OSHA SEHO

① E. K. GODFREY
② C. R. ROTTHOFF
③ McMULLEN

RECEIVED
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PLAINTIFF'S EXHIBIT
tabbies
UC-1152

TO: Mr. A. W. Boyd
Mr. J. M. Fallon
Mr. E. D. Fowler
Mr. J. D. Horn
Mr. L. G. McMullen
Mr. P. A. Walden

FROM: B. Clark

DATE: March 8, 1974

SUBJECT: OSHA Inspection Report

Attached is the report on the recent OSHA inspection related to the cobalt mix laborer.

BC:jb
Attachment

UCTC 19743

# Texas State Department of Health

JAMES E. PEAVY, M.D., M.P.H.
COMMISSIONER OF HEALTH

FRATIS L. DUFF, M.D., Dr. P.H.
DEPUTY COMMISSIONER

AUSTIN, TEXAS

BOARD OF HEALTH
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JOHN M. SMITH JR., M. D.
JESS WAYNE WEST, R. PH.
ROYCE E. WISENBAKER, M. S. ENG.

March 6, 1974

Mr. Larry McMullen
Union Carbide Corporation
Bldg. 2
P. O. Box 186
Port Lavaca, Texas 77979

Dear Mr. McMullen:

Reports of the industrial hygiene survey of the alcohol unit of the Union Carbide plant have been sent to Mr. Bill Clark of Brown and Root and to Mr. Joe Fallon of Union Carbide. Thank you for your assistance in the survey.

The air samples taken at the alcohol unit showed less than 1 ppm, of butyraldehyde. The analysis was made by NIOSH at Salt Lake City. Their report is enclosed.

Very truly yours,

John G. Willard

John G. Willard, Chief
Special Services Branch
Occupational Health Program
Division of Occupational Health
and Radiation Control

Enclosures

UCTC 19744

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March 6, 1974

Mr. Bill Clark, Maintenance Superintendent
Brown and Root Company
P. O. Box 186
Port Lavaca, Texas 77979

Dear Mr. Clark:

Enclosed is a copy of the report of an industrial hygiene survey made at the Union Carbide petrochemical plant recently. Thank you for your cooperation in this survey.

We trust this has been a service to you, and if we can be of further service, please let us know.

Very truly yours,

Horace F. Adrian

Horace F. Adrian, P.E., Administrator
Occupational Health Program
Division of Occupational Health
and Radiation Control

Enclosure

UCTC 19745

INDUSTRIAL HYGIENE SURVEY
Brown and Root Co.
Seadrift, Texas

A limited industrial hygiene survey was conducted at the Union Carbide petrochemical plant located near Seadrift, Texas, by Mr. John G. Willard, Chief, Special Services Branch, Occupational Health Program, Texas State Department of Health. The study was made on December 12, 1973, as a result of an Industrial Accident Board report on an employee of Brown and Root Company, a subcontractor at this plant. Assistance was given by Mr. Bill Clark, Maintenance Superintendent of Brown and Root Company, and Mr. Larry McMullen, Industrial Hygiene Technician, Union Carbide Corporation.

OBSERVATIONS:

Brown and Root Company sub-contracts work on a continuous basis at this large petrochemical plant. There are approximately 140 Brown and Root employees working around the clock, seven days a week. The alcohol unit was selected as the area of interest for this survey since the Industrial Accident Board report was on an employee who has worked primarily in this area.

At the alcohol unit, synthesis gas consisting of hydrogen and carbon monoxide is made in a reformer from methane, carbon dioxide, and water. The synthesis gas is reacted with propylene catalytically to form a mixture of butyraldehydes. All process operations are conducted in the gas phase under pressure, in which condition there is no possible exposure to liquid or solid chemicals. The process is controlled from a control house in the immediate area. The only employees in the area outside of the control house are those doing housekeeping chores and maintenance work.

Housekeeping in the area was very good. There was a perceptible odor of chemical vapors throughout the area. At one time the odor was thought to be characteristic of Dowtherm, but this changed to an odor of butyraldehyde during the visit. Two ten-minute air samples on charcoal tubes were taken. One was taken near the Aldrich pumps, and the other was taken about 50 feet east of this point. The sites were selected on the basis of the odor being strongest at these locations. Analysis showed less than 1 ppm. butyraldehyde in each sample.

DISCUSSION:

There is an everpresent odor of chemicals in the vicinity of the alcohol plant. The odor is not strong nor particularly objectionable. Mr. McMullen estimated that the odor at the time of this survey was typical. Analysis of air samples showed less than 1 ppm. of butyraldehyde. This should be well within safe limits.

Housekeeping was excellent arount the plant area and management is to be commended for this. Also, it was observed that the employees were diligent in wearing personal protective equipment, that is, hard hats and safety glasses.

UCTC 19746

RECOMMENDATIONS:

No recommendations for improvements. Management and workers are to be commended for good attitude toward industrial hygiene.

Respectfully submitted,

John G. Willard

John G. Willard, Chief
Special Services Branch
Occupational Health Program
Division of Occupational Health
and Radiation Control

UCTC 19747