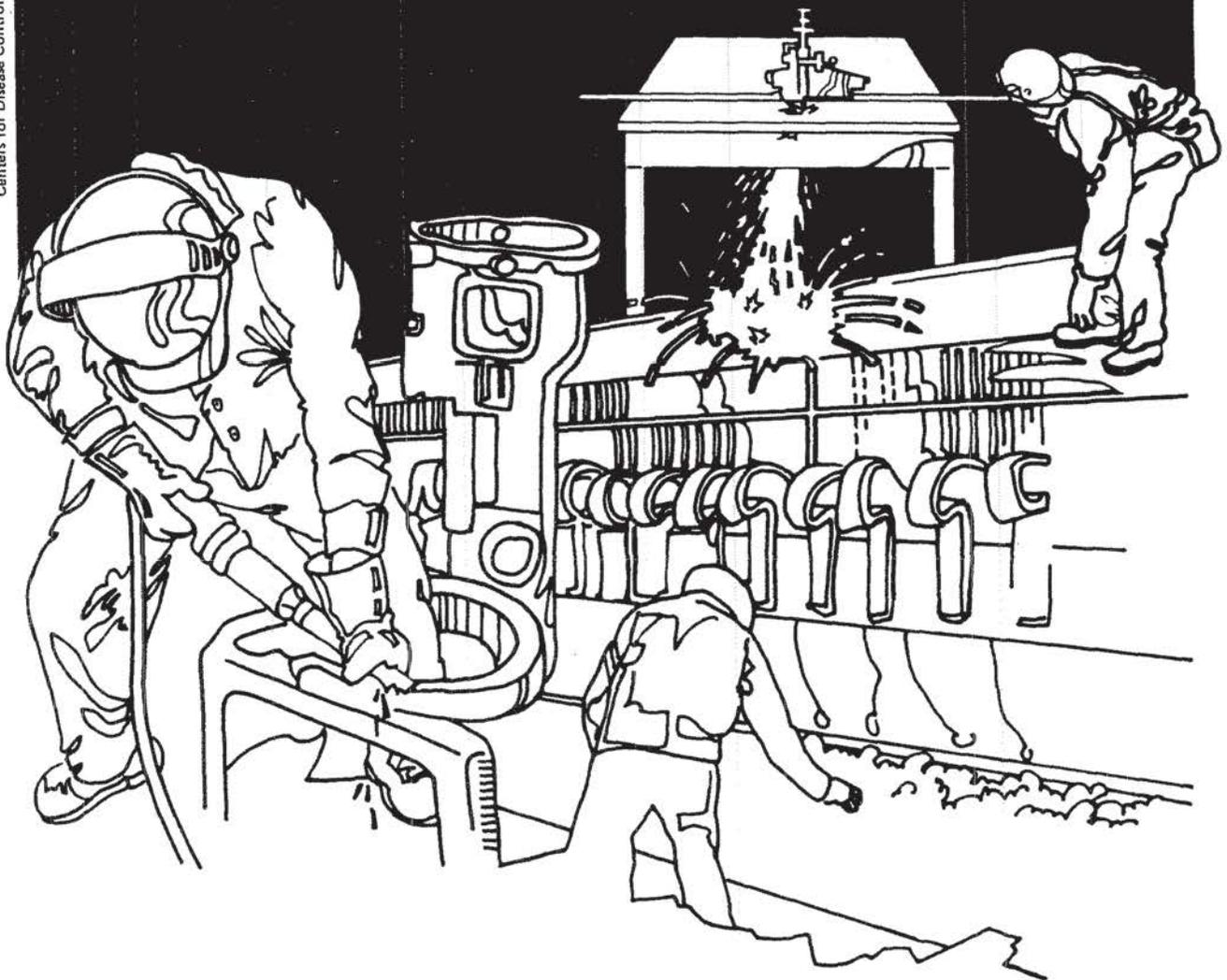


NIOSH



Health Hazard Evaluation Report

HETA 81-201-900
GENERAL FOODS
LAFAYETTE, INDIANA

PREFACE

The Hazard Evaluations and Technical Assistance Branch of NIOSH conducts field investigations of possible health hazards in the workplace. These investigations are conducted under the authority of Section 20(a)(6) of the Occupational Safety and Health Act of 1970, 29 U.S.C. 669(a)(6) which authorizes the Secretary of Health and Human Services, following a written request from any employer or authorized representative of employees, to determine whether any substance normally found in the place of employment has potentially toxic effects in such concentrations as used or found.

The Hazard Evaluations and Technical Assistance Branch also provides, upon request, medical, nursing, and industrial hygiene technical and consultative assistance (TA) to Federal, state, and local agencies; labor; industry and other groups or individuals to control occupational health hazards and to prevent related trauma and disease.

Mention of company names or products does not constitute endorsement by the National Institute for Occupational Safety and Health.

HETA 81-201-900
General Foods
Lafayette, Indiana
June 1981

NIOSH INVESTIGATORS:
William N. Albrecht, IH
Arthur S. Watanabe, Ph.D.

I. SUMMARY OF INVESTIGATION

On February 12, 1981, a confidential request for a health hazard evaluation was submitted to the National Institute For Occupational Safety and Health (NIOSH) by employees at General Foods, Lafayette, Indiana. They were concerned that they were being overexposed to food additives, food dyes, and insecticides used at the facility.

The Lafayette Division of General Foods occupies two large buildings. Building I contains a 'luxury' or moist dog food manufacturing operation, while Building II houses several dry blend, mixing, and packaging processes.

On April 13, 1981 an opening conference with management representatives of General Foods and the President of Local #348, UFCW, was conducted. A walk-through survey was performed and a general medical epidemiological questionnaire was administered during April 13-14, 1981. During the site visit particular attention was paid to material transfer procedures, ventilation capabilities, and toxicity data relative to the major and minor constituents of the products. No environmental sampling was required or performed.

Because the facility is a food processing operation, it is under the scrutiny of the U.S. Department of Agriculture as well as the Food and Drug Administration. Consequently a high standard of cleanliness is maintained. Additionally, most of the materials utilized in the processes are of negligible or extremely low toxicity. Two minor constituents of some food products, tartrazine (FD&C Yellow #5), and carageenan were identified in a recent literature search as substances posing some concern for possible allergic and cocarcinogenic activity. Neither of these additives are used in appreciable quantities at the site, and contact is restricted to one employee part-time per shift who is responsible for weighing out the minor constituents of the batches. Well-designed and effective ventilation systems are in place throughout the ten-year old plant. Fumigation of railroad cars and other shipping containers is performed by a private pest-control company.

NIOSH concludes that no health hazards due to exposures to food additives, food dyes, or insecticides were present at the time of the survey.

KEYWORDS: SIC 2090, food additive, food dye, FD&C yellow #5 (tartrazine), carageenan.

II. RESULTS AND CONCLUSIONS

A questionnaire directed at acute effects was administered to Building I and II employees. The results are summarized in Tables I and II. Twenty-four of 28 Building I workers completed the questionnaire as did 18 of 19 Building II workers. Both groups reported similar prevalences of symptoms, i.e., 37.5% for Building I versus 38.9% for Building II. Reported symptoms included headache, cough, mucous membrane irritation and skin irritation. Some workers reported symptom occurrence was related to fiber in Building I and dust in Building II. There appeared to be an association of symptom occurrence with history of allergy. In Building I, 4 of the 9 symptomatic workers had allergy to dust, hayfever, or medicines versus Building II with 4 of 7 symptomatic workers with allergy history. No worker reported any past history of work-related symptoms or illness.

III. RECOMMENDATIONS

Based on current findings, no further environmental or medical evaluation appears necessary at this time.

This evaluation does not necessarily negate the potential for allergic response by some of the employees at General Foods. The management of the facility is encouraged to continue to attempt to accomodate those employees allergic to certain materials in the plant.

IV. AUTHORSHIP/ACKNOWLEDGEMENTS

| | |
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V. DISTRIBUTION AND AVAILABILITY OF REPORT

Copies of this report are currently available upon request from NIOSH, Division of Technical Services, Information Resources and Dissemination Section, 4676 Columbia Parkway, Cincinnati, Ohio 45226. After 90 days the report will be available through the National Technical Information Service (NTIS), Springfield, Virginia. Information regarding its availability through NTIS can be obtained from NIOSH Publications Office at the Cincinnati address.

Copies of this report have been sent to:

1. General Foods, Lafayette, Indiana
2. United Food and Commercial Workers, Local 348
3. U.S. Department of Labor, Region V
4. NIOSH, Region V

For the purpose of informing all employees, a copy of this report shall be posted in a prominent place accessible to the employees for a period of 30 calendar days.

TABLE I
QUESTIONNAIRE RESULTS

GENERAL FOODS
LAFAYETTE, INDIANA
HETA 81-201

April 1981

| | <u>BUILDING I</u> | <u>BUILDING II</u> |
|---------------------------|-------------------|--------------------|
| A. Number of Workers | 28 | 19 |
| B. Number of Participants | 24 (85.7%) | 18 (94.7%) |
| mean age | 45.7 yrs. | 40.7 yrs. |
| # male | 10 | 3 |
| mean age | 37 yrs. | 37.7 yrs. |
| # female | 14 | 15 |
| mean age | 51.7 yrs | 41.3 yrs. |
| # smokers | 14 (58%) | 7 (39%) |
| # with allergies | 7 (29%) | 8 (44%) |
| C. Number Symptomatic | 9 (37.5%) | 7 (38.9%) |
| mean age | 45.5 yrs. | 34.4 yrs. |
| # male | 3 | 2 |
| mean age | 39.3 yrs | 29.5 yrs. |
| # female | 6 | 5 |
| mean age | 49.2 yrs. | 36.4 yrs. |
| # smokers | 6 (67%) | 3 (42%) |
| # with allergies | 4 (44%) | 4 (57%) |

TABLE II
REPORTED SYMPTOMS
GENERAL FOODS
LAFAYETTE, INDIANA
HETA 81-201
April 1981

| <u>Symptom</u> | <u>BUILDING I</u> | <u>BUILDING II</u> |
|-------------------|-------------------|--------------------|
| total # reporting | 9 | 7 |
| headache | 5 | 2 |
| cough | 3 | 3 |
| MM irritation* | 5 | 4 |
| skin irritation | 5 | 3 |
| dizziness | 1 | 0 |

* MM: eye-nose-throat irritaion

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