



INTERNAL CORRESPONDENCE

FILE COPY

CHEMICALS AND PLASTICS

P. O. BOX 8361, SOUTH CHARLESTON, WEST VIRGINIA 25303

(Name) Mr. D. L. Johnson  
Division 511-5518 (512)  
Location

Date November 16, 1979

Originating Dept. Technical Center IH/EP

Copy to  
Mr. C. W. Carman  
Mr. G. F. Hurley  
Mr. C. R. Johnson  
Mr. D. R. Paugh  
Mr. P. A. Perry  
Mr. C. E. Richardson  
Mr. H. L. Robinson  
Mr. E. C. Shipley

Subject Asbestos Monitoring  
704 Powerhouse, First and  
Second Level

PROJECT

Determine the exposure of Construction workers to asbestos fibers during insulation stripping in Building 704.

DATE OF SURVEY

October 26, 1979

DISCUSSION

On October 26, 1979, separate breathing zone samples were taken on J. C. Erwin, J. F. Chandler, S. M. Barker, D. R. Powell, and P. M. Brown to determine their exposure to asbestos fibers. They were stripping and bagging approximately thirty feet of an 8-foot by 6-foot exhaust duct coming from No. 3 boiler in Building 704 - Powerhouse on the first and second levels. During the stripping and clean-up procedure all Construction workers wore Norton disposable dust respirators, gloves, and coveralls. All others who needed to be working in the 704 Powerhouse operating area were given 3M disposable dust masks to wear during the stripping. Because the duct was hot and electric motors were situated near the duct, the insulation was only minimally wetted with a garden sprayer.

The dust created by the stripping and throwing the insulation to the floor became so heavy that the insulators were advised to

hand the insulation to the laborers to be bagged. The stripped asbestos was placed in plastic bags for disposal.

When the dust became so heavy at the site of stripping on the second level, samples were taken on the first level on the north and south side of the stack.

After the stripping of the duct on the second level was completed and the dust had settled some, breathing zone samples were taken on D. R. Powell and P. M. Brown as they finished bagging the stripped insulation and cleaned the second level area.

When the stripping started on the first level, only area samples were taken. Two samples were taken on the first level on the north and south side of the stack, and one sample was taken on the west wall north of the stack on the second level. All area samples were placed at breathing zone level.

### CONCLUSIONS

The dust collected on the breathing zone samples of J. C. Erwin, J. F. Chandler, S. M. Barker, D. R. Powell, and P. M. Brown, was so heavy that it was impossible to determine the concentration of asbestos fibers on these samples. The results of the other samples are given in the attached table.

Since asbestos levels were so high on samples taken after some of the initial dust had cleared, they were likely higher during the period of greatest dust concentrations. Since all people in the area wore masks they were probably protected if a good mask fit was obtained.

### RECOMMENDATIONS

It is suggested that all Construction workers that are involved with the stripping and disposal of suspected asbestos containing insulation be shown the Industrial Hygiene slide presentation on the proper handling of asbestos containing materials.

### REFERENCES

Volume 38C-29X4-R1a Asbestos, Dust Determination By Membrane Filter Technique Using Phase Contrast Microscopy

RESULTS

| <u>DATE</u> | <u>SAMPLE TYPE</u> | <u>TIME (MINUTES)</u> | <u>ASBESTOS FIBERS (Fibers &gt;5 <math>\mu\text{m}/\text{cm}^3</math>)</u> | <u>REMARKS</u>                                                                                                                         |
|-------------|--------------------|-----------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 10/26/79    | Area               | 32/2 LPM              | 0.28                                                                       | First level, north side of stack while dust was settling after stripping on the second level. Cleanup being completed on second level. |
| 10/26/79    | Area               | 27/2 LPM              | 0.51                                                                       | First level, south side of stack while dust was settling after stripping on the second level. Cleanup being completed on second level. |
| 10/26/79    | D.R. Powell        | 15/2 LPM              | 3.93                                                                       | Bagging insulation after stripping on second level finished.                                                                           |
| 10/26/79    | P.M. Brown         | 15/2 LPM              | 2.97                                                                       | Bagging insulation after stripping on second level finished.                                                                           |
| 10/26/79    | Area               | 51/2 LPM              | 1.01                                                                       | First level, north of stack while first level being stripped.                                                                          |
| 10/26/79    | Area               | 55/2 LPM              | 0.9                                                                        | First level, south of stack while first level being stripped.                                                                          |
| 10/26/79    | Area               | 48/2 LPM              | 1.16                                                                       | Second level, on west wall, north of stack while first level being stripped.                                                           |

REPORT PREPARED BY

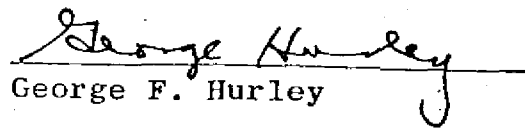
Ruth Clise  
Technical Center Industrial Hygiene Group

*Ruth Clise*

Ruth Clise

11/16/79

REPORT APPROVED BY

  
George F. Hurley

RC/sc