UNION CARBIDE

INTERNAL CORRESPONDENCE

D XC [redacted] RECEIVED JUN 29 1983 J. E. LAWRENCE

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UNION CARBIDE CORPORATION TECHNICAL CENTER
P O BOX 8361 SOUTH CHARLESTON, WV 25303

RECEIVED JUL 8 1993 S. G. AUSTIN, Sc.D.

To: Mr. T. E. Lawrence
Division: Section K1467
Location: Danbury
Area:

Date: June 24, 1983

Originating Dept.:

Area:

Subject: Chemical Regulation Reporter, May 27, 1983 - "OSHA Vinyl Chloride Case Was Lesson To Heed Animal Data, Infante Maintains"

cc: Mr. T. W. Carmody - P2595
Mr. L. A. Crisorio - P2598

Dr. Infante states that Dr. Viola's studies were kept confidential to avoid over-reaction by the Department of Labor and NIOSH. He cites the source as being from internal Union Carbide Corporation correspondence.

Attached is the correspondence he refers to. This was provided to the law firm of Levinson, Conover, Fink and Axelrod in the case of Maliko, et al. versus Union Carbide Corporation during discovery and production of documents. They, in turn, made it available to Dr. Samuel Epstein. Contrary to normal rules of confidentiality, Dr. Epstein used it in his other work as professional expert witness and author. I have objected to our attorneys Pitney, Hardin and Kipp about this use, but to no apparent avail.

Considering that the memorandum is now in the hands of the "scientists" it will be quoted eternally.

R. N. Wheeler

R. N. Wheeler, Jr.

RNWJr./rhw

Attachment

UCC
014718

MEMORANDUM

November 23, 1971

TO : Dr. C. U. Dernehl, NYO-4
Mr. M. E. Eisenhour, 515
Mr. R. J. Hanna, 511
Dr. E. O. Hull, 514
Mr. G. R. Kraft, 514
Dr. K. S. Lane, NYO-4
Dr. W. R. Manning, 511
Dr. A. B. Steele, NYO-28

SUBJECT: Manufacturing Chemists Association
Occupational Health Committee -
Vinyl Chloride Conference

Companies with interest in vinyl chloride were invited to send representatives to consider the following:

1. Continuation of the Acroosteolysis Registry Program.

2. Review the reports of Dr. P. L. Viola on the development of tumors in rats exposed to vinyl chloride monomer gas.

3. Consider sponsoring a research program in the U.S. to confirm and to provide additional data in Doctor Viola's study area. The proposed program would cost approximately $100,000 per year.

The meeting attendance was light with about 30 people present. A full list of those attending will be issued later by MCA.

Continuation of the Acroosteolysis Registry Program was estimated to cost $300 to $500 per month, depending on the case load. The program has cost $4,000 for eighteen months operation to date. A firm budget for future operation was not available at this time.

UCC
014719

013-1995-00004594

Lake Charles, LA
Volume 1, Issue 3
August, 1995

the Stevedore

PPG & Vista – Partners in New VCM Facility

PPG Industries and Vista Chemical Company announced in June 1995 the formation of PHH Monomers, a jointly-owned company that will expand the vinyl chloride monomer (VCM) production capacity at PPG's existing Lake Charles facility.

The project is owned equally by Vista and PPG and builds on a 25-year customer-supplier relationship between the two companies. This strategic alliance is designed to capitalize on each company's position in the chlorine/ethylene/vinyl chain. It will result in a major expansion of the present PPG VCM plant and enhance the cost competitiveness of both companies.

The capacity of the PHH Monomers plant is expected to be 1.15 billion pounds per year, an increase of 500 million pounds from the current PPG plant capacity. The expansion is targeted for completion in the first quarter of 1997.

"The project will enable the retention of existing jobs at both the PPG and Vista facilities and ensure the continued economic contribution of these plants to the Southwest Louisiana economy," said Tom Brown, PPG works manager. "In fact, when completed in 1997, the new plant will mark 50 years of continued involvement by PPG in the community and its economic expansion," he added.

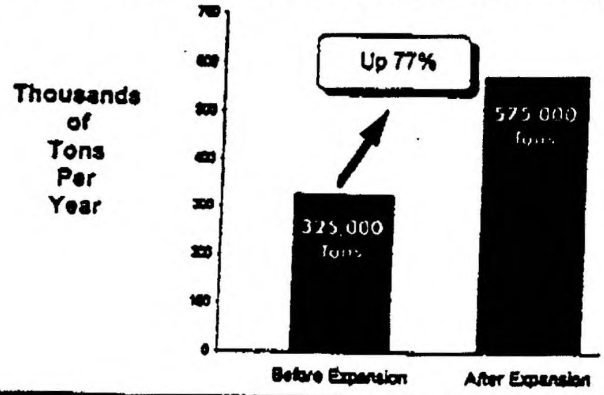
"The increased VCM capacity is integral to Vista's ongoing expansion of its polyvinyl chloride (PVC) business," according to Pat Jernigan, vice president and general manager operations, for Vista. "The formation of PHH Monomers will make it possible for Vista to pursue growth and competitiveness strategies we believe are necessary in today's marketplace," Jernigan said.

PPG Industries, headquartered in Pittsburgh, Pa., is a major global producer of chlor-alkali and derivatives and specialty chemicals, coatings and resins, flat and fabricated glass, and fiberglass.

Vista produces recyclable PVC resins and compounds used to fabricate a variety of consumer and industrial products, including wire and cable coatings, pipe and fittings, wallcoverings, and automotive parts. Vista, headquartered in Houston, is a wholly-owned U.S. subsidiary of RWE-DEA AG for Mineralöl und Chemie of Hamburg, Germany.

RWE-DEA is the petroleum and chemicals arm of RWE AG, a diversified energy and technology group based in Essen, Germany.

VINYL CHLORIDE MONOMER PRODUCTION CAPACITY



Now you know!

The vinyl industry has more than a 50-year documented record of safe performance and has one of the most closely regulated production processes in existence. Vinyl is one of the most time-tested synthetic materials in use.

Study after study has confirmed there is no evidence that vinyl affects human health – not for workers in the industry, not for people living near vinyl-related manufacturing facilities, not for those who use the hundreds of vinyl consumer and industrial products.

JAN 13 1975

UNION CARBIDE CORPORATION
CHEMICALS AND PLASTICS
P. O. BOX 8004, SOUTH CHARLESTON, W. VA. 25303

SOUTH CHARLESTON PLANT

January 10, 1975

CONFIDENTIAL
Subject to Protective Order in
Ross v. Conoco, Inc., No. 90-4837
14th Judicial District Court
Calcasieu Parish, Louisiana

Mr. Milton Freifeld
Manufacturing Chemists Association
1825 Connecticut Avenue, N. W.
Washington, D. C. 20009

Subject: Supplementary Analysis of
Vinyl Chloride Worker Mortality
by Tabershaw/Cooper Associates

Dear Mr. Freifeld:

Union Carbide Corporation has completed the search of the payroll records at its South Charleston, West Virginia plant, and has identified 3,103 persons as having been exposed to vinyl chloride in their working environment. These records are available for copying and/or inspection by Tabershaw/Cooper Associates. The actual number of these workers' records used by TCA in the original study is not clear but we think they used 459. These vinyl chloride exposure records start at South Charleston in 1928.

Tabershaw/Cooper Associates, in their study proposal for these records, would like to start with those employed on January 1, 1946 or later. While their reasons for this cut-off date are certainly valid, this fails to fully utilize valuable information. The whole data base here is equal to half the population in the original TCA study. The plant at South Charleston has always had a relatively low labor turnover rate and has been under Social Security since its inception in 1936. Except for the problem of establishing cause of death or locating the individual, I don't feel that the reasons TCA advance for a 1946 cut-off date are serious enough to merit full acceptance of their proposal. If the degree of difficulty cannot be used for establishing a cut-off date, then a cut-off of January 1, 1940 might be reasonable in that this was the beginning of a rapid expansion of vinyl resin employment. After consuming about 400 manhours searching 50,000 employment folders, elimination of a major fraction of the data by TCA is not likely to aid future studies at South Charleston.

Very truly yours,

R. N. Wheeler, Jr.

RNWJr/ra

(Distribution Attached)

CONFIDENTIAL
Subject to Protective Order in
Ross v. Conoco, Inc., No. 90-4837
14th Judicial District Court
Calcasieu Parish, Louisiana

COPIES TO:

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Uniroyal, Inc.
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Dr. M. N. Johnson
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9008 Building
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CARL R. HOPPER

CMA - VINYL CHLORIDE TECHNICAL PANEL MEETING

March 4, 1980

I. Attendance

Torkelson	--	Dow (Chairman)
Seawell	--	CMA
Kiskland	--	Shell
Wheller	--	Union Carbide
Parks	--	Firestone
Broddle	--	Conoco
Abramowitz	--	Hooker
Gabbett	--	Georgia Pacific
Cohen	--	Great American
Harris	--	Uniroyal
Sauerkoff	--	Stauffer
Johnson	--	Goodyear
Wen	--	Gulf
Hopper	--	Gulf
Bell	--	PPG
Reed	--	Tenneco
Blakeslee	--	Certain-teed

II. Agenda

1.0 Status - 5 yr. update, basic epidemiological study by Equitable Environmental Health, Inc. (EEH)

2.0 Review of plans for raw data assessment and evaluation by EEH for brain study and 5 year update.

3.0 Review of the preparatory work for the OSHA March 20, 21, 1980 VCM & PVC Conference in Bethesda, Maryland.

4.0 Status Report on current research.

a. Domestic
b. International

III. Discussion

A. Agenda reference 3.0.

Discussion on the OSHA/NIOSH/NIEHS Conference. Tentative schedule is supplied.

1. Epidemiological study of VCM by EEH/MCA was accepted for the conference.

2. Other data not accepted by OSHA

a. Review of sarcoma records for VCM.
b. Statistical review of Mattoni's paper.
c. Other study, but could not remember exact study.

3. Extention to May 9, 1980 - deadline for OSHA request for information.

4. Rumor - Joe Wagoner has a bomb shell to drop. OSHA trying to build a record for standard for PVC dust and possible to lower level of exposure to vinyl chloride.

5. Symposium, in an open forum, seats 400 people. Reserve early to participate.

B. Agenda reference 1.0

VC Epidemiological Studies

1. Do not have to use EHA as the contractor, but can ask for bids.

2. Timing of follow-up of brain cancer cases is critical. Controversial issue here, thus need to act quickly.

3. Need agreement of 31 companies to update data. Taking list of survivors in 1972 and checking to see what deaths have occurred. (5 year update)

4. Comment that we may find out what we do not want to know with regards to brain cancer. If company has a brain cancer questionable incidence, which Union Carbide has, then should people be contacted. Union Carbide does not want any contact with families.

5. Proposed and seconded that middle paragraph on Page 4 of CMA will be deleted and that middle paragraph Page 2 of EHA will be inserted with changing of the wording of may be to will be. Last sentence is deleted from this paragraph. This was accepted by the group.

6. Dr. Wen pointed out that we do not have a protocol that provides a case control study. This was acknowledged by Dr. Torkelson. It was noted by Mr. Seawell that data was moved from Rockville, Maryland to EHA in California.

   a. Should consider what else could cause brain cancer, besides vinyl chloride. Six of the 12 cancers reported are in Louisville.
   b. Is there another approach besides a case control? Dr. Wen stated that it is more efficient and economical to perform the case control study. For a case control study need to consider health factors such as life style, smoking, family interviews, etc. If there are doubts as to the 12 cancer cases, need to clarify the existing data. If brain cancer believed to be due to VCM, then should do a case control study. Dr. Wen, recommends to do a case control on the 12 cancers, and then a follow-up of case controls on any other brain cancers uncovered in the 5 years update. Discussion followed.
   c. Dr. Wen motioned and was seconded that we request a revised protocol with a cost estimate for a proposal for a case control study. What we need is a statistical evaluation, instead of a clinical evaluation. Motion passed-cost to be roughly $30,000 to $40,000.
   d. What we don't know is whether those people with brain tumors had other types of tumors. Also, don't know what type of brain tumors these 12 are. All of cohorts are white males. For a case study need to match up certain parameters, but not all.

CUSAROSS 02459

Carl R. Hopper

CMA - VINYL CHLORIDE PROJECT PANEL MEETING

March 18, 1980 Washington, D.C.

1. General Remarks

a. Meeting chaired by Ed Frost, CMA General Counsel. Also present was David Zall, CMA Attorney.

b. The Busey Report (EPL - Vinyl Chloride Pathology Report of the IBT data) was evaluated by an attorney of Union Carbide, Mary Manette, and concluded that there is a possible 8(e) consideration here. This was determined on March 13, 1980, but Mr. Wheeler of Union Carbide stated that Carbide's position has not been crystallized yet. In particular, Carbide is concerned with the rat brain data and the incidence of Neuroepithelioma (primary brain tumor).

c. Initially, there was no consideration of an 8(e) report when the Busey Report was submitted. Also, no consideration was given at that to it being submitted to the governmental agencies. In addition, this report, for some reason, was not widely distributed beyond the audit group??

2. Background: IBT/CMA vinyl chloride inhalation study.

a. Project began in 1973 with three species and three dose levels. An interim report "IBT-23 months Status Summary to MCA Chronic Vapor Inhalation Toxicity Study with Vinyl Chloride in albino rats, albino mice, and golden hamsters. September 23, 1975 IBT 663-03222" was made to CMA and later disclosed to a lower level EPA employee on January 14, 1977. (Copy to be obtained). This interim report only indicated suspected gross lesions. For male rats three brain lesions were reported in the high dose group (T-3). For female rats and male and female mice, no brain gross lesions were reported. There is question as to whether the interim report clarifies that the three gross brain tumors were found in only six observed rats. It was felt by those present who had looked at the interim report that this could not be determined.

b. An audit of the IBT study by Experimental Pathology Laboratories (Dr. Busey) indicated that:

1) Angiosarcoma effect in all species at all levels
2) Primary lung tumor effect in mice
3) A carcinogenic effect on the Zymbal's gland of the rat.

Besides the above, this audit indicated that in the high dose male rats (T-3), only 23 brains were counted with six examined microscopically. Of the six, three indicated primary brain tumors (neuroepitheliomas). Also, for the middle dosed male rats (T-2), 23 brains were counted with 18 examined microscopically with 1 of the 18 determined to have a neuroepithelioma.

It was noted that in this particular rat strain, primary brain tumors occur from 0% to 3%. In the IBT study, there was 100 animal/doses/sex, if no more than three brain tumors per sex/dose level are determined then they would fall within a statistical norm. This problem can only be resolved by histpathological

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evaluation of all the brain tissues, as indicated by several of the individuals present. However, it appeared that some individuals were not particularly in favor of the approach.

3. Disposition of Busey Report.

a. Initially Dr. Busey recommended in the EPL Vinyl Chloride Pathology Report, January 9, 1979, that no further pathology work be done on this study. This was because of the serious deficiency in the number of tissue saved. However, in a meeting with CMA-VC audit task group on March 21, 1979, Dr. Busey reversed his recommendations and indicated that in light of recent epidemiological data further pathology work should be performed.

b. It was mentioned at this time by Ed Frost that he had heard that Joe Wagoner had evidence that he believes will sink CMA. Dr. Wagoner is the last speaker at the two day government vinyl chloride meeting, representing EDF.

c. Ed Frost pointed out what he, as the CMA representative, considered the two critical issues to be addressed.

1) The disposition of the Busey Report should be made available to government agencies in a low-keyed way as soon as possible. He recommends to draft a letter this afternoon and send out the report tomorrow to the six government agencies that received the IBT interim report: OSHA, CPSC, EPA, HEW, FDA, and NCI.

2) Additional treatment and disposition of the IBT data should be considered, particularly the remaining brain tissues.

d. It was motioned, seconded, discussed and approved that a letter be drafted as discussed and be sent along with the Busey Report (EPL - Vinyl Chloride Pathology Report) to the six indicated government agencies.

e. Mr. Wheeler of Union Carbide stated that there are no working connections between any brain tumors observed at Texas City and VC working conditions.

f. Question raised concerning 8(e) reporting and whether this sending of the Busey Report eliminated a company's obligation, if any, to report. It was suggested by counsel (Ed Frost) that all companies need to consider 8(e) reporting.

4. Additional treatment and disposition of IBT data and tissues.

a. Stated that sinse January, 1979 there have been problems and a lot of discussion concerning what to do.

b. Dr. Hatfield stated that we need to look at other tissues besides the brain. He feels that it is difficult to just single out the brain if you suspect all the data reported by Dr. Busey.

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Page 002

c. After much discussion, Dr. Zeb Bell motioned that we proceed to look at all the available brain tissue in the entire study, as recommended by Dr. Busey in March, 1979. This motion was seconded and carried with one exception of a No vote by Dr. Torkelson. Ed Frost stated that this would be done in all haste and requested that Dr. Bell coordinate this effort. Dr. Bell agreed along with the consensus of the rest of the members present.

5. Termination of IBT contract and our legal claim.

CMA has made a claim to IBT for a breach of contract. Despite a number of calls and requests by Ed Frost, IBT has not yet responded. It is not advised that we sue at the present time. CMA has asked for $600,000 from IBT, but it is not believed that this amount will be refunded. It is hoped that a modest amount, probably in the neighborhood of $100,000 can be obtained from IBT without recourse to a law suit.

6. Other follow-up work.

There was discussion as to what to ultimately to do with the archived material at IBT. It was suggested that the same procedure be used as was used with the CMA/IBT trichloroethylene study. The procedure entails notifying the government that all materials will be kept at their disposal for a period of six months. After that time, IBT is to retain this material, but without any financial support. No action was taken by the panel on this matter.

7. Meeting adjourned.