

34975

CAMBRIDGE

TO: H.A. Brown

DATE: October 1, 1971

FROM: Peter Kostic

SUBJECT: BuMines Report - Libby

CC: O.F. Stewart - Enoree
R.L. Oliverio - Libby
D.W. Shea, Jr.
R.A. Kulberg

Regarding the wearing of respiratory protection on the ground floor of the dry mill, you may recall I had recommended this in my letter to Lovick dated 1-19-71. It was not until a recent visit to Libby that I learned that the rule was not made mandatory because that floor is used as a passageway by personnel going to the wet mill, especially during inclement weather.

It is my impression, now that we've learned that approximately half the samples taken in the wet mill showed counts in excess of the proposed TLV of 5 fibers/ml greater than 5 microns in length, that all personnel working in or passing through both mills should be required to wear respiratory protection. All personnel should be so instructed, and appropriate signs should be posted at each of the doors leading into these buildings.

The report also shows that both the wet and dry mill lot of money, these rooms patching of holes, caulking the rooms so as to provide reduce the fiber count.

the proposed TLV in without spending a Such things as or pressurizing pressure might well

I note that four of the the laboratory were comparatively high. While recently, I observed considerable dust being generated in that building during sweeping and blowing-off with compressed air. This is probably the primary reason for the high fiber counts. It is my suggestion that the practice of sweeping and blowing-off be discontinued and that an industrial type vacuum cleaner be provided for clean-up purposes.

The report indicates that the railroad car loading control-booth showed high fiber counts, but that the dust collecting equipment was undergoing repairs at the time. This should be checked out again by Rex Smith as soon as repairs are completed to see if the dust collection is effective. If not, a study should be made to determine what mechanical improvements must be made.

15162836

34976

H.A. Brown

-2-

October 1, 1971

The dusty exposure of the loading dock foreman is created primarily by (1) dumping of ore into the bins by dump trucks, and (2) his operation of the payloader while moving the ore around. If no changes in transporting and storing ore is contemplated, we shall have to equip that payloader with a tightly sealed cab and oil-filtered cab ventilating equipment such as J-M provides at their LOMPOC operation.

Weather conditions at the mine were admittedly wet at the time of the survey which probably was the reason for lower filter counts. Either we should repeat the sampling of the mine exposures during a dry spell or we should ask BuMines to do it. If the fiber counts are shown to be higher than the accepted TLV, it may be necessary to install oil-filtered cab ventilating equipment on all equipment used in mining operations.

I am greatly puzzled by the vast difference between the number of fibers in the samples Rex Smith had taken in the dry mill last year and those taken by the BuMines people. The following is a brief comparison:

<u>1970 Samples - Rex Smith</u>			<u>BuMines</u>	
	<u>Range</u>	<u>Arithmetic Average</u>	<u>Range</u>	<u>Arithmetic Average</u>
Dry Mill	4 to 24	9	5 to 81	29

Possible reasons for the difference:

1. Faulty equipment - pump out of calibration.
2. Faulty technique - Rex Smith.
3. Faulty laboratory analysis - Werby Lab.
4. Possible dislodgement of the fibers from the filters in transit. (I doubt that this is possible, but I will check).

At any rate, it is necessary that we take a good close look at our equipment, sampling technique, and laboratory analysis procedure.


Peter Kostic

PK:mh

P.S. I've just learned from Jerry Lynch, U.S. Dept. of Health, that dislodgement of fibers from filters in transit does not occur.

15162837