FILE NAME: Shell (SHEL)

DATE: 1972 Aug 31

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DOCUMENT DESCRIPTION: Memo RE Asbestos with Internal Test Results

SHELL OIL COMPANY

DATE AUGUST 31, 1972

TO MR. B. W. DUNBAR

FROM F. M. PARKER

SUBJECT ASBESTOS

Conclusions of Sample Results from Wood River and Houston are:

1. No situation was surveyed that exceeded 5 fibers/cc (based on 49% of sample results finished at this time).

2. The tasks ranked by average concentration are:

   a) Cleanup (Ave: 1.47, Max: 3.39 fibers/cc)

   b) Replacement (Ave: 1.16, Max: 1.50 fibers/cc)

   c) Rip out (Ave: 0.65, Max: 1.36 fibers/cc)

   d) Fabrication (Ave: 0.20, Max: 0.47 fibers/cc)

   e) Mortar mixing (unknown)

   f) All tasks combined (Ave: 0.80, Max: 3.39 fibers/cc)

3. The data collected are insufficient to base a corporate decision on such basic issues as whether or not physical exams or respirators can be excluded in a given task.

4. Relative humidity plays a critical part in any attempt to accurately weigh the filters.

5. Wetting of insulation prior to rip out has an insignificant effect on the airborne concentration of asbestos. This is probably due to the insulation not being soaked completely before rip out begins. Therefore, we should not insist on wetting asbestos prior to rip out in those situations where a wet working surface will create a significant physical hazard.

6. The use of a solid stream of water in fact aggravates the situation by physically dispersing asbestos into the working environment. Only a spray of the smallest droplets practical for the situation should be used.

7. Cleaning of gloves or other apparel by clapping, brushing or other physical means creates unnecessary airborne concentrations.

FMP-1-0398

Recommendations are:

1. That all sample results be evaluated prior to issue of report. (These can be reviewed by D. P. Atwood to insure no major discrepencies.) Samples are estimated to be complete by middle to end of next week.

2. That we make a recommendation to the field that operation be required to wear respiratory protection for those operations that exceed a set limit. I recommend that the limit be set at 1 fiber/cc maximum concentration and not average concentration. I also recommend that respirators be continued to be required for all asbestos operations until sampling has proven concentrations (average and maximum) are below 1 fiber/cc. (See attached proposed letter.)

3. That personnel taking samples be trained in the proper techniques.

4. That all samples submitted be accompanied by a corresponding sample document.

5. That all sample analysis be done by trained personnel at a central location such as Bellaire.

6. That the analytical center provide a copy of the sample document and analysis results to DOSH. We then can continuously revise our conclusions.

7. That we abandon weighing of samples routinely due to the criticality of relative humidity and local weighing capabilities.

8. The form used for recording sample collection data be modified per attached. If weighing is abandoned, then Item #6 of Sampling Protocol should be deleted.

Attachments