



## Interoffice Communication

To John Friend

From Tom Grumbles

D R A F T

Date November 16, 1981

Subject INDUSTRIAL HYGIENE AUDIT OF ABERDEEN PLANT

The subject audit was conducted on November 11,12,13 by Sid Pitts, Safety Director, LCCP, Louis Legendre, Corporate Industrial Hygienist, Ponca City, and myself. Following are the audit team's comments and recommendations. Although all applicable items on the Audit Criteria were considered all items will not be commented on.

The overall appearance of the plant was very good. Housekeeping in process, maintenance, and storage areas was good, and eating areas within the plant were clean and orderly.

Overall administration of the industrial hygiene activities is well defined and organized. Written programs, i.e., Chemical Exposure Reduction Plan, are complete and reflect current practices. The Vinyl Chloride and Lead training programs need minor revisions to reflect the plant expansion and changes in respiratory protection devices in compounding. However, the technical content of these programs is current and correct. Frequency of training is adequate.

Hazard recognition and evaluation at the plant has been very complete. Many of the chemicals present in large volumes with significant exposure potential or special concern have been monitored for. Written determinations have been completed for many of the chemicals present in small volumes. Where exposures have been identified steps have been taken to reduce exposures. Exposure controls instituted in the lead handling areas have succeeded in greatly reducing exposures. This is evidenced by exposure levels as well as bio-assay results.

### Recommendations

1. The laboratory currently keeps the analytical records for the passive dosimetry results for only a short time. To comply with the OSHA Records Access Standard, "... background data relevant to the interpretation of results obtained" must be kept for at least one year.
2. Currently there is no routine health training done for contractors. This general subject, contractor training requirements, has been discussed at length recently with the legal department. Although we expect further guidance from them, the plant is encouraged to begin work on a contractor training program. The content of this program probably could be abstracted in a condensed form from the existing employee education programs.

3. A review of the fixed point monitoring results from the inlet and outlet points on the breathing air system indicated unacceptable levels of VCM for at least the one month reviewed. There were also unexplainable discrepancies in inlet vs. outlet measurements. Also, the charcoal filter bed was recently removed from the system due to moisture problems.

This situation should be investigated in depth to determine the cause of these measurements. It appeared that the month we reviewed had clerical errors resulting in the VCM levels being reported in the outlet to the system. If this is the case other reports should be reviewed and the record corrected. This is damaging evidence to have on file if it is in fact a clerical error.

If the measurements are accurate, the source of VCM contamination must be located and corrected. Also, it is recommended that the removal of the charcoal filter bed in the system and the problems causing its ineffectiveness be reconsidered. Without an organics filtering device the potential for contaminated breathing air is increased.

4. Currently the plant guard distributes sampling devices to those scheduled for VCM and lead dosimetry. The employee is expected to properly place the device on himself and turn it in at the end of the shift. The guards also load the samplers and calibrate the air sampling pumps. As discussed, this method of accomplishing the routine dosimetry is somewhat disturbing in that many areas exist for measurement error. From an industrial hygiene standpoint it is certainly not recommended practice. However, considering the available manpower and the frequency of monitoring this method is the only practical way to administer the VCM monitoring. Interviews with plant personnel also indicate that the system works relatively well.

However, the lead monitoring utilizes a pump and filter. This measurement technique contains more points for error in measurement results than the passive dosimetry. The monitoring frequency for lead is much less than VCM. For these reasons it is recommended that consideration be given to having safety department personnel do the lead monitoring. This would assure proper sample placement and sample integrity.

Once again, the plant industrial hygiene program is in good order. The plant should be commended for its overall efforts in hazard recognition and controls, particularly in Compounding. Please let me know if you have questions on the items covered in the report. I would like to thank the plant personnel for their time in preparing for and time spent with the team during the audit.

Thomas G. Grumbles

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