



Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29801

PLAINTIFF'S EXHIBIT

SWB-224

AUG 20 1979

Mr. Ruben Ridgeway
Associate Staff Manager - Safety
Southern Bell Telephone
1600 Hampton Street
Columbia, SC 29201

Dear Mr. Ridgeway:

Enclosed is a copy of the results of the Du Pont evaluation of exposure of Southern Bell Telephone (SBT) installers to airborne asbestos fibers generated from hand-operated drills. The test was conducted with guidance from an SBT representative on work techniques and load levels to simulate as close as possible actual conditions of drilling into asbestos containing wallboard (Transite).

This evaluation meets the initial asbestos monitoring requirements of the Occupational Safety and Health Program at Department of Energy facilities. We recommend that a written procedure be issued by SBT to cover this situation for its Savannah River Plant operation. Drilling into asbestos containing wallboard should be limited by the procedure to hand-operated equipment, and not higher than shoulder level. A provision for cleanup of the asbestos bearing waste with a HEPA-filtered vacuum cleaner or by wet sweeping into a labeled waste bag should be included. If you will provide a copy of the procedure, we will review it and appropriately inform Du Pont. It should be noted that any change in work techniques or load levels which could affect airborne asbestos fiber concentrations will require additional evaluation.

Your cooperation in this matter is appreciated.

Sincerely,

W. T. Thornton, Chief
Health, Safety & Fire Protection Branch
Safety & Environment Division

Enclosure

004005

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NO.	LOCATION	ΔT	FLOWRATE	PUMP NO.	TOTAL VOL	CONCENTRATION	DESCRIPTION
	BKGRD	76'	1.38 gpm	5	104.88 L	0.01 F/cc	Before all the tests 7/16/79
1	Area at wall	16'	3	Neptune 7	48.0	ND	Tests 1-3
2	Left shoulder	38'	2	5	76.0	0.10	Tests 1-6 & clean-up
4	Barricade	38'	1.95	10	71.44	0.06	Tests 1-6 & clean-up
7	Area by floor 2' high	16'	3	Neptune 7	48.0	0.14	Tests 4-6
	Clearing	19'	3	Neptune 7	57.0	0.02	After tests
	Blank	--	--	--	--	0.05 F/Field	Same lot as other filters

NO.	LOCATION	ΔT	FLOWRATE	PUMP NO.	TOTAL VOL	CONCENTRATION	DESCRIPTION
3	Right shoulder	6'	1.95 gpm	27	11.7 L	0.11	Test 1 hand drill 8 holes
5	Right shoulder	2'	1.95	27	3.9	ND	Test 2 wheel drill 8 holes
6	Right shoulder	2'	1.95	27	3.9	ND	Test 3 brace & bit drill 8 holes
8	Right shoulder	5'	1.95 gpm	27	9.75	0.14	Test 4 hand drill 8 holes
9	Right shoulder	2'	1.95	27	3.90	ND	Test 5 wheel drill 8 holes
10	Right shoulder	2'	1.95	27	3.90	ND	Test 6 brace & bit drill 8 holes
						Tests 1-3	Standing 2 ft from wall
						Tests 4-5	Kneeling 1½ ft from wall
						Tests 6	Kneeling 2 ft from wall

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Nomenclature

ΔT = Sampling Time

' = Minutes

F/cc = Fibers longer than 5 micrometers per cubic centimeter of air

lpm = Liters Per Minute

AVERAGE BREATHING ZONE CONCENTRATION

0.0⁵ F/cc

HIGHEST SAMPLE CONCENTRATION

0.14 F/cc

TLV = 2 F/cc

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