GRACE

CONSTRUCTION PRODUCTS DIVISION

PLAINTIFF'S EXHIBIT WRG-60

EXHIBIT PX-44 3-16-88 Dt

017024

TO: C. F. STEWART/ENOREE

DATE: December 17, 1971

FROM: F. W. EATON

SUBJ: Dust Survey at Trenton and Easthampton

Since I am familiar with the subject survey, Dick Schneider has asked me to answer questions set forth in your memo of December 1, 1971.

I agree with you that this was an enlightening survey, but unfortunately, communications broke down somewhat with Environmental Analysts and we did not obtain all of the fiber tests at both Trenton and Easthampton that we initially agreed to. Because of the costs involved (approximately $5,000 for this survey) we do not plan at this time for Environmental Analysts to take additional samples on fiber concentration. Since fiber counts measured by the Bureau of Mines at Libby seem to parallel in magnitude those results obtained by Environmental Analysts, it looks as if our present sampling and/or measuring techniques may be giving us false results. I hope that Peter Kostic will resolve this matter this week in his discussions with Industrial Hygienists at the Bureau of Mines in Denver.

The major portion of this report deals with percent free silica and as can be seen from Table 7, there is less than 1% free silica in both vermiculite and perlite when samples are in the aggregate form. It's a different situation, however, when total dust and respirable mass concentrations are sampled and evaluated. This was quite alarming because the majority of us have been under the opinion that vermiculite, especially, did not contain any free silica. The percent free silica in gypsum was another alarming factor because we have been treating this form of dust as nothing more than nuisance dust.

Referring to the sampling locations at Trenton (Figure 1), the #1 vermiculite furnace is the D-16 and it was expanding S.C. #4 during the sampling period. Furnace #2 is the Model A and it was expanding Libby #1. Trenton's D-16 is basically a dust-free operating furnace including the bagging station, but the Model A is far from being up to par. Sampling results, both fiber and silica, are a little misleading if one is to use these results to determine or evaluate the general condition of the furnaces. As you know, there is a large overhead door on the S.E. side of the building which is normally kept open creating a draft or flow of air from one side of the building to the other. It is my personal feeling that the high readings at Location E (D-16) are caused by dust particles being emitted from the Model A, becoming airborne and moving in the direction of the D-16. This, therefore, does not give us a true evaluation of whether fibers are in S.C. ore. Once discrepancies are ironed out on our sampling and testing procedures, we should be able to determine this fact.

When samples were taken at Easthampton, both furnaces were expanding Libby #1. It should also be noted that these samples were taken prior to the installation of new vent systems and bag houses. Sample "J" was taken adjacent to the primary cyclone on #2 furnace and this particular cyclone was full of holes. Actual test results at the two bagging stations bear out visual observations made during the sampling period, where the #1 bagger was covered with dust on the head and shoulders while the #2 bagger was working in a relatively clean environment. I am very disappointed that we did not get fiber count at Easthampton because they probably would have been very high, based on the concentration of total dust and respirable mass.

The one part about Environmental Analysts' technique and procedures for sampling fiber that I did not like was the duration of sampling time. This sampling duration varied from 1-6 minutes and if in that period of time a light fixture was hit or dust blown off a ledge accidently, a high fiber concentration would result.

I hope some of your questions have been answered, but if I can be of any further help in clarifying this report, please let me know.

F. W. Eaton

FWE:jrd