

AIRBORNE FIBER COUNTS

for

Georgia Pacific Corp.
Milford, VA

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Samples Collected and Analyzed By: E. J. Kleber
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OBJECTIVES

Monitor airborne asbestos fiber at Georgia Pacific Corp., Milford, VA, a manufacturer of ready-mix tape joint compounds.

OPERATIONS MONITORED

- 1) Dry mix operator - Basic responsibilities include gathering of raw materials, weighing them and adding them to the hopper. Materials are then conveyed along to the wet mix area. Four breathing zone samples were collected here because it can be logically assumed that this job generates the most airborne asbestos fiber.
- 2) Wet mixer operator - Job consists of operating a control panel which blends bulk handled materials and ingredients sent from dry mix operator with liquids. A breathing zone sample was collected at this point.
- 3) Palletizer operator - Carts off completed pallets to warehouse and makes sure palletizer is operating properly. A breathing zone sample was collected at this point since this operator moves freely about the plant and represents a cross-section of in-plant air.
- 4) Warehouse - An environmental sample was collected in the area of stored asbestos.

EQUIPMENT AND PROCEDURE

Sampling and dust counting were carried out in accordance with OSHA Regulation 1910.93a, using the Bayer, Zummalde and Brown method for counting asbestos fibers by phase contrast microscopy (Bureau of Occupational Safety and Health, Feb. 1969).

Battery-powered air pumps (M.S.A. type) calibrated to 2 liters per minute were used to collect personal breathing zone and environmental samples on millipore membrane filters of 0.8 micron porosity.

Fiber counting was performed on a Vicker's phase contrast microscope utilizing a Porton reticle for sizing and field definition.

TEST RESULTS

Reported as fibers greater than 5 microns in length per cubic centimeter of air sampled. A fiber is defined as a material having an aspect ratio greater than 3:1

SUMMARY OF FIBER COUNTS

Sample No:	Sample Time	Description	Fibers/cc >5
I-23	5 min.	Personal-Dry mix operator (John J. Green) gathering, weighing and adding raw materials to hopper. 30 lbs. SG-210 & 78 lbs. Canadian used per batch.	4.1
G-3	41 min.	Personal-Same as I-23.	0.9
I-31	21 min.	Personal-Same as I-23.	2.8
H-22	21 min.	Personal-Same as I-23.	1.8
G-10	30 min.	Personal-Wet mix operator (Lester Taylor) at control panel.	0.4
J-8	25 min.	Personal-Palletizer operator (John R. Green) driving towmotor, transporting pallets & controlling palletizer.	0.6
J-13	27 min.	Environmental-In warehouse 3' from asbestos pallets 5½' off floor during normal activity.	0.2