FILE NAME: Asbestos Cement Pipe and Sheet (ACPS)

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Research & Engineering Center
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SPECIAL DUST SURVEY
TRANSITE PIPE FIELD OPERATIONS

Personal dust samples were taken by the membrane Filter method on several field operations that are performed on TRANSITE Pipe. The initial tests were conducted on March 9, 1972 located outside between PD #1 Building and New Business Building. Moderate to strong drafts were present primarily in a direction away from the operation. However, frequent swirling winds contaminated the sample area.

Bob Anderson and Vinco Pacifico performed the operations and Larry Jarema and Joe Macko conducted the sampling.

Three different sized pipes were used during the tests; 4 in. Telephone Duct, 6 in. CL 150 Water Pipe, and 8 in. CL 2400 Sewer Pipe. The samples were of very short duration, covering the time required for a single operation. The test results are listed below.

| Operation | Pipe Size | Sample Time, min. | | F/cc | |
|---|---|---|---|---|---|
| Skill Saw Cutting | 4 in. | 4.2 | 20 | 123.0 | 41 |
| | 6 in. | 4.6 | 20 | 129.0 | 2.9 |
| | 8 in. | 4.8 | 20 | 96.0 | 4.5 |
| Hand Rasping | 6 in. | 5.0 | | 8.2 | |
| | 8 in. | 4.6 | | 20.0 | |
| Power Machining | 6 in. | 4.1 | | 28.0 | |
| | 8 in. | 3.4 | | 24.0 | |
| Manual Machining | 4 in. | 3.0 | | 13.7 | |
| | 6 in. | 3.0 | | 3.6 | |
| | 8 in. | 4.5 | | 20.0 | |
| Power Cutting with Carbide Tip Blade | 4 in. | 3.6 | | 6.9 | |
| | 6 in. | 6.0 | | 5.5 | |
| | 8 in. | 5.0 | | 9.9 | |
| Hammer and Chisel (Tapping for Sewer Saddle) | 8 in. | 6.6 | | 19.0 | |
| Hand Sawing | 4 in. | 5.0 | | 3.3 | |

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Due to the sampling duration, the values listed above are not truly representative of the average concentration. Therefore, specific operations were re-tested on March 17, 1972 for the purpose of repeating the operations in order to obtain a sufficient sampling time. The results of this survey are listed below.

| Operation | Pipe Size | Sampling Time, min. | F/cc | |
|---|---|---|---|---|
| Power Machining | 6 in. | 20 | 1.2 | 0.6 |
| | 8 in. | 20 | 4.1 | 0.4 |
| Manual Machining | 4 in. | 20 | 2.5 | 0.4 |
| | 6 in. | 20 | 3.3 | 1.2 |
| | 8 in. | 20 | 2.5 | 0.4 |
| Hand Rasping | 6 in. | 20 | 2.5 | 1.6 |
| | 8 in. | 20 | 2.9 | 1.2 |
| Hammer and Chisel (Tapping for Sewer Saddle) | 8 in. | 20 | 2.5 | 1.2 |

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