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United States Department of the Interior
MINING ENFORCEMENT AND SAFETY ADMINISTRATION

329 U.S. POST OFFICE AND COURTHOUSE
ALBANY, NEW YORK 12201

April 6, 1976

Mr. George Erdman, Vice President
Gouverneur Talc Company, Inc.
P.O. Box 89
Balmat, New York 12226

Subject: Safety Inspection Report
No. 3 Mine and No. 3 Mill
Gouverneur Talc Company, Inc.
Emeryville, St. Lawrence, New York
September 15 & 17, 1975
By James M. Salois, John S. Rouba,
Metal and Nonmetal Mine Inspectors and
Lewis Roberts, Mining Engineer

Dear Mr. Erdman:

The enclosed report covers a Federal inspection of the above-named operation made pursuant to Section 4 of the Federal Metal and Nonmetallic Mine Safety Act (80 Stat. 772)

Sincerely yours,

Edward J. Podgorski
Subdistrict Manager
Metal and Nonmetal Mine Health
and Safety, Northeastern District

Enclosures
cc

J. Alleva, Dept. of Labor (report only)
E. T. Beaudett, Dept. of Labor (report only)
J. Della-Gala, Dept. of Labor (report only)
R. Trombley, USWA (report only)



WES000874



United States Department of the Interior

MINING ENFORCEMENT AND SAFETY ADMINISTRATION

Michael P. Trainor, District Manager
Edward J. Podgorski, Subdistrict Manager
Metal and Nonmetal Mine Health and Safety
Northeastern District
329 Federal Building
Albany, New York 12201

Inspection No. : 16 Health

Identification No.: 30-00609

SAFETY INSPECTION REPORT

This report is based on an inspection made pursuant to Section 4 of the Federal Metal and Nonmetallic Mine Safety Act (80 Stat. 772).

A State Plan Agreement is in effect in New York which plan includes procedures for enforcement by the New York State Department of Labor, of State health and safety standards which are substantially as effective for the purpose of the protection of life, the promotion of health and safety, and the prevention of accidents as the mandatory standards promulgated by the Secretary of the Interior.

Company: Gouverneur Talc Company, Inc.

Mine Name: No. 3 Mine and No. 3 Mill

Location: (City) Emeryville (County) St. Lawrence (State) New York

Date(s) of Inspection: September 15 & 17, 1975

Name of Inspector(s): James M. Salois, Metal and Nonmetal Mine Inspector

John S. Rouba, Metal and Nonmetal Mine Inspector

Lewis Roberts, Mining Engineer

Company Official(s): George Erdman, Vice President-General Manager

Work Schedule: Shifts/day 3 Days/week 5 Hours/shift 8

No. of Employees: 16 Union Official(s): Roy Trombley, President,

U.S.W.A., Local 4979

Inspector(s) Accompanied by: Stanley Zaluski, Mill Foreman; Floyd Robinson,

Safety Director

Type of Mine: Underground Mining Method: Open Stop Product: Talc

WES000875

ASBESTOS FIBER EVALUATION METHOD

Measurement of the airborne asbestos fiber concentration consists of drawing a sample of dust laden air through a filter, counting the fibers on the filter using a microscope, and calculating the airborne fiber concentration. The results are fibers per milliliter of air.

Samples are collected to represent personal breathing zone measurements of fibrous dusts. The filter media is 37 mm Millipore type AA mounted in an open face filter holder. The sampling air flow rate is 1.7 lpm, using a battery powered personal pump. The sampling time is a function of concentration so that the filter contains a quantity that is satisfactory for counting with a microscope. Full working shift time weighted average exposures are calculated by relating appropriate sample results to estimated exposure times on the day of the evaluation.

Counting is performed by the phase contrast illumination method (the membrane filter method) described by NIOSH in their criteria document "Occupational Exposure to Asbestos", U. S. Department of HEW, HSM 72-10267, G.P.O., Washington, D.C. 1972. This method requires phase contrast illumination, 400-450 magnification and a 4 mm objective. Fibers greater than 5 microns in length and with an aspect ratio greater than 3 to 1 are counted.

MESA Mandatory Standard 55, 56, 57.5-1 (b) states, in part, the following:

55, 56, 57.5-1 Mandatory. (b) "The 8-hour time weighted average airborne concentration of asbestos dust to which employees are exposed shall not exceed 5 fibers per milliliter greater than 5 microns in length. No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of 10 fibers longer than 5 micrometers, per milliliter of air, as determined by the membrane filter method over a minimum sampling time of 15 minutes....."

NO. 3 MINE AND NO. 3 MILL

No. 3 Mine

<u>NAME</u>	<u>OCCUPATION</u>	<u>EXPOSURE</u> <u>FIBERS/ml</u>	<u>TLV</u> <u>FIBERS/ml</u>
Gilbert Streeter	Laborer	1.4	5.0
Murray Sykes	Trammer	3.2	5.0
Duane June	Driller	2.1	5.0
Johnnie Arquette	Trammer	0.7	5.0

No. 3 Mill

Gary Rust	Packer	13.0	5.0
Dale Harmer	Hardinge Operator	3.2	5.0
Gary Hopper	Packer	2.0	5.0
Larry Perrin	Packer	3.4	5.0

Mine ID No.: 30-00609

Date: 9/17/75

Product: Talc

Mine Name : No. 3 Mine and No. 3 Mill

METHOD OF DETERMINATION☐ Microprojector Counting☒ Fiber CountingTYPE OF SAMPLE ANALYZED☐ Midget Impinger ()☐ Total Airborne Dust

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV fibers/ml	TW/Cor
Gilbert Streeter 100-40-6719	Driller/No. 3 Mine	9/17/75 7:15 A	50		1.0			
		8:05 A	65		2.6			
		9:10 A	65		1.2			
		10:15 A	70		1.7			
		11:25 A	65		0.2			
		12:30	75		1.2			
	Off	2:40						
	Totals		445				5.0	1.

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc
Murray Sykes	Trammer/No. 3 Mine	9/17/75						
		7:05 A	70		*THTC			
		8:15 A	55		*THTC			
		9:10 A	68		4.0			
		10:18 A	52		5.0			
		11:10 A	80		2.3			
		12:30 P	65		2.2			
		1:35 P	65		3.0			
		Off	2:40					
	Totals		445				5.0	3.2
	*See Discussion							

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc
Duane June 124-34-5112	Driller - No. 3 Mine	9/17/75						
		7:03 A	72		*THTC			
		8:15 A	60		1.5			
		9:15 A	60		2.9			
		10:15 A	60		3.7			
		11:15 A	75		0.2			
		12:30 P	60		4.3			
		1:30 P	70		0.7			
	Off	2:40						
	Totals		457				5.0	2.1

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Con
Johnnie Arquette 133-36-6317	Trammer - 422 Stope	9/17/75 7:10 A	55		1.3			
		8:05 A	65		0.8			
		9:10 A	66		0.5			
		10:16 A	54		1.7			
		11:10	60		0.09			
		12:30 P	65		0.7			
		1:35 P	65		0.04			
		Off 2:40 P						
	Totals		450				5.0	0.

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc.
Gary Rust 124-34-5450	Packer-No. 3 Mill	9/17/75 3:50 p	55		25.0			
		4:45	30		4.2			
		5:15	60		4.1			
		6:15	60		35.0			
		7:15	60		3.1			
		8:15	60		2.8			
		9:15	60		*THTC			
		10:15	65		*THTC			
		Off 11:20						
	Totals		450				5.0	13.0
	*See Dust Discussion							

WES000882

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc
Gary Hopper 117-44-0105	Packer-No. 3 Mill	9/17/75 3:47	58		*THTC			
		4:45	50		*THTC			
		5:15	60		1.7			
		6:15	60		0.6			
		7:15	60		3.1			
		8:15	60		0.6			
		9:15	60		3.9			
		10:15	65		*THTC			
	Off	11:20						
	Totals		453				5.0	2.

WES000883

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc
Larry Perrin 062-42-5209	Bagging/mill	9/17/75						
		3:55 p	40		*THTC			
		4:35 p	35		8.2			
		5:10 p	60		*THTC			
		6:10 p	40		6.2			
		6:50 p	70		2.1			
		8:00 p	45		5.0			
		8:45 p	30		1.5			
		9:15 p	60		*THTC			
		10:15 p	30		*THTC			
		10:45 p	35		*THTC			
	Off	11:20 p						
	Totals		445				5.0	3.6
	*See dust discussion							

(SAMPLING RESULTS CONTINUED)

Mine ID No.: 30-00609

Name and Social Security No.	Occupation and Location	Date/Time Sampled	Sampling Time (Min.)	Occupancy Time Spent	Concentration Fibers/ml	Percent Silica	TLV Fibers/ml	TWA Conc.
Dale Horner 062-32-2044	Hardinge Operator-No. 3 Mill	9/17/75						
		3:45	60		*THTC			
		4:45	90		*THTC			
		6:15	60		1.3			
		7:15	30		*THTC			
		7:45	30		*THTC			
		8:15	60		*THTC			
		9:15	60		5.0			
		10:15	65		*THTC			
		Off	11:20					
	Totals		455				5.0	3.2

DUST DISCUSSION

As indicated in the Fiber Survey Results, the fiber concentration reported for Gary Rust, exceeds the currently enforced threshold limit value (TLV) of 5 fibers/ml for all forms of asbestos fibers according to techniques presently employed by the Mining Enforcement and Safety Administration (MESA) for determining fiber exposures.

Differences in laboratory results between MESA and the National Institute for Occupational Safety and Health (NIOSH) were discovered as a result of a technique comparison study conducted after completion of the fiber survey. The results of the survey reported herein may be affected when these differences are resolved.

Employee Rust's exposure also exceeded the ceiling limit of 10 fibers/ml as defined in Mandatory Standard 57.5-1 subparagraph (b), therefore, the operator was notified by telephone of this violation and that engineering or administrative controls were necessary.

A recommendation to reduce this exposure to an acceptable level through feasible engineering and/or administrative controls is enclosed along with a recommendation, under Part 57.5-5 (Mandatory), for the operator to provide and enforce the continued use of respirators approved for this contaminant. The supplied respirators shall be required for all employees working in the packing area and should be required in any areas of the mill or mine when dust generation is evident. A good respirator program must meet the requirements as defined in Appendix A.

In addition, a recommendation is enclosed requiring the operator to conduct dust surveys in the packing area of No. 3 Mill as frequently as necessary to determine the adequacy of control measures. The results of these surveys should be submitted to the Albany Subdistrict Office of MESA for review. Inquiry with the operator's compensation insurance company may find this service available.

Plans for abatement should be submitted to the Albany Subdistrict Office along with monthly progress reports as these plans develop.

Some samples were too heavy to count (THTC) because of excess material on the filter that made fiber counting inaccurate. It is probable the results obtained for the subject employees would be somewhat higher than those shown. The sampling time for these filters were excluded from time weighted average calculations.

Plans for abatement should be submitted to the Albany Subdistrict Office along with monthly progress reports as these plans develop.

Comparison of Fiber Counts for
#3 GTC Mill Monitoring. Monitoring by
MESA, September 15, 16 & 18, 1976

<u>Sample Numbers</u>	<u>MESA</u>	<u>NIOSH</u>	<u>Factor</u>
MS 155	3.0 (Fibers/ml.)	10.2 (Fibers/ml.)	3.4
MS 171	2.3	6.4	2.8
DJ 104	4.3	10.5	2.4
DJ 92	0 (Dusts too heavy to count)	14.9	-
DJ 170	3.7	10.7	2.9
DJ 190	1.5	9.0	6.0
MS 70	0 (Dusts too heavy to count)	15.7	-
JA 106	0.7	6.5	9.2
JA 188	0.8	8.5	10.7
JA 188	0.09	1.0	11.1
DJ 114	2.9	17.7	6.1
GR 195	2.8	13.7	4.9
GR 178	4.1	19.0	4.6
GR 184	35	20.6	-
GR 185	25	16.4	-
		Average Factor	5.8

Comparison of Fiber Counts for
#3 GTC Mill Monitoring. Monitoring by
MESA, September 15, 16 & 18, 1976

<u>Sample Numbers</u>	<u>MESA</u>	<u>NIOSH</u>	<u>Factor</u>
MS 155	3.0 (Fibers/ml.)	10.2 (Fibers/ml.)	3.4
MS 171	2.3	6.4	2.8
DJ 104	4.3	10.5	2.4
DJ 92	0 (Dusts too heavy to count)	14.9	-
DJ 170	3.7	10.7	2.9
DJ 190	1.5	9.0	6.0
MS 70	0 (Dusts too heavy to count)	15.7	-
JA 106	0.7	6.5	9.2
JA 188	0.8	8.5	10.7
JA 188	0.09	1.0	11.1
DJ 114	2.9	17.7	6.1
GR 195	2.8	13.7	4.9
GR 178	4.1	19.0	4.6
GR 184	35	20.6	-
GR 185	25	16.4	-
		Average Factor	5.8