Air Products

Date 15 August 1980

INTEROFFICE
MEMORANDUM

Subject Company Medical Audit

RECEIVED
AUG 18 1980
LAW DEPT.

To R. H. Schenck — Legal Division
(Location, Organization, or Department)

From R. R. Brown 7615 — Internal Audit
(Location, Organization, or Department)

Attached is the draft report of our Company Medical Audit. Please review it and direct your comments to me (extension 8015). If you have any questions, feel free to call me.

Ronald R. Brown

RRB:pmg
Attachment

(320)

AP00031244

Air Products

AUDIT NO. 80-244

AUDIT REPORT

TO R. F. Bennett DATE

FROM R. R. Brown COPIES TO

AUDIT OF Company Medical Audit

BY R. R. Brown

I. Introduction and Scope

The Internal Audit department recently completed a corporate medical and chemicals manufacturing operational audit dealing with OSHA compliance to vinyl chloride monomer (VCM) requirements at our poly vinyl chloride (PVC) plants. Our objectives were to:

1. Determine if the company is complying with OSHA requirements.
2. Evaluate the administration of the company medical programs relating to PVC.
3. Evaluate the effectiveness of the mechanized systems which support our plant and medical staffs.
4. Evaluate the administration of PVC controls at our plant locations (Calvert City and Escambia).

FORM 2100 (REV. 9/75)

CONTINUATION

Audit No. 80-244 Date

II. Summary

Isn't the lack of a Calvert regulated area a violation?

While our audit revealed no OSHA violations at either plant, it is our opinion that certain existing conditions potentially could lead to inaccurate record keeping, erroneous management decisions, and/or a loss of assets. Specifically, the conditions noted were:

1. The medical procedures for VCM are not being applied uniformly at our PVC locations.
2. The automated medical system is not being efficiently utilized by PVC field locations.
3. A common understanding of the OSHA requirements for VCM does not exist among all areas involved in overseeing PVC operations.

III. Detailed Audit Findings and Recommendations

As a result of our review of the administration of our medical surveillance program at our PVC plants, we found that:

A. Medical procedures are not being applied uniformly at our PVC locations.

Contractors are responsible for OSHA compliance re their employees. APCI may (or may not) assist the contractor by arranging for/ providing physicals

1. There are no guidelines indicating when construction physicals are to be given or who should be getting them at our PVC plants. As a result, plant medical personnel are not sure all required physicals are being administered.
2. The format of the medical exam given to construction employees is different at our two plants. Calvert City uses several of

the forms we use for employees. Escambia uses a one page physical exam form.

3. Calvert City performs 5-liver function tests for VCM; Escambia performs 6 (OSHA requires 5).

The grounds should be determined by the examining physician.

4. The grounds for medically declaring someone unfit for VCM work are different. At Calvert City, any two abnormalities in the 5-liver tests constitutes unfitness. At Escambia, one abnormality in the 6-liver tests constitutes unfitness for VCM work.

Isn't this up to the examining physician?

5. The follow-up physicals for liver test abnormalities are different. Calvert City re-tests only the abnormal test(s); Escambia re-tests all of the 6-liver function tests and re-tests the person every six months for a period of 18 months.

6. Medical record retention is different. Calvert City maintains MID input forms, lab tests, physician's statements of fitness, and associated computer output. Escambia discards everything except lab tests and computer output.

7. For terminations, Calvert City retains the medical files. At Escambia, the medical files for terminations are forwarded to the Corporate Medical Department in Trexlertown.

Recommendations

Because of the above inconsistencies, we recommend the following:

1. The corporate medical department should establish and communicate to the field uniform standards for the following areas at all our plants:

   - Guidelines on what construction employees should be under our medical surveillance program and when they should receive physicals.
   - The scope of construction physicals including forms to be used, number of liver tests and follow-up testing to be conducted.
   - Guidelines on liver tests to be conducted, criteria for declaring an employee unfit and follow-up physical guidelines for company employees.
   - Retention requirements for medical records by the plant for employees and contractors. Also, disposition instructions for files of terminated employees.

APCI is not required to provide physicals to contractor employees. We do it as a service.

B. The existing medical information systems are not being efficiently utilized.

   1. The medical exam scheduling list (report A3C220) can not be used at either plant because it contains inaccuracies relating to the current listing of persons requiring physicals. For example:

CONTINUATION

Audit No. 80-244 Date

- 33 of 49 current PVC plant employees at Escambia do not appear on this report.
- 43 of 182 total persons listed on the report for Escambia have terminated.
- 8 of 149 total persons listed on the report for Calvert City have terminated.

It is not required to maintain a log of persons who enter a regulated area.

2. The RAMADS system report (A3C505), which lists persons who entered a restricted area and whether they were/or were not authorized to do so is missing 50% of its data because Calvert City no longer fills out the input form (regulated area access log-form 5583) which provides the data for this report.
3. The VCM monitoring/exposure report (A3C130) is incomplete because Calvert City forwards the input forms (form 5576) to Trexlertown before all the required information has been put on the form (i.e., respirator usage and type).
4. The medical system reports do not include current contractor physicals. The medical exam scheduling list (report A3C220) shows 18 construction people at Calvert City. However, Calvert's plant medical department has 53 contractors who have received VCM physicals as of May, 1980. Escambia's exam scheduling list shows no contractor physicals.

We are not required to keep a record of contractor physicals, but we may do so on behalf of contractor.

Recommendations

Since extensive amounts of data are either missing or incomplete, in the medical systems data base, the exposure exists that all the medical system reports are inaccurate, and thus we recommend:

1. With the assistance of MID, all reports from the medical system should be reviewed by the appropriate level of management to determine if their continuance is warranted in their present state.
2. Steps should be taken to upgrade the completeness and accuracy of the medical systems data bases.
3. The medical system users should determine if they need the RAMADS system report (A3C505).
4. The appropriate level of management should determine if contractor physical information is to be maintained on the medical system.

C. Area monitoring controls are not applied uniformly at our PVC locations.

1. The PVC area at Calvert City is no longer considered a regulated area. Therefore, people can enter the PVC area without signing the regulated area access log or being monitored for medical clearance to enter the PVC plant. At Escambia, the

NOT REQUIRED

area is regulated and the access log is still used. Also, a fence surrounds the PVC area at Escambia. Calvert City has no barrier surrounding their PVC area.

Boyce Helms says that this is not so. In any case, what the plant THINKS is not relevant; what it DOES is relevant

2. Calvert City does not consider area monitoring to be an OSHA requirement. However, area monitoring is required per the OSHA standards for general industry (page 316).
3. At Escambia, area monitoring readings are taken every 15 minutes by gas chromatographs. The readings are recorded on strip charts and are also evaluated and documented immediately by a minicomputer. At Calvert City, the gas chromatographs take readings every 20 minutes. However, the readings appearing on the strip charts are not evaluated until the following day. Calvert City's minicomputer could be used to perform this task with greater speed and efficiency but is currently not in use.

Recommendations

Because of the above inconsistencies, we recommend the following:

1. The plant staffs and their support groups should clarify their understanding on the specific OSHA requirements for VCM.
2. The appropriate level of management should determine how area monitoring is to be handled (i.e., manually or mechanically).

CONTINUATION

Audit No. 80-244 Date

3. Based on personnel monitoring indicating VCM in excess of the permissible exposure limit (1 ppm in 8 hours or 5 ppm in 15 minutes), certain parts of the Calvert City plant should be regulated areas. These areas should be identified in order that appropriate measures can be taken to restrict access to such areas to authorized personnel only. Also, once these areas have been identified, OSHA must be notified in writing of their existence and location.

All of the assistance provided by chemicals manufacturing, corporate medical, and the plant staffs at Escambia and Calvert City was very helpful and greatly appreciated.