PLAINTIFF'S EXHIBIT UC-403

UC 149-2

UNION CARBIDE

INTERNAL CORRESPONDENCE

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UNION CARBIDE NUCLEAR CO.
KING CITY, CALIF.

UNION CARBIDE CORPORATION • 270 PARK AVENUE, NEW YORK 17, NEW YORK

To (Name) Mr. J. A. Riddle
Company Nuclear Division
Location King City, California

Date October 21, 1964

Originating Dept. Industrial Medicine and Toxicology

Answering letter date

Subject

DISTRIBUTION
COHAN
J. A. Riddle
L. F. Crew
G. C. Brice
D. S. Kamens
Foreman
File DSK
RWK

Copy to Mr. K. W. Lentz
Mr. C. E. Brown
Dr. C. U. Dernehl
Dr. K. S. Lane

Dear Mr. Riddle:

The following is the report of the findings of my visit to King City, October 8-9, 1964.

Mine

The mine was visited and proposed pattern of operations discussed with Mr. Cohan. Air samples were not collected because the only work in progress at the time was maintenance at the grizzly. The rather heavy layer of fine loose material in the stockpile area was noted and it was felt that this was a potential source of air-borne dust that should not be overlooked. Mr. Cohan felt that the loose material could be removed and that the travel area for loaders could be wet down often enough to keep the dust concentrations low. It was agreed that these procedures should be considered as standard for work at the site.

Mill

The procedures for dust evaluation were reviewed with Mr. Kamens, and particular attention was given to problems of microscopic examination of the very small dust particles involved. It was noted that the microscope eyepiece did not allow for proper seating of the eyepiece micrometer, and it was shown that with an adequate eyepiece dust counting would be much easier and much more reliable. It was recommended that another eyepiece be procured. Information on eyepieces will be forwarded later.

Dust samples were collected in the mill at pellet bagging and other parts of the cycle that were in operation. Findings are given below.

Location	Air-borne Dust Million of Particles/cubic foot
Alongside operator at bagger. (Bagging pellets). Area being vacuum cleaned at the same time.	3.6 5.4

Location (cont'd)	Air-borne Dust Millions of Particles/cubic foot
Bagging area in general during operation of micropulverizer, bagging, and vacuum cleaning.	17.3
At bag conveyor discharge during bagging.	2.3 2.4
Walkways around Simplicity vibrating screen and bin discharge.	2.3 2.2
Platform above mix tanks.	2.2 3.5

As you will note, dust concentrations were generally within the 5 million particles per cubic foot limit except during operation of the micropulverizer in the bagging area. During this period all personnel in the area wore respirators. The need for continuing this practice is evident.

In view of our experience to date in mill operation, I recommend that the practice of wearing respirators in the presence of even small amounts of visible dust be continued. This is necessary because of the very low concentrations allowed for a safe work environment and because we are dealing with a material in which many of the particles are exceptionally small.

Recently, (October 19-21), I attended a conference on asbestos sponsored by the New York Academy of Sciences. Among those present were representatives of industry from the United States, Great Britain, Canada, South Africa and other countries in which asbestos is produced. Also present were a number of representatives of the U. S. Public Health Service and state health departments.

The conference covered much of the experience obtained to date in handling asbestos. I was impressed by the growing concern for hazards of handling this material, but even more so by the increasing consideration given to the role of very small particles (less than 1 micron in length and diameter). In view of the tone of the discussions, I believe the care that we are exercising in our operations is definitely justified.

Yours very truly,

Paul W McDaniel

Paul W. McDaniel
Industrial Hygiene Engineer

PWM/en