



PERSONAL AND CONFIDENTIAL

Interoffice Communication

To L. N. Vernon, Saddle Brook

From D. V. Porchey, Ponca City

Date May 24, 1974

Subject VCM HEALTH PROBLEM--CONOCO CHEMICALS MANUFACTURING--
STATUS REPORT NO. 12

F. Z. [unclear]

The Proposed Permanent Standard (PPS) was summarized in the last report, as were the three methods by which Conoco planned to respond to the government. The details of one of these responses, our written objections, have been drafted. A review meeting is scheduled for May 29. A schedule for further reviews and meetings with the objective of filing our objections by the June 10, 1974, deadline had been defined, but will be altered in view of the following information published in the May 24, 1974, Federal Register, Vol. 39, No. 102. The previously defined objection procedure has been waived. An informal hearing has instead been scheduled for June 25, 1974, to receive data, views, and arguments concerning the proposed standard. Conoco has until June 17 to notify OSHA of our intent to present information at the June 25 hearing.

Our primary objection is based on the position that a "no detectable level" of VCM in our VCM and PVC manufacturing plants is not feasible and is unnecessarily strict. We do feel, however, that our plants can operate at a 10 ppm Time Weighted Average (TWA) and 25 ppm Ceiling (C) value by October 5, 1975. A number of other objections to the PPS are proposed, but will not be discussed in this report.

A second method of response to the PPS will be voiced through our participation in the Society of Plastics Industry, Inc. (SPI). The SPI presently intends to propose a 1000 ppm-hr basis for weekly exposure. That is, a total weekly exposure of 1000 ppm would be allowed after which respiratory protection would be required. This level would allow exposure to a 25 ppm TWA for 40 hours. Conoco participation in a response allowing this high a level of exposure is uncertain at this time.

The Vinyl Chloride Safety Association has called another meeting for May 24, 1974. The primary purpose of the meeting is to discuss work practices in light of the PPS. J. Gabbett will represent Conoco.

One additional case of angiosarcoma has been reported in the U.S. by Union Carbide. This brings the number of reported angiosarcoma deaths in the U.S. among VCM and PVC industry workers to eleven. Inclusion of newly released statistics from Europe and of the two live cases at B.F.G. raises the total number of reported angiosarcoma cases in the industry to nineteen worldwide.

VVC 000000679

Fixed Point Monitoring

The fixed point monitoring program is progressing as follows: AFE data for two units at Lake Charles and two units at Oklahoma City have been submitted to the plants. The Honeywell estimate for Aberdeen should be received next week. The cost for each of the two defined plants was estimated at \$29,000 at \$14,500 per unit.

We expect four units to be ready for delivery from Honeywell by the end of June, with the remaining four ready in the later part of July. It is possible that we could have the first unit operational about three weeks after receipt, about August 1, 1974.

An estimate was received from Honeywell for a van-mounted 10-point analyzer unit for use at Lake Charles. The decision was made not to purchase a mobile unit at this time.

Oklahoma City PVC Plant: Personnel monitoring was commenced on May 20 according to the schedule discussed in the last report. An R&D chemist is in the plant to assist with dosimeter and survey analyses.

The exhaust fan has been placed on the Chem Wash Sweco. The fan has increased the efficiency of the vent hood significantly, but does not eliminate the potential for exposure in this area. The entire system will be tightened and reevaluated.

The plant support PED team is surveying the entire plant to determine what engineering will be required to continue operation at low VCM levels. Previous evaluations were directed at operation below 50 ppm and were made using the Century OVA. Surveys for operational feasibility studies for VCM levels below about 25 ppm require more accurate analyses: gas chromatography is being used.

Lake Charles VCM Plant: The primary problem area at the VCM plant continues to be the ship loading dock. An OSHA inspector visited the refinery in response to a complaint from the union representing the refinery dock workers. The inspector was an industrial hygienist from the New Orleans OSHA office. He questioned refinery and VCM plant personnel about the loading operation, VCM, etc., apparently using the same OSHA questionnaire discussed in earlier reports and used in the Oklahoma City inspection in early May. A ship loading is scheduled for May 28 and the inspector stated his intention to be present with sipin pump, activated charcoal dosimeters. He indicated that the dosimeters would be used over 5- to 20-minute intervals and commented that we could monitor concurrently. We plan to do so. New ship loading procedures directed toward reduced exposure to VCM have been issued as appropriate to both VCM plant and refinery dock workers.

L. N. Vernon
May 24, 1974
Page 3

One of the company medical doctors is scheduled to be in the plant on May 29 and 30 to answer employee questions regarding the angiosarcoma health problem, our medical examination procedures, and, presumably, any other appropriate questions.

A new dosimeter testing schedule has been published and is underway. VCM exposure data will be acquired for occupations skipped on the first testing program. Testing will include supervisors, lead men, and engineers. The plan will, however, probably be altered to retest previously tested employees in accordance with repetition requirements of the Emergency Temporary Standard.

Aberdeen PVC Plant: All modifications have been made to the walls of V-11 and V-12.

Results from the MED trailer published earlier and mentioned in the last status report were obtained in V-11, V-12, the dryer building and the large reactor area. The trailer has subsequently been used to evaluate the compound and dry-blend areas, but the results are as yet unpublished. Repeats of the points sampled in V-11 and V-12 are planned and will provide an evaluation of the effects of the reactor building modifications.

Two additional work practices have been modified based on recently obtained data. Respiratory protection is now required when the reactors are water blasted, and when the blowdown receiver is drained.

PED work in the plant is continuing. The primary projects being worked on have been previously discussed, but an additional project has been added. PED will determine the feasibility of operating the plant under a 5 ppm TWA/10 ppm C restriction.

Previous PED work on steam stripping to remove monomer from the slurry has been limited to one modified reactor on L line. The plant will now modify the remaining 4 reactors of L line and will evaluate whether or not to modify 5 more. They hope to have L line ready for steam stripping when PED personnel return to Aberdeen after the coming holiday. Modifications of more reactors will allow steam stripped blends eventually to be evaluated and dried, thus quantifying the effect of steam stripping on dried polymer. Additional analytical personnel may be required to support the accelerated stripping studies.

VVC 000000681

L. N. Vernon
May 24, 1974
Page 4

Manpower Utilization:

Chemicals PED	11 Chemical Engineers
Design PED	1½ Chemical Engineers
MED	½ Chemical Engineer 1 Physicist ½ Chemist
CED	2½ Mechanical Engineers ½ Architectural Engineer
R&D	6 Chemists 6 Technicians 1½ Chemical Engineer
TOTAL	30 3/4



D. V. Porchey
Research Chemical Engineer
Engineering Research
Chemicals Research Division
Research and Development Department

cdp
cc: RWG JDBu JJL JDBr KLS REL
RDG EMS RGW FK WRS RELa RSM CW
LH JBH JFG

VVC 000000682