

FROM J. DAMIANO

TO J. R. ARCHIBALD

PITTSBURGH OFFICE - 6

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1986 January 07

RE: INDUSTRIAL HYGIENE AUDIT FOLLOW-UP

A coordinated effort was made to investigate the development of industrial hygiene programs in the twelve plants audited December, 1982 through March, 1985. Progress reports have been completed and are enclosed in chronological order. The recommendations in each progress report were extracted from the text of the full audit report; the status comments were composed by the responsible Pittsburgh liaison in consultation with the plant industrial hygienist. The plant contacts have been given copies of their progress reports.

The following observations are noteworthy:

- o Environmental surveillance remains the weakest element in most plant programs.

Inadequate environmental surveillance was reported in every audit. This broad deficiency was recognized in 1983 and attributed in part to the absence of standards for adequate surveillance. A sampling guideline was developed with input from our plant contacts and issued in January, 1985. The Alcoa Sampling Guideline is a tool for effectively managing environmental surveillance. Most notably, it provides the industrial hygienist with a method for quantifying sampling needs; such information can be used to solicit support for increased staffing.

Sampling efforts have increased in Rockdale, Warrick, Vernon, Corona, Cleveland, and Badin; however, none of these locations have used the guideline to plan their sampling programs. Point Comfort has just recently used the guideline to assess baseline needs and the plant's sampling efforts have expanded in accordance with the identified needs. Regrettably, Davenport, Lafayette, Arkansas, and Logans Ferry have not used the guideline and what little sampling is conducted in these locations is performed on a fire-fighting basis.

Without using the sampling guideline, the plants are really unable to assess the adequacy of their exposure data. More importantly, without establishing minimum baselines, the plants frequently do not have enough data to differentiate between acceptable and unacceptable exposures.

- o Increased industrial hygiene staffing was recommended for Cleveland, Arkansas, and Lafayette. Since the audits, staffing has increased in Cleveland and decreased in Arkansas and Lafayette. A decrease in staffing was also reported for Logans Ferry Works.

474763 1137



J. R. Archibald
1986 January 07
Page 2

- o Inadequate instrument calibration practices remain a common deficiency. There is a continued need to issue a calibration guideline to the field locations.
- o Steve Roth has noted progress in noise reduction in Davenport, Lafayette, Suralco, Vernon, Corona, Badin and Point Comfort.
- o The enforcement of hearing protection rules remains a problem in Cleveland, while Arkansas and Logans Ferry have attained increased usage of hearing protection.
- o Inadequate respirator fit testing remains a common deficiency. A major exception to this is Rockdale where each employee required to use a respirator has been fit tested.
- o Inadequate follow-up on significant threshold shifts revealed through audiometric testing remains a common deficiency. The investigation of significant threshold shifts is fundamental to the prevention of repeated shifts and permanent hearing loss.
- o Each location has upgraded its health hazard training activities, most commonly in the areas of new employee orientation and hearing conservation. (Inadequate training had been reported in every audit.) There is a continued need to improve the management of health hazard training efforts (e.g., identification of training needs, planning refresher training, recordkeeping, etc.). Only one location, Arkansas, has stepped up to the task of evaluating the effectiveness of health hazard training; this is done as part of their internal CORE audits. More training is needed on health hazards specific to the location (e.g., solvents, beryllium, etc.). Training sessions on silica and welding fumes remain a common need.
- o Most plants have made significant improvements in the various administrative aspects of their industrial hygiene programs, such as the quality of written programs, the development of materials inventories, acquisition of material safety data sheets, and the organization of exposure records.

The following suggestions are offered:

- o Corporate Safety and Industrial Hygiene should reinforce plant accountability for adequate environmental surveillance. A structured approach could be considered with target dates for completion and reporting of baseline data for selected job classes and exposures. We will need to support efforts to increase plant staffing where more manpower is necessary to attain sampling objectives.
- o Follow-up and reporting of plant progress in meeting recommendations made in audits should continue on a periodic basis. Each Corporate staff liaison should strive to focus plant attention on the significant and persistent deficiencies in their Safety and IH programs (e.g.,

J. R. Archibald
1986 January 07
Page 3

enforcement of hearing protection, respirator fit testing, and follow-up on significant threshold shifts).

- o Corporate Safety and IH should continue to promote and support effective health hazard training.

Corporate guidance is needed on the management of health hazard training. In particular, there is a need for guidance on in-plant evaluations of training effectiveness. One potential method may be to integrate the evaluation into departmental or location self-audits.

Finally, more corporate guidance is needed on available training aids and resources that may be applied to subjects specific to the location. Consideration should be given to evaluating commercially available audio-visual aids for common training needs (e.g., silica, welding fumes and radiation) or, if necessary, producing in-house training aids.

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JD:wp

Enclosure

cc: Copy Circulated to Safety & Industrial Hygiene Staff

474763 1139

J. R. Archibald
1986 January 07
Page 4

INDUSTRIAL HYGIENE AUDITS

Completed audits (follow-up report enclosed):

Davenport	82 December 07-09
Rockdale	83 January 18-20
Lafayette	83 March 01-03
Suralco	83 September 20-23
Warrick	83 December 12-15
Vernon	84 April 24-26
Arkansas	84 May 29-31
Cleveland	84 June 11-13
Corona	84 August 02-03
Badin	84 October 02-03
Logans Ferry	84 October 18
Point Comfort	85 March 20-22

Completed audits (no follow-up reports):

Massena	85 September 23-26
Wenatchee	85 October 22-23