



I N T E R N A L C O R R E S P O N D E N C E

Engineering, Manufacturing & Technology Services
Engineering
Technical Center

Post Office Box 8361
Building 2000
South Charleston, WV 25303

TO: Mr. F. P. MacFarlane - 511 DATE: August 4, 1987

COPY: Mr. T. L. Bateman - 500 AREA: Health, Safety and
Mr. S. W. Clark - 511 Environmental Technology
Mr. T. L. Collins - 511
Mr. M. W. Gilzow - 511 SUBJECT: 706/707 Pilot Plant OS/HS
Mr. J. M. Hurt - 511
Dr. P. R. Kavasmaneck - 511
Mr. J. E. Llana - 511
Mr. C. P. Maxwell - 511 Dr. J. B. Saunby - 511
Mr. R. E. McElowney - 511 Mr. D. C. Scheid - 500
Mr. J. D. McCue - 511 Mr. R. W. Scoular - 511
Mr. J. E. Neff - 511 Mr. E. G. Trawick - 511
Mr. R. R. Rankin - 500 Mr. D. J. Weintritt, Jr. - 511

Dear Mr. MacFarlane: .

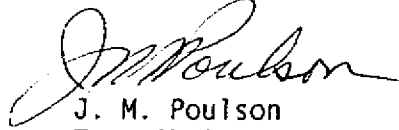
Attached is the final report of the Large Scale Pilot Plant Operational Safety/Health Survey conducted during the week of June 1, 1987 by Messrs. McCue, Theiling, Trawick, Weintritt and me. Comments on the preliminary report presented to you on June 5 have been received and incorporated into this final version.

As described in the report, the team noted a number of positive aspects of the Pilot Plant operations, including thorough safety reviews for all projects and significantly improved SOPs. As is the focus of such an activity, however, the team also identified a number of areas of concern, none of which was judged to be of an imminent nature, requiring immediate correction. Three areas, including Cell 13 fire protection, a safety valve in Cell 5, and a combination of deficiencies at the tank truck pad, were classified as major by the team, reflecting a high degree of concern about the possible consequences of each of the situations, even though the probability of an incident occurring was judged to be low.

It is customary for the surveyed facility to develop an action plan addressing the concerns in the report within about sixty days of issue of the final version. This action plan should be addressed to Mr. J. E. Llana with copies to me, Mr. D. C. Scheid, and others as outlined in the OS/HS Guidelines.

On behalf of the team, I would like to express our appreciation for the cooperation and assistance afforded us during the course of the survey. We certainly hope our efforts will be an aid in continuing the fine safety record at the Technical Center. If you have any questions concerning the report, please contact me or any of the team members.

Very truly yours,



J. M. Poulson
Team Chairman
(UNICOM 721-3602)

JMP:cas
7882D
Attachment

OPERATIONAL SAFETY/HEALTH SURVEY

LARGE SCALE PILOT PLANT

SOUTH CHARLESTON TECHNICAL CENTER

SURVEY DATE: JUNE 1-5, 1987

REPORT DATE: August 4, 1987

TEAM MEMBERS

J. D. McCue
J. M. Poulson
L. F. Theiling
E. G. Trawick
D. J. Weintritt

LH 4 General

LH 4.1 Asbestos insulation is known to be in the general Pilot Plant area. Maintenance personnel reported that in some areas the containment is loose and contact causes asbestos to flake off. They also noted concern over the lack of proper identification of known asbestos sources. Fluorescent lights in the area also use asbestos gaskets. To change tubes in the lights requires extensive and time consuming precautionary procedures to prevent potential personnel exposures.

Recommendation

- a. Where asbestos insulation is known to exist, it should be labeled as such.
- b. Replace the old fluorescent lights with approved non-asbestos containing units.

LH 4.2 In many operations, the operators are required to rope off an area and work within the area with full protective clothing, including a fresh air mask. Instances were reported where unit personnel (including a supervisor conducting tours with non UCC visitors) entered the restricted area to observe the work in progress without use of the required protective equipment. Present IH monitoring data illustrates that the need for fresh air is real because area samples are above established TWA limits. Although the operator was properly protected, potential overexposure exists for unprotected personnel.

Recommendation

- a. Reinforce the need to observe the restricted areas.
- b. Inform operators of their UCC responsibility to prevent entry into restricted areas by non-authorized or improperly outfitted personnel.

LH 4.3 Pipefitters reported that they were monitored by the IH department for asbestos over a month ago. They have not been informed of the monitoring results.

Recommendation

Determine why the test results have not been reported back to the individuals monitored.

- LH 4.4 The MSDS book lists several Controlled Substances for which no IH monitoring data has been collected since 1984. Several of these compounds are carcinogens and/or teratogens; CELLOSOLVE acetate, benzene, butyl CELLOSOLVE, methylene chloride, butyl isocyanate, dimethylformamide, chloroform, methyl methacrylate, butyl acrylate and ethylene glycol. Drums of some of these compounds were observed in the unit. At the time of the survey, information concerning the volume and frequency of use of these chemicals was not available. Due to the their highly toxic nature, the need for IH monitoring of these compounds should be reviewed to obtain baseline data for potential exposures.

Recommendation

Review the volume and frequency of use of the chemicals listed with the Industrial Hygiene group to determine where future personnel monitoring is warranted.

- LH 4.5 SOP PP-3-19 requires that all unused mercury manometers be stored in appropriate cabinets provided. Several unused manometers were observed stored in a fiberpak drum outside Conference Room 100 in Bldg. 707.

Recommendation

These manometers should be moved to a suitable storage area.

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