



E. I. DU PONT DE NEMOURS & COMPANY

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JUL 2-2-77



C-01522

PIGMENTS DEPARTMENT

July 16, 1976

R. H. AKINS
C. CLEMENTE
C. J. HELY
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N 27682

NEWARK PLANT REVIEW

A meeting was held on July 14, 1976, for the purpose of reviewing the recently completed Epidemiological Study Report and a need for further study of the Newark Plant. All addressees were in attendance. (See attachment for information on participants.)

R. M. Salemi reviewed background information on employee dust exposure, particularly from lead chromate pigments; the Plant as a participant in the Dry Color Manufacturers' Association (DCMA) Epidemiological Study; the results from that study together with the contractors conclusions (albeit somewhat inconclusive); and lastly the urgent need for an in-depth employee study to determine, if possible, the cause of excess employee mortality due to stomach cancer, as well as a need to review the full Epidemiological Study Report.

In the discussion which followed a number of suggestions were proposed, some of which follow:

- Where possible, death certificates as the source of "cause of death" should be verified by checking medical records of the deceased.
- With regard to the lung cancer, smoking histories should be developed and used to adjust the SMR.
- For stomach cancer, should check clinical and medical histories to get clues on specific type of cancer.
- Newark Cancer Registry should be reviewed for changes in mortality data.

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- Early warning screening tests are not available at this time.
- There is a need to review as thoroughly as possible the work histories of the employees who died from stomach cancer.
- There is need for a recheck of the non-exposed population for lack of incidence of stomach cancer.

After the related discussion, a proposal was solicited from Drs. Louria and Clemente on a thorough epidemiological type study of the Newark Plant. Dr. Louria indicated an interest in engaging in such a study and indicated a preliminary contact would be made with us in several days, and if such a study was engaged in that a proposal might be developed within several weeks.

Attached to Drs. Louria's and Clemente's copy of this letter is the Epidemiological Report as submitted to OSHA.

R. M. Salemi
R. M. SALEMI

RMS/jew

RECEIVED

JUL 19 1976

HASKELL LABORATORY

DU PONT SEMINAR PARTICIPANTS

JULY 14, 1976

ROBERT H. AKINS	- PLANT MANAGER - NEWARK
CELESTINO CLEMENTE, M.D.	- DIRECTOR, UNITED HOSPITAL OF NEWARK
CHARLES J. HELY, M.D.	- PLANT PHYSICIAN - NEWARK
BRUCE W. KAARH, M.D.	- ASSISTANT MEDICAL DIRECTOR WILMINGTON
JOSEPH D. LOJEWSKI	2 PRODUCTION MANAGER - COLORS WILMINGTON
DONALD LOURIA, M.D.	- PROFESSOR, CHAIRMAN DEPARTMENT OF PREVENTIVE MEDICINE AND COMMUNITY HEALTH
RICHARD M. LUCKRING	- PROJECT & ENVIRONMENTAL MANAGER
ROBERT F. MITCHELL	- EMPLOYEE RELATIONS SUPERINTENDENT NEWARK
JAMES F. MORGAN	- INDUSTRIAL HYGENIST - HASKELL LABORATORY
DR. SIDNEY PELL	- BIOSTATISTICIAN - WILMINGTON
CHARLES F. RHEINHARDT, M.D.	- DIRECTOR HASKELL LABORATORY
DR. ROBERT M. SALEMI	- PROJECT & ENVIRONMENTAL MANAGER
DR. WILLIAM S. STRUVE	- MANAGER - COLORS RESEARCH AND DEVELOPMENT
DR. JOHN A. ZAPP	- DIRECTOR HASKELL LABORATORY - RETIRED

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C-01522

LEAD CHROMATE AND ZINC CHROMATEPRODUCT RISK (TOXICITY)

At present, "there exists moderate but inconclusive evidence that zinc chromate is a human and experimental carcinogen; there is less evidence linking lead chromate to human cancer and slight evidence experimentally" (1). There is no evidence that either chemical will pose a carcinogenic hazard from isolated acute exposures by the oral, inhalant, or percutaneous routes. Both chromates have been classified as suspect carcinogens by Du Pont.

Specific environmental data on these two chemicals are lacking. The most suitable general guide available (2) states".... it appears that the following concentrations of chromium, trivalent or hexavalent, will not interfere with the specified beneficial uses:

- a. Domestic water supply 0.05 mg/l
- b. Stock and wildlife watering 5.0 mg/l
- c. Fish life 1.0 mg/l
- Other aquatic life 0.5 mg/l

REFERENCES

1. J. F. Morgan, "Background of consideration of carcinogenicity of lead chromate and zinc chromate pigments," memorandum dated April 14, 1975" (HL File C-01522).
2. J. E. McKee and H. W. Wolf, eds., Water Quality Criteria, 2nd ed., The Resources Agency of California, State Water Quality Control Board, Sacramento, California 1963, pp. 163-166. (A later edition, Water Quality Criteria 1972 (EPA) supports the recommended drinking water level of 0.05 mg/l with additional literature references - see p. 62).

RRM/mdc RRM

See C-04788, 7/16/76 for cover letter

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