



Houston Works
September 20, 1979



To: J. W. Hardin
From: E. B. Huber
Subject: Problem Areas - 1980 & How To Cope With Them

The foreseeable responsibilities of the accident Prevention and Occupational Health Department are mind-boggling! The impetus will come from two primary sources:

1. OSHA intends to promulgate health standards that will have far reaching effects on the steel industry.
 - a. Carcinogen Standard - see Industrial Hygiene section
 - b. Noise Standard - see Industrial Hygiene section
 - c. Silica Standard - see Industrial Hygiene section
2. Organized labor is actively alerting their members to potential health hazards and they are sending their people to week long seminars to give them knowledge on a variety of subjects.

This report will outline problem areas by functions:

1. The Medical Department does not now have the space, equipment, or trained personnel to meet the following challenges:
 - a. Provide audiometric tests to an estimated 2000 employees.
 - b. Provide pulmonary function tests to Coke Plant employees, and all other employees that are required to wear a respirator.
2. The Medical and Claims Advisor will encounter, to a higher degree, in 1980 the following:
 - a. Job placement of persons that can not wear a respirator
 - b. Drug screening program
 - c. Pregnancy policy administration
 - d. Rising Workman Compensation costs due to \$119.00/week benefits and soaring medical costs.

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red-BW#2- Houston "found in loose files near front 1/3"

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- e. It is just a matter (possibly in 1980) of time before the employee and/or his representative will have access to the medical files.
 - f. The Union is encouraging employees to use doctors and hospitals of their choice - we lose control and the value of the Workman Compensation case is enhanced.
3. The Safety Engineer must spend more time in the plant in order to audit the quality of:
- a. Physical inspections and follow up
 - b. Planned contacts
 - c. Planned observations
 - d. Wearing of safety apparel
 - e. Accident investigations and corrective action follow-up
 - f. Evaluate fresh air equipment working in confined spaces
4. The Industrial Hygiene Engineer will encounter the following problems:
- a. The revised Material Safety Data Sheet program should be in full swing. This will require requesting, receiving, approving and distributing from 500 to 700 data sheets.
 - b. Coke Plant Standard
 - 1) Compliance with the standard includes quarterly exposure monitoring, yearly respirator fit-testing, maintenance of the clothing and respirator programs, and assisting in the medical surveillance program.
 - 2) OSHA Citation - continue to review the contest proceedings and offer assistance.
 - c. Plate Mill Noise Citation
 - 1) Continue to review the contest proceedings and offer assistance
 - 2) Develop a complete hearing conservation program for all employees that are exposed to noise in excess of the OSHA noise standard. This program will consist of:
 - a) Determination of noise exposures through noise surveys throughout the plant. Most departments have some excessive noise areas; however, the melt shops and pipe mill are the most extensive.

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b) Control of noise exposure by engineering and administrative controls and hearing protection.

c) Audiometric testing.

This will require purchasing noise measurement equipment as well as allocating considerable time.

d. Mold Foundry

The Mold Foundry should be resurveyed for exposures to silica. The last survey in 1975 showed several excessive exposures. The respirator program should be audited for compliance.

e. Direct Reduction

Exposures to particulates from material handling should be closely studied as well as exposures to noise.

f. Sinter Plant

Possible excessive exposures to respirable dust and silica should be studied for all jobs as well as noise.

g. Proposed Generic Carcinogen Standard

This standard will classify chromium, nickel, and benzene as Class I carcinogens and will be regulated similar to coke oven emissions. This will require extensive monitoring, engineering controls, protective equipment, medical surveillance, etc., for at least the employees involved with welding, burning, or cutting of alloy steel as well as coke plant by-products workers. This standard is proposed to be passed sometime in 1980. It will put tremendous additional burdens on the Industrial Hygiene Engineer.

h. Metal Fumes

Even if the carcinogens standard is not put into effect in 1980 several exposures to metal fume should be investigated. Some of these areas include:

1) Welding and burning in the Roundhouse, Rigger Shop, Weld Shop, as well as field operations involving these crafts and others.

2) Plate cutting operations such as in the Combination Mill and Plate Warehouse.

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i. Carbon Monoxide and Sulfur Dioxide

The increased use of blast furnace gas and coke gas as a fuel will likely increase the amount of exposures to these two gases. New equipment has been developed to monitor for these contaminants and will need to be purchased.

j. Asbestos

As asbestos materials are replaced we will need to begin exposure monitoring on all tearout operations. This will be an extremely time consuming task and as a result has only been done on few occasions in the past.

Finally, in answer to the question of how to cope with the above outlined programs - unfortunately, the solution involves additional personnel, training of present personnel, purchasing additional equipment, and capital expenditure for expansion of present facilities. In addition, the staff must continue to diligently plan and utilize their time.



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