



Interoffice Communication

To : Distribution

From : J. V. Uptain ✓

Date : November 30, 1976

Subject : Vinyl Chloride Safety Association (VCSA)
Trip Report, November 18 & 19, 1976

The VCSA meeting was held in Denver, Colorado. A total of 73 people, representing 24 U. S. Companies and nine foreign companies were in attendance. Conoco Chemicals was represented by R. A. Fronreich, E. C. Gremillion, and J. V. Uptain.

In summary, the meeting was informative, with good exchange of information between companies. The meeting dealt with OSHA and EPA compliance, transportation problems, industrial hygiene, the safe use of large reactors, job safety analysis, motivation, training, and balancing productivity versus safety. Following is a brief summary of the highlights of the meeting.

I. VCM TRANSPORTATION PROBLEMS - Speaker: Jim Ferrell, Pantasote

- A. All companies handling hazardous materials should get the pamphlet "Hazardous Materials-Emergency Action Guide, 1976", by the U. S. Department of Transportation.
- B. Emergency Response systems were discussed. Dow has a system whereby Dow telephone number is printed on each rail car and a response team is on standby.
- C. DOT is expected to establish very stringent regulations on VCM within 15 months.
- D. Unloading problems were discussed. PPG purges with N₂ and has had no problems. Pantasote does same at a barge facility but has been unable to reduce total emission to less than one gallon. Goodyear uses Corken compressors to evacuate lines and is working on a system of mechanical seals.
- E. Pantasote has been cited by OSHA at a barge facility for not keeping area logs. They have fixed regulated area signs, but don't consider the facility a regulated area except when a barge is present, because of low VCM levels. OSHA takes the view that the facility should be regulated at all times. Situation complicated by Coast Guard's attitude that barge is under their jurisdiction at all times.
- F. The problem of VCM rail car security was discussed. Several companies are trying to lease outside trackage on a long-term basis and fence it in.

Most agreed that in-plant VCM storage is more secure. Several companies are considering cable-type seals, because of vandalism experienced with present "car seals". One company cited for failure to have a 24 hour patrol on cars on trackage outside the plant.

II. MUTUAL RESPONSE TO TRANSPORTATION ACCIDENTS - Speakers: Thomas Moore, Tenneco
Bob Wilson, Stauffer

The purpose and methodology of CHEMTREC was reviewed by Bob Wilson. He emphasized that by calling CHEMTREC at (800) 424-9300, anyone can find out immediately the basics of coping with particular hazardous chemical emergencies.

A current proposal is that when alerted to a given emergency, CHEMTREC would make every effort to contact the shipper and advise them of the nearest emergency response team. If unable to contact the shipper, they would contact "someone else who is nearest". The prime responsibility for responding to the emergency is the shipper's. The Association of American Railroads has threatened to apply pressure for DOT regulation to force the issue if the proposal is not adopted.

Pentastote's ~~position~~ (also expressed by Tenneco) is that they will ~~act~~ strictly in an advisory capacity. They further believe that only people who can qualify as "experts" in court should be sent to emergency scenes to give advice. The discussion continued along the lines of legal responsibility.

The Compressed Gas Association is developing an emergency kit for covering VCM railcar domes.

The new "Flammable Gas" placard for railcars and trucks was reviewed. Regulations will require use of this placard as of July 1, 1977, although conversion may be made ahead of that date.

DOT is expected to announce (within 2 weeks) a stringent regulation on the design of railcars for compressed gas service. Included will be requirements for head shields and a thermal insulation jacket. Stauffer believes the conversion will require \$10,000 per car and reduce car capacity.

When asked, three companies stated they have "formal" programs for training outside agencies, such as city fire departments, in handling VCM problems.

III. SPECIAL PROBLEMS WITH LARGE REACTORS - Speaker: Norman Fahnoe, Diamond Shamrock

Diamond Shamrock's basic approach to large reactor safety is the same as with small reactors. They utilize:

- A. Job Safety Analysis - On most serious tasks. They have "over 300" JSA's that "are kept up to date".

- B. Lockout procedures.
- C. Deluge and Fire Systems - Deluge trips @ 20% of LEL, alarms @ 50%.
- D. Standby electric generators - Fourteen companies have standby electrical for agitation.
- E. Redundant rupture disc/relief valve systems.
- F. A "Quick Kill" system - Agent is charged to reactor in five (5) seconds or less. Can be activated remotely.
- G. Direct line telephones for use during reactor entry (accomplished every 3 batches).
- H. Life lines and harnesses - used during vessel entry.
- I. Double blocks and bleeds.
- J. Manway standbys - 30+ companies use.

IV. CATALYST HANDLING - Speaker: Glen Schaaf, B. F. Goodrich

Major points of interest were:

- A. B. F. Goodrich uses a "Catalyst Committee", similar to that set up by NFPA.
- B. They have set up a hazard classification system similar to Factory Mutual's.
- C. They now use horizontal freezers and handling incidents have been reduced as a result.
- D. No companies reported having any storage failures during the past year.

V. INDUSTRIAL HYGIENE - Speaker: J. D. Torry, OSHA

Mr. Torry reviewed the history of OSHA, the VCM regulation, the role of NIOSH, current trends in OSHA thinking, and new regulations. Some points of interest were:

- A. Standards relating to carcinogens or suspected carcinogens require concentrations to be "as low as possible".
- B. For the most part, "ceiling" values, which are not to be exceeded at any time, are measured over 15 minute periods.
- C. The purpose of the "Action Level" is to alert you to a problem "that is developing".

- D. The proposed noise standard will require audiometric testing above 85 DB.
- E. OSHA expects employees to keep records of all exposure measurements.
- F. The two methods of exposure monitoring are calculation and actual measurement.
- G. Regulation expected during 1977 include those on toluene, benzene, cotton dust, trichlorethylene, chloroform, carbon monoxide, noise and "carcinogens" (NIOSH thinks there are about 100 suspected carcinogens). "Guidelines" are expected for lead, mercury, and crystalline silica.
- H. OSHA's position on beards is:
 - 1. OSHA can't require a man to shave his beard.
 - 2. If you transfer or terminate a man because he refuses to trim or remove his beard, OSHA will uphold your decision.
- I. Ultimately all citations will be reviewed by one OSHA group to eliminate disparity between regions.
- J. If an employee violates an established employer rule, OSHA will hold the employer responsible.

VI. EPA REGULATION - Speaker: Bill Madden, Firestone

Mr. Madden reviewed the current status of the regulation. In doing so, several points worth noting were made:

- A. If a company has any alternate procedure it wishes to use, it should apply for the alternate and submit a waiver request. "EPA cannot terminate a waiver".
- B. There appears to be differences in EPA regional approaches to the regulation.
- C. Except for handling waiver requests, states can take over. They can be as strict or more strict as EPA, but never less so.
- D. "EPA enforcement people have purportedly made the following statements:
 - 1. Enforcement guides will be coming out after the 90 day period.
 - 2. Equivalent methods will not be approved if the other methodology will result in quicker compliance.

3. All plants will be inspected within a year. At least 24 hours notice will be given.
4. An "Excess Emission" is anything over 10 ppm. "It must be reported to EPA".
5. Enforcement action is likely if a plant reports that it is in compliance, but EPA testing shows otherwise.
6. EPA will determine if error was avoidable.

VII. OSHA - Speaker: Joe Degenfelder, Borden

- A. Variances - No company reported having received positive action on variance requests.
- B. Inspections -
 1. 12 companies received OSHA inspections since April 1, 1976.
 2. 2 companies received 2 or more.
 3. 16 companies had none.
- C. Cannister Windicators - There is evidence that OSHA won't cite for the lack of windicators, although the deadline was not extended beyond October 31, 1976.
- D. Cases Related to Regional Differences
 1. Ethyl reported a case in which an OSHA inspector turned off a personnel monitor while an employee wore a respirator.
 2. Two cases (one of them reported by Tenneco) of OSHA inspector turning off personnel monitor when employees left regulated areas.
 3. One citation was mentioned because an employee touched reactor residue without wearing gloves.
 4. In one case, OSHA admitted sampling error when confronted with company samples made at the same time which contradicted the OSHA results.

VIII. JOB SAFETY ANALYSIS - Speaker: H. Loyd, Georgia Pacific

Mr. Loyd reviewed job safety analysis as practiced at Georgia Pacific. They like the system and advise working on critical hazards first. Ten other companies reported that they too use JSA.

IX. JOB SAFETY, MOTIVATION AND TRAINING - Speaker: Tom Zielinski, Hooker

Mr. Zielinski reviewed their efforts in upgrading their motivation and training as a result of 2nd, degree burns to two people caused by decomposition of catalyst. One aspect of their efforts was a series of employee interviews conducted by a "human resources company". The results of that survey indicated that employees wanted:

- A. More training
- B. A change in shift schedules
- C. Football/softball programs
- D. A newsletter
- E. A Labor-Management Safety Committee
- F. A Safety Awards Program
- G. An incentives program
- H. First aid training



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 - R. T. Ferrell, Okla. City
 - G. G. Draper, Aberdeen
 - J. A. DeBernardi, Lake Charles VCM
 - R. A. Frohreich, Okla. City
 - C. E. Gremillion, Lake Charles VCM
 - Bill Henry, Okla. City