Paste resins are not.                            | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 |                                                                                               |
| BFGOODRICH   | If > 8.5 ppm RVCM, would be so labeled. Generally resins are < 8.5 ppm and are not so labeled. | NO                                        | NO                                              | YES                                                     | YES                               | YES                                 | Currently evaluating whether label should have notations re dust and fire combustion hazards. |
| VISTA        | NO - Since RVCM is < 8.5 ppm.                                                                  | NO                                        | NO                                              | NO                                                      | YES                               | YES                                 |                                                                                               |

\* Information received 7/17/86 at VI Health, Safety and Environment Committee Meeting.

TABLE III  
 PVC COMPOUND LABELING AND MSDS PRACTICES\*  
 VI MEMBER COMPANIES PRODUCING PVC COMPOUNDS

| Company      | LABEL ON COMPOUND                                      |                                   |                                                 | MATERIAL SAFETY DATA SHEET                              |                                   |                                | Comments                                                     |
|--------------|--------------------------------------------------------|-----------------------------------|-------------------------------------------------|---------------------------------------------------------|-----------------------------------|--------------------------------|--------------------------------------------------------------|
|              | Does Label Carry An OSHA "Cancer Suspect Agent" Label? | Does Label Carry Notation Re Dust | Does Label Carry Notation Re Fire/Comb. Hazard? | Does MSDS Include VC- "Cancer Suspect Agent" Statement? | Notation Re Dust As A "Nuisance"? | Notation Re Fire/Comb. Hazard? |                                                              |
| GEORGIA GULF | NO                                                     | NO                                | YES                                             | NO                                                      | NO                                | YES                            | Label also carries information on sensitivity to stabilizers |
| OCCIDENTAL   | NO                                                     | NO                                | NO                                              |                                                         |                                   |                                |                                                              |
| BFGOODRICH   | NO<br>If RVCM < 8.5 ppm                                | NO                                | NO                                              | YES                                                     | YES                               | YES                            |                                                              |
| VISTA        | NO                                                     | NO                                | NO                                              | NO                                                      | YES                               | YES                            |                                                              |

\*Information received 7/17/86 at VI Health, Safety, & Environment Committee Meeting.

Note that the compositions of PVC Compounds were not discussed, but are likely to vary.

VVV 000004645

Action: Company representatives are requested to review the tables shown above and advise Ms. Scheck of any changes and/or revisions/additions needed to properly reflect their company's practices.

Mr. de la Cruz distributed a letter dated July 16, 1986 regarding OSHA regulation of PVC resins and compounds in which he reviewed a "less than satisfying" meeting with John Miles, Director of Occupational Safety and Health, Administration Directorate of Field Operations, and Roy Gibbs and Gail Brinkerhoff of the OSHA staff.

After a review of this meeting, it was agreed that Mr. de la Cruz should develop additional information to submit to the Agency. Dependent on the response Mr. de la Cruz, Dr. Gottesman, and Mr. Barr will brainstorm this and if OSHA is not forthcoming with a clarification on the status of PVC resin compound under the OSHA Vinyl Chloride Standard, we will ask for a meeting with the appropriate Agency personnel.

Action: Mr. de la Cruz will develop additional information to submit to OSHA and if necessary, make arrangements for an additional meeting with the Agency.

7. EPA Proposal of June 13, 1986 Regarding the Hazardous Waste Management System.

There was discussion concerning the proposal in the Federal Register of June 13th relating to EPA's Hazardous Waste Management System, identification and listing of hazardous waste, notification requirements and reportable quantity adjustments.

The representatives present indicated that no one currently has equipment to run the proposed TCLP tests. Messrs. King and Blackman indicated that they feel that there will be trouble with regard to both resin and waste materials. Mr. Ledvina indicated that Vista plans to have the old EP toxicity testing run on some streams to see what the results would be. It has not carried out any tests at this point. Mr. Barr indicated that while no tests have been run at Air Products, he has no doubts that any PVC containing greater than 1-2 ppm, will exceed 50 ppb of VC in the extract. Mr. Barr further noted that the teflon-lined vessels cost approximately \$1,000 each and probably have limited life.

Company representatives from the following organizations indicated that they will file comments on behalf of their companies:

Air Products and Chemicals  
Borden Chemical  
Occidental Chemicals  
Georgia Gulf  
Vista Chemicals

Mr. Holbrook indicated that BFGoodrich had made some equipment and carried out some tests and are proceeding to do others. They have tried to simulate the TCLP extraction procedure. Their initial results show that in general, process wastes from their PVC operations failed the TCLP test. Filter cake from the waste treatment plants has given mixed results, i.e., some passed and some did not. As regards products, except for latex, Mr. Holbrook believes that materials having a residual VCM of up to about 50 ppm will not give extracts exceeding 50 ppb VC.

It was agreed that the Vinyl Institute should be on record offering comments on this proposed rule. At Mr. Barr's suggestion, Dr. Gottesman spoke with Ken Kastner, an attorney at CMA who specializes in RCRA activity. He advised that the August 12th deadline for comments has been extended by 45 days on all factors except for the TCLP procedure. By statute, EPA indicates it must issue regulations regarding landfilling by November 8th and since the TCLP is involved in that regulation, it is not extending the date for comments on that feature.

A task force consisting of Mr. King as Chairman, Messrs. Barr, Ledvina, Blackman (or a designee from Borden), a representative to be named from Georgia Gulf, Mr. de la Cruz, and Ms. Scheck serving as staff will be responsible for developing these comments.

Action: Mr. King to convene this task group to develop comments on the EPA Hazardous Waste Management System proposed rule.

Action: Mr. de la Cruz to write-up comments for Dr. Gottesman's signature regarding the reservations expressed concerning the TCLP procedure.

Mr. Barr developed an outline for use by the task force which could serve as the basis for development of these comments. His outline is as follows:

I. General

A. Support

1. Degree of hazard.
2. Use of toxicity base.
3. Use route specific toxicity.
4. Quantitative levels.
5. No added safety factor on carcinogens.

B. Concerns

1. EPA Risk Assessment Programs.
2. 1,000 fold safety factor to no-effect level.
3. Oilwater coefficients.
4. Choice of candidates.
5. Use of proposed MCL.
6. Inadequate data base.

C. Definition of mismanagement.

D. Multiple Test System - May have to run two tests for container and solution.

E. There are 9 items that EPA is not ready on.

F. Conflicts with RCRA rules.

G. Conflicts with non-RCRA rules. Problem with sludge until EPA makes up its mind. Discussion regarding water and surface impoundments.

H. Impact analysis faulty.

II. Specific concerns for specific substances.

III. Specific questions.

IV. Test methods.

V. Specific products.

VI. Recommendations - Testing Methods  
- Listings

8. Update on PVC Solid Waste Disposal Subcommittee.

Mr. Ledvina advised that he had developed a survey form which has been sent out to companies for evaluation of their practices on land disposal of PVC. To this point, he has had six responses from five companies, and he anticipates having all information tabulated for presentation at the October meeting of the Vinyl Chloride Safety Association.

9. Discussion on Community Emergency Planning Activities.

Mr. Baker of Dow presented a video developed by the Texas division regarding the CAER (Community Awareness Emergency Response Program) in Brazosport, Texas. He indicated that the program is now being initiated in Texas and the video is being used on public broadcasting stations. Further information can be obtained from Tim Scott at (409)-238-2099.

Following this, there was discussion concerning establishing a trigger level for notification or evaluation of the public when there is a discharge of vinyl chloride monomer of significance.

It was established that none of the companies present have a trigger level, no one has such a level under consideration, and a community itself has never been evacuated although there have been instances at Dow and PPG where highways have been barricaded and temporarily closed. It is recognized that the real danger in a large VCM discharge is from fire and explosion rather than health effects on the community. By a vote of 8 to 3, the group voted against establishing a trigger level for notification/evacuation of the public based on health effects. It was also suggested that:

1. The Vinyl Institute should not establish a trigger level at this time.
2. Whether there should be community evacuation or highway barricading and closing is an "on the spot call", which must be based on safety considerations.
3. Mr. Baker is to determine whether ORC (the Organization of Resource Counselors) is going to establish a trigger level for VC.
4. Roy Gottesman is to advise the Executive Board of the Committee's recommendation at its September 10th meeting.

Mr. Borrelli provided the Committee with his thoughts for a Community Awareness Survey, which he proposes to carry out. This includes questions concerning the distance of a plant to the nearest community residence, whether the plant has an emergency plan which includes local community emergency response plans, elements of the plan, notification systems, etc.. It was agreed that Mr. Borrelli could proceed with this survey as proposed under the aegis of the Vinyl Institute, and that if the survey is complete before the Vinyl Chloride Safety Committee Meeting in October, it would be presented there.

10. Final Approval of Vinyl Institute VM Storage and Handling Guidelines.

Mr. Barr indicated that he has received final comments and is putting the revised draft of this document into final form.

Action: Mr. Barr is to send final draft of VCM storage and handling guidelines to Roy Gottesman.

Action: Roy Gottesman is to obtain legal approval and then submit this document to the Executive Board for their approval and issuance.

11. VCM NESHAPS Performance Tracking and Annual Awards.

After discussion, the group agreed on the following formula for calculating performance indices.

Performance Index For PVC Plants:

$$PI_{PVC} = 100 - \frac{RVCM \text{ Ex}}{RVCM} \quad 100 - \frac{ROL \text{ Ex}}{ROL} \quad 100 - \frac{VGI \text{ Ex}}{VGI} \quad 100 - RV - RD - MV - BPI$$

Where:

PI = Performance Index  
RVCM = Daily average of excursions on residual vinyl chloride monomer.  
ROL = Reactor opening losses.  
VGI = Excursions at the vent gas incinerator.  
RV = Number of relief valve discharges.  
MV = Number of manual venting discharges.  
RD = Number of rupture disk incidents.  
BPI = Number of incinerator by-passes.  
Ex = Excursion

Performance Index For VCM Plants:

$$PI_{VC} = 100 - \frac{VGI \text{ Ex}}{VGI} \quad 100 - \frac{Oxy \text{ Rx}}{Oxy \text{ Rx}} \quad 100 - \frac{By-Pass \text{ Hrs.}}{Operating \text{ Hrs.}} \quad 100 - RV - RC$$

It was agreed that the reporting would be by plant in January of each year for the preceding calendar year and that the performance index would be calculated to two decimal places.

Action: Mr. Holbrook will develop instructions for the collection of data and method of calculation. This proposed program will be presented to the Executive Board for approval at its next meeting.

12. Quarterly Safety Statistics Reporting.

Mr. Barr reported that some companies have not submitted their 1985 safety statistics and has requested that these be submitted as soon as possible.

13. Discussion of Plant/Worker Safety Action Information.

Mr. Waltemate of Goodrich provided a detailed description of the incident at Pedricktown, which led to an explosion and fire on May 13th. He also described the corrective measures which have been taken.

Mr. Barr reported on an incident a few days prior to the meeting at their Pensacola plant where electrical power was lost on both incoming lines. Reactors in progress were controlled by manual addition of chainstoppers and manual venting. When power was re-established about 5 hours later, all agitators could be restarted.

14. Company Discussion of Recent State and Federal Enforcement Activities.

The company representatives discussed their individual recent experiences regarding enforcement. Mr. Baker reported that in their Louisiana division, Dow had gotten a request under Section 114 of the Clean Air Act for information regarding their use of flares. Dow has filed suit against EPA indicating that it had properly reported all discharges to the flare and that all prior inquiries for information under Section 114 had led to suits by the Agency for violations. Per agreement with the Agency, the suit is being held pending resolution of a relief valve discharge case.

15. Discussion of "Air Toxics" Activities.

Under the date of January 20, 1986, CMA announced an Air Toxics Program complementary to their CAER Program. This program deals with both accidental releases and process emissions.

Pursuant to CMA's air toxics policy, it was indicated that Dow, PPG, Air Products and Georgia Gulf have old programs underway to evaluate existing environmental controls, and that they are taking another look at these programs in view of the CMA recommendations.

None of the companies are carrying out fault tree analyses pursuant to CMA's proposed air toxics policy and because the EDC/VC/PVC industries are so highly regulated, no one is planning to predict community health risks for their operation.

16. VI Participation in 1986 VCSA Meeting.

The Vinyl Institute will not be making a presentation at the Vinyl Chloride Safety Association Meeting as no invitation has been received.

Action: Roy Gottesman is to ask the Executive Board for approval to make available the Community Health Effects Document and the Handling and Storage Document to the members of the Vinyl Chloride Safety Association.

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17. Final Review of Committee Document.

The final draft of the Community Health Effects of Vinyl Chloride developed by a subcommittee consisting of Messrs. Holbrook, Barr, de la Cruz, and Gottesman was reviewed in great detail by the Committee and numerous changes were made.

Action: Roy Gottesman will arrange to have the final draft re-typed, submitted to Mr. Barr for his review, and then sent to Mr. Luss for legal approval.

18. Next Committee Meeting Date.

The next meeting of this Committee was tentatively set for October 8, 1986 in Washington, D.C. at the SPI offices. This is the day immediately preceding the Vinyl Chloride Safety Association meeting.

Action: Mrs. Scheck to make arrangements for this meeting.

The meeting was adjourned approximately 2:30 p.m. on July 18th.

*Roy J. Gottesman*

RTG/pmb

# VINYL CHLORIDE

CAS #75-01-4 UN1086

## DANGER!

- EXTREMELY FLAMMABLE—LIQUID AND GAS UNDER PRESSURE
- VAPOR HARMFUL—CANCER-CAUSING AGENT

## PRECAUTIONS

- KEEP AWAY FROM HEAT, SPARKS, AND FLAME.
- DO NOT BREATHE VAPOR. Cancer-causing agent; vapors can also cause lung irritation, dizziness, anesthesia, helplessness or unconsciousness.
- USE WITH ADEQUATE VENTILATION. Ventilation must be sufficient to minimize employee exposure to Vinyl Chloride below OSHA or PPG permissible limits (1 ppm 8-hour TWA; 5 ppm ceiling).
- AVOID CONTACT WITH EYES AND SKIN. Can cause frostbite and/or tissue damage due to rapid evaporation.
- DO NOT SWALLOW.
- DO NOT EAT, DRINK OR SMOKE IN WORK AREAS.

## +FIRST AID+

- INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.
- SKIN CONTACT: Wash with water, then soap and water while removing contaminated clothing and shoes. Vinyl Chloride's rapid evaporation rate can produce frostbite. For frostbite, do not rub but warm affected area by placing in lukewarm water. Exercise affected area afterwards. Give patient warm drink. If irritation persists, contact a physician. Thoroughly clean contaminated clothing before reuse or discard.
- EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.



PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

L115A-1A-1284C

SEE REVERSE SIDE FOR HANDLING AND STORAGE

NOTE: READ AND REMOVE TAG BEFORE UNLOADING

# VINYL CHLORIDE

CAS #75-01-4 UN1086

## FIRE

Extremely flammable liquid and gas. Immediately evacuate area. Only personnel trained and equipped with NIOSH/MSHA-approved self-contained breathing apparatus should be allowed in area. When burning, vinyl chloride forms toxic and corrosive fumes of hydrogen chloride. Try to shut off source of leak. For small fires, use carbon dioxide or dry chemical. Cool equipment exposed to fire with water spray.

## EXPOSURE

INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. SKIN CONTACT: Wash with water, then soap and water while removing contaminated clothing and shoes. Vinyl chloride's rapid evaporation rate can produce frostbite. For frostbite, do not rub but warm affected area by placing in lukewarm water. Exercise affected area afterwards. Give patient warm drink. If irritation persists, contact a physician. Thoroughly clean contaminated clothing before reuse or discard. EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

## SPILL OR LEAK

Evacuate area, remove all sources of ignition and provide maximum ventilation. Only personnel equipped with appropriate respiratory and skin/eye protection permitted in area. Shut off source of leak and spill material to evaporate. Then flush area of spill with plenty of water and maintain ventilation until vapors are eliminated.

## EMERGENCY

Transportation Incident: Contact CHEMTREC at (800) 424-9300. In all other emergencies, contact PPG Industries, Inc., Natick, WV (304) 843-1300.

## DANGER!

- EXTREMELY FLAMMABLE—LIQUID AND GAS UNDER PRESSURE
- VAPOR HARMFUL—CANCER-CAUSING AGENT

## Handling and Storage

- For details on handling, please refer to PPG brochure Vinyl Chloride Monomer Handling and Properties (A-994-115).
- Store away from direct sunlight and other sources of heat.
- Avoid contact with flames, hot glowing surfaces or electric arcs.
- Before unloading, purge oxygen from unloading system.
- Do not use in poorly ventilated or confined areas.
- Container and system must be electrically grounded before unloading.
- Wear appropriate respiratory and skin/eye protection in any case where exposure may be above recommended limit.
- Adequate ventilation must be maintained in storage area to reduce fire hazard in the event of a leak.
- For additional product information, contact PPG Industries, Inc.



PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

Made in U.S.A.  
© 1984 PPG Industries, Inc. L115A-1A-1284C

SEE REVERSE SIDE FOR PRECAUTIONS AND FIRST AID

## VINYL INSTITUTE HEALTH, SAFETY, & ENVIRONMENT COMMITTEE

The Grand Hotel  
2350 M Street, N.W.  
Washington, D.C.

Tuesday  
May 27, 1986  
1:30 p.m.

### Attendees:

|                          |                          |
|--------------------------|--------------------------|
| W. C. Holbrook, Chairman | B.F. Goodrich            |
| J. T. Barr               | Air Products & Chemicals |
| W. Bailey Barton         | Borden Chemical          |
| N. M. Blackman           | Borden Chemical          |
| F. E. Borrelli           | Georgia Gulf             |
| P. de la Cruz            | Keller & Heckman         |
| A. Gellner               | CertainTeed              |
| J. Kachtick              | Occidental Chemical      |
| J. Ledvina               | Vista Chemical           |
| R. R. Oubre              | Dow Chemical             |
| M. N. Scheck             | The Vinyl Institute      |

### OLD BUSINESS

1. VI Submissions To EPA on Three Source Assessment Documents. Holbrook noted that he is still receiving calls from EPA staff resulting from the VI comments on three source assessment documents (Source of Ethylene Dichloride Emissions Sources; Survey of Carbon Tetrachloride Emission Sources; and Survey of Trichloroethylene Emission Sources). He further noted that he has been told that analysis of the details on the returns of the 112 letters is continuing.
2. Update on Vinyl Chloride Standard. It was noted that both the states and the EPA Regional Offices are reluctant to surrender any authority they presently hold on this issue. The Committee noted that it appears unlikely that the proposal will appear in the final form prior to the final disposition of the NRDC law suit.
3. VI OSHA Recordable Statistics Survey. Results of the VI survey were reviewed by Barr. Scheck noted that the first and second place winners in each of the two categories would be receiving certificates at the Annual Meeting dinner. Barr commented that three member companies had not submitted data (PPG, Occidental, and CertainTeed).

Action Item: Scheck to write to the Board Members of those three companies that had not submitted data to request that they do so, pointing out that the information would be useful next year in compiling comparisons between 1985 and 1986.

4. Update on Community Health Effects Brochure. Holbrook stated that he and Barr are to meet with Gottesman on June 24th to spend the day developing the brochure material. Holbrook noted that the following assignments had been made:

Gottesman to prepare "historical background"; Barr to prepare section dealing with EPA and OSHA standards; B. Hinderer (BFG) to prepare an evaluation of reports in the literature on health effects; Barr to prepare a summary on the risk assessment section. The Committee discussed what can most appropriately be included in the risk assessment section. It was further noted that CMA is still completing the updating of medical records, with finalization anticipated by the end of the year.

Action Items: Scheck to send to Holbrook dispersion modeling data and Barr's papers as submitted to EPA prior to the June 24th meeting.

Borrelli to send copy of a speech he recently gave on the above-referenced subject to Scheck for distribution to the Committee.

5. Review of Meeting with the Delaware Department of Natural Resources and Environmental Control. Borrelli reviewed the meeting with Secretary Wilson of the Delaware DNREC and his staff. The Committee discussed the effectiveness of the monitor installed in Delaware City. Borrelli noted that the monitor was triggered in the recent Georgia Gulf release. The Committee discussed the effectiveness of other monitors used with the industry.

Action Item: As follow-up to the meeting with the State of Delaware, Holbrook asked Scheck to make certain that the material he had forwarded to Gottesman for further forwarding to the State had been done. Also, it was noted that the Task Group had promised the Community Health Effects Brochure mentioned in #4 above to the State upon its completion.

6. Review of Draft Document: Recommendations for the Storage, Shipping and Handling of Vinyl Chloride. Barr noted that he had received some comments from members of the Committee and that he has amended the draft to reflect these comments. Barr requested that any others interested in commenting, do so in the near term (some comments were given to Barr at the meeting). Following a discussion on concerns expressed relative to this document as a "standard" or as a "guideline", it was decided that in addition to review by the HSE Committee, that appropriate review by the Legal Committee and Legal Counsel would occur at the appropriate time.

Action Item: Reviewed draft of paper being developed will be disseminated to members of the Health, Safety & Environment Committee and to the VI Legal Committee, as well as VI Counsel.

7. Status Report on Jacobs Engineering/Versar Report. It was noted that the final draft does incorporate some of the VI comments and that the meeting with the contractor had been beneficial.

Action Item: Oubre and Holbrook to forward copies of final draft to Scheck for distribution to the Committee.

8. Status Report on RDA-PVC Proposal. de la Cruz noted that the comment period was extended upon request to June 5th. To this date, there have been no adverse comments submitted. Counsel noted that the docket is being monitored by Counsel.

The Committee discussed the segments of the proposal dealing with water pipe RVCM levels.

#### NEW BUSINESS

1. Request For Information on Solid Waste. Ledvina reviewed the request for technical information that had been received from Diamond Shamrock by the VI through the SPI Technical Department. A copy of the letter was distributed at the meeting. Ledvina noted that he believed the items raised in the letter are questions of the future and that it would be helpful to gather the necessary background information. (Information on a worldwide basis that includes data from VI and non-VI companies). It was noted that the most effective manner in which to gather the information would be through the Vinyl Chloride Safety Association.

Action Item: Ledvina to contact Larry Payton (Program Chairman for the VCSA). It was decided that this would most appropriately be done under a legal banner with the survey being distributed in June 1986, with returns to Keller and Heckman. In this way, the results of the survey could be presented at the VCSA Annual Meeting on October 9-10, 1986 in Washington, D.C.

2. Community Evacuation - VCM Concentration Trigger Level. The Committee discussed in general, the programs that have been developed in conjunction with the CAER Program, with particular discussion on whether any companies have developed evacuation plans.

Action Item: Borrelli to contact Payton regarding VCSA questionnaires and the CAER Program.

3. VCM NESHAPS Compliance Data. The Committee discussed the appropriateness of collecting on a routine basis, VCM NESHAPS compliance data as reported to the EPA. The Committee decided that this would be appropriate data for the VI to collect, and further that an award should be given by the VI at the Annual Meeting for compliance.

Action Item: It was decided that Chairman Holbrook would make a presentation at the Annual Meeting on May 28, 1986 and seek Board approval for such a program.

4. Company-By-Company Review of VCM NESHAPS Enforcement Actions. Committee members discussed recent enforcement activities. No follow-up is required by the committee.
5. Establishment of East Coast VCM Transportation Emergency Response Team. Borrelli reviewed his ideas relative to the establishment through the VI of a VCM Transportation Emergency Response Team for the East Coast. The Committee decided that this discussion more appropriately fit within the scope of CMA's CHEMTREC Program.

6. Pantasote ASL Case. Barr reviewed the recent litigation filed by a relative to ASL case by an employee in a fabrication plant with limited monomer exposure.

Action Item: Barr to continue to monitor case and to keep the Committee informed.

7. Pedricktown Accident. Holbrook reviewed the events that had occurred recently at BFGoodrich's Pedricktown Plant.

8. Container - PVC Labels Under the Hazard Communication Standard. de la Cruz reviewed recent communications with the Occupational Safety and Health Administration relative to the above-referenced subject.

Action Item: Scheck to distribute copy of May 23rd letter from de la Cruz to Gottesman on the subject. (This letter had not been received prior to the Committee's meeting).

9. EDC In Groundwater.

Action Item: Due to time constraints, it was decided to hold discussion on this item until the next meeting. Barton to make presentation on this item at that time.

10. Next Meeting.

Action Item: It was decided that the Committee members should plan on quarterly meetings, unless there is some more urgent reason for the Committee to convene. The Committee Chairman will select the date and location of the next meeting in consultation with VI staff.

There being no further business, the Committee was adjourned until the next meeting.

Respectfully submitted,



Meredith N. Scheck

# agenda

File: VI

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## P R E L I M I N A R Y    A G E N D A VINYL INSTITUTE HEALTH, SAFETY & ENVIRONMENT

Charlotte, North Carolina

Thursday, July 17, 8 am - 5 pm  
Friday, July 18, 8 am - 4 pm

1. Self Introductions and Approval of Minutes Group
2. Company by company discussion of EDC groundwater considerations including but not limited to: Group
  - a) monitoring
  - b) regulatory initiatives
  - c) RCRA considerations
  - d) remediation activities
3. Company by company discussion of inadvertent PCB generation in EDC/VCM manufacture including but not limited to: Group
  - a) monitoring results
  - b) analytical methods
  - c) registration per TSCA
  - d) NPDEs considerations
4. Update on EPA's EDC Hazardous Air Pollutant Regulatory Development P. de la Cruz
5. Update on EPA's VCM Hazardous Air Pollutant Regulatory Development P. de la Cruz
6. Company by company discussion of VCM/PVC/PVC compound Labeling pursuant to OSHA VCM and Hazard Communication Standards Group
7. Development of comments regarding EPA's June 13, 1986 (FR 21648-21693) proposal to list PVC as a RCRA Hazardous Waste Group
8. PVC Solid Waste Disposal Subcommittee Update J. Ledvina
9. Company by company discussion of community emergency planning activities. Consideration of establishing an industry developed community VCM evacuation trigger level. Group

- more -



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- ~~10.~~ Company by company discussion of "Air Toxics" activities Group
- ~~11.~~ VCM NESHAPS performance tracking and annual VI awards W.C. Holbrook
- ~~12.~~ Quarterly safety statistics reporting to VI and Annual VI awards J. Barr
- ~~13.~~ Final Approval of VI VCM storage and handling guidelines J. Barr
- ~~14.~~ Company by company discussion of plant/worker safety/ accident information Group
- ~~15.~~ VI Participation in 1986 VCSA Meeting Group
- ~~16.~~ Company by company discussion of State/local/ federal enforcement activities Group
- ~~17.~~ Final review of committee document: Community Health Effects of Vinyl Chloride Group
18. Next Committee Meeting Date
19. Adjournment

Please note that adjournment is scheduled for no later than 4 pm on Friday, July 18.