INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION • 270 PARK AVENUE, NEW YORK, NEW YORK 10017

DISTRIBUTION
W. T. Cohan ☐
J. A. Riddle ☐
K. A. Wood ☐
L. F. Crow ☑
G. C. Brice ☐
D. S. Kamon ☑
K. West ☐
G. Vessels ☐
Shifters ☐
A. A. Andrade ☐
File JAR ☐

To (Name) Mr. J. Riddle
Division Mining and Metals Division
Location King City, California

Date January 31, 1966
Originating Dept. Medical Department
Answering letter date

Copy to Mr. L. B. Emlet/
C. E. Brown
Mr. L. S. O'Rourke
Dr. J. J. Welsh/
K. S. Lane

Subject

PLAINTIFF'S EXHIBIT
UC-1389

Dear Mr. Riddle:

The following are the findings of dust determinations made at the King City plant January 25-26, 1966.

Location	MPPCF* 1/25/66	1/26/66	Remarks
Beside bagging machine operator. Both bagging spouts in use.	27.0 24.1		Visibly dusty with back surges through collectors.
		16.0 21.2	Less visible dust loss on first sample but back surges occurring during second sample (bagging high density wetted material.
Same location but with ducts cleared.	12.7 26.5		Less visible dust loss during first sample but surges occurring during second sample.
Discharge end of bag conveyor.	9.5 11.0	12.5 14.7	Conditions visibly about the same on both days.
Platform at controls for refiner circuit.	7.0		Generally clear.

Published by AsbestosClaims.Law
asbestosclaims.law/library/16524/1

(cont'd) Location	MPPCF* 1/25/66	1/26/66	Remarks
ComBin feeder and screen area.	7.3		Generally clear.
Shaker table area.		13.0 10.7	Some visible dust.
Drier stack		18.2	Sample taken inside stack by use of a probe.
North Boundary fence about 60 yards from ore pile.		22.7 24.1	Wind from south with gusts to about 20 M.P.H. Visible loss of material from ore pile and dust deposit on grass beyond boundary fence.

*Millions of particles per cubic foot of air. For the King City plant the recommended limit is 5.0 MPPCF.

Samples were collected by impingement in distilled water and counted by the light-field microscope technique recommended by the United States Public Health Service. Magnification was 100 diameters.

You will note that at all points investigated the dust concentrations were higher than 5.0 MPPCF. Inside the building it was felt that this was caused by a combination of construction activity which affected dust control and also by plug-ups in the dust system resulting from the addition of water to the product prior to bagging. Concentrations at the north boundary fence resulted from loss of material from the stock pile in face of a fairly constant wind from the south. The concentration of dust in the drier stack was not excessive and would cause no problem of air pollution to points outside the plant. There is a possibility however that the effluent can enter the main building if north doors are not closed. This has been demonstrated in the past.

In view of the findings it was recommended that added effort be made to increase the dust control efficiency at the bagging machine and to eliminate plug-ups in the control system. Since it was felt that the bagging operation was the primary source of dust it was believed that improved control at this point will markedly reduce the dust problem throughout the building.

The possibility of loss of dust from the ore pile has been recognized and the practice of wetting the pile with water has been followed for some time. The findings of this investigation emphasize the need for careful continuance of the practice both to prevent contamination of the work environment with a wind from the north and contamination of adjacent property with a wind from the south.

It is also recommended that routine dust evaluations be made in the plant at intervals of no more than two months by plant personnel. Mr. Kamens felt that within the routine of laboratory activity this could be accomplished without undue strain. This office will continue to review the work at intervals and provide assistance as needed.

During this visit questions concerning supply water and the handling of liquid wastes were discussed. It was recommended that the routine submission of tap water samples to the local health district for sanitary analysis be re-instituted. A continuing record of this type may prove to be of considerable value in the future.

Yours very truly,

Paul W. McDaniel
Industrial Hygiene Engineer

PWM/en