

REPORT FOR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
AN EVALUATION OF THE SPIROMETRY AND RADIOGRAPHIC FINDINGS ON
SOME WORKERS FROM THE E.I. DUPONT DE NEMOURS AND CO. INC.,
REPAWNO PLANT, GIBBSTOWN, N.J. 08027.

D. M. P. Murphy, M.D.
Assistant Professor of Medicine
Director, Pulmonary Function Laboratory
Hospital of the University of Pennsylvania
Phila., PA. 19104

EXHIBIT # Vorrh-C DO.
DATE 12-19-86 Calb.
MASTROIANNI & FORMAROLI, INC.
CERTIFIED SHORTHAND REPORTERS

923

278

V-2

DUP 0907473

021226

DU 028574

This report includes an evaluation of spirometry performed on fourteen workers and radiographic interpretation of chest films available on sixteen workers. Occupational histories on eight workers were provided by OSHA.

The original roentgenograms from sixteen workers were made available for reading. As the question to be settled was whether there was any evidence of a pneumoconiosis, the roentgenograms were read according to the ILO/UC classification (International Labour Office, University of Cincinnati). Standard interpretative forms were used for recording the findings - these were similar to the forms used by the Department of Labor in evaluation of miners with coal workers' pneumoconiosis (Black Lung Disease). A standard set of roentgenograms prepared by the ILO in Geneva was available and all films were judged against these standards which were displayed at the time of the interpretations. Many of the original roentgenograms were unacceptable in that they were poorly developed or the subject's chest was not completely on the radiograph. In the majority of instances, these films were not read. All the acceptable films available on each worker were read and recorded. Each film was read separately.

Spirograms

Spirograms were also available on fourteen workers. These were evaluated considering what is standard medical practice. The majority of the spirogram tracings were not acceptable in that the subject did not continue to expire for five seconds. In most instances, the spirograms were not reproducible, and therefore the data obtained is not truly representative of the subject's performance.

V-3

270

DUP 0907474

021227

DU 028575

Results

The third paragraph under "Results" on page 4 should be revised. No change in the first sentence, but delete the balance of the paragraph and replace with:

A similar relationship appeared when TEL results were plotted (Figure 5). However, the slope of the curve appeared to be much steeper which would indicate a greater absorption rate. In the case of TML exposures of time-weighted average lead-in-air concentrations exceeded four times the combined organic-lead organic TLV before the average urinary excretion level reached 0.1 mg/l (Figure 4). Exposures exceeded two times the combined TLV in the TEL exposure areas before the 0.1 mg/l urinary excretion rate reached 0.1 mg/l.