

INDUSTRIAL HYGIENE WALK-THROUGH REPORT

PLANT NAME: Standard Industrial Minerals, Laws Mill

LOCATION: Bishop, California

PURPOSE: The National Institute for Occupational Safety and Health (NIOSH) in cooperation with the Mining Enforcement and Safety Administration (MESA) has underway a preliminary study of the talc mining and milling industry. As part of this study NIOSH is conducting walk-through surveys to compile necessary data in an effort to characterize talc composition in the U.S.

NIOSH PERSONNEL: Howard R. Ludwig, Thomas E. Sandusky

PLANT HISTORY AND PROCESS:

Standard Industrial Minerals acquired the Laws Mill in 1962 from Huntley Industrial Minerals. The mill processes talc and kaolin from their own mines and pits, as well as talcs for Interpace and Johns-Manville, and barite from Nevada.

The Laws Mill was built in 1949 and presently employs 7 workers (6 days per week) during the single 10 hour shift. The stockpiled talc is fed into a hammer mill before passing into a Raymond roller mill (200 mesh). Depending on the desired use of the talc it is either bagged after the Raymond mill or a finer grind is produced by also passing the talc through a Byer mill. Various different blends and grades of talc are processed for use in cosmetics and pharmaceuticals.

Standard Industrial Minerals also employs 2 workers in their open pit Kaolin Mine and 3 workers in their underground White Eagle Talc Mine in the Saline Valley. The underground miners work 10 days and are off 4 days, being paid by the ton when producing and by the hour when maintaining or making repairs in the mine.

HEALTH HAZARDS: Potentially excessive dust and noise exposures.

PERSONNEL RECORDS: Include Social Security numbers, work histories, and lost time accident data back to 1962 when mill was acquired.

RECOMMENDATIONS:

1. An audiometric hearing program should be instituted to ascertain the effectiveness of current hearing protection.
2. Better housekeeping practices should be instituted to prevent dust buildup on floor. A vacuum type system is recommended instead of sweeping or shoveling. Encrusted talc deposits should be removed from stairways leading to mill.

3. The exhaust ventilation rate on bagging machines should be increased to better collect excess talc or clay.
4. The wearing of NIOSH approved dust respirators should be strictly enforced.

Work Sheet

for

Preliminary Industrial Hygiene
Survey of

Plant Name: Standard Industrial Minerals, Laws Mill

City, State: Bishop, California

Survey Date: July 19, 1976

Survey Conducted By: Howard R. Ludwig
Thomas E. Sandusky

Industrial Hygiene Section
Industry-Wide Studies Branch
Division of Surveillance, Hazard Evaluations and Field Studies
National Institute for Occupational Safety and Health
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I. General:

1. Establishment Name Standard Industrial Minerals
Address P.O. Box 303 City Bishop
State California Zip Code 93514 Tel. No. (714) 873-6720
2. Persons Interviewed Al Wooten, Superintendent
Title _____
Others: _____
3. A) Union Representative: Norman Morin
Title Asst. Business Representative Telephone Number (714) 873-4473
B) Name of Union(s) Laborers Local 185
5. NIOSH Staff Present H.R. Ludwig, T.E. Sandusky

II. Plant Description:

1. Is plant a subsidiary or independently owned? Subsidiary
Name of parent company Standard Slag (Reno, Nevada)
Legal Owner _____
2. Date plant built 1949 by Huntley Ind. Minerals, acquired in 1962-63.
Date of plant additions _____
3. Acreage of plant site _____
4. Number of major buildings 3 Total Square Feet 20,000
5. A) How many people are on your payroll at the present time? 12
B) Of this number, how many are normally in the
Production Area? 11 (incl. 5 miners) 3 Underground miners (White Eagle)
Administrative Area? 1 2 Open pit miners (Kaolin)
Other Areas? 0 2 Packers
1 Fork lift operator
1 Front end loader operator
1 mechanic, 1 maintenance ma:
1 superintendent

* Normally 1 8hr/day 5 days/wk shift

6. Number of Shifts 1 10hr/day 6 days/wk*

7. Number of employees/shifts? 9 (mill and open pit)
Underground mine 10 days on, 4 days off. Paid by ton when producing, hourly wages when maintaining or repairing mine.

III. Description of Process:

1. What are your major products or services? (list)

Talc (1) their own talc from Saline Valley Mine (underground) 70 miles to S.E. is processed for use in cosmetics (micronized) and pharmaceuticals.
(2) Interpace Talc from Desert and Holiday mines in Death Valley. It is not micronized.

Koalin - various grades from nearby open pit mine
Barite - from Nevada

2. Plant Processes

A) Product Talc

Raw materials and possible contaminants

Saline Valley - "virus", otherwise "pure"

Desert Mine - Interpace, unknown content

Holiday Mine - Interpace, unknown content - 'Blackish Talc'

Production Processes Talc Feed (all) to Hammer Mill (minus 1 inch) to

Ryamond Mill (200 mesh) to Byer Mill (Fine grind)

↓
Interpace Talc

↓
Saline Valley (for cosmetics)

↓
Saline Valley (for pharmaceuticals)

Snocal 50, 70, 90 Mono 48

B) Product Kaolin (clay) Sunshield (ortho)

Raw materials and possible contaminants

3 grades. The Sunshield (used to protect from sun's rays) has 1%

glue added (Vistik - a Herbicide adjuvant for reduction of spray drift

containing 100% hydroxyethyl cellulose).

Production Processes

Kaolin (26% moisture) to hammer mill (minus 1 inch) to dryer 350-380°F to

Scale room (blended if necessary) to Raymond Mill then bagged.

Talc Mine (White Eagle Mine) 2 drillers, although only 1 drills at a time
with bomb on stick technique (6-8 sticks of dynamite on a pole). Height of
tunnels may become 40 - 50 feet.

Barite - from Nevada, intermittent demand for it to be processed.

IV. Description of Medical, Safety and Industrial Hygiene Programs:

1. A) Does your company employ an industrial hygienist?

Yes, at this location _____

Yes, at corporate headquarters _____

Yes, on a consulting basis _____

Yes, insurance carrier _____

Yes, specify _____

No X _____

B) Name _____ Telephone Number _____

Address _____

C) What types of measurements are routinely taken? Explain.

MESA conducts quarterly visits with air sampling and noise
measurements.

D) Were industrial hygiene measurements obtained: Yes _____ No X _____

2. Do you have an agreement with a physician to give your employees
emergency or other medical care?

Yes, at this location--full-time _____

Yes, at this location--part-time _____

Yes, on call X

No _____

Name Dr. Curtis Telephone Number _____

Address Bishop, California

3. Do you have a licensed nurse in your facility at a regular time?

Yes, Full-time _____ Yes, Part-time _____ No X

4. Do you have an employee at this facility on each shift with formal first aid training, other than doctors or nurses, who has been designated to provide emergency treatment?

Yes X (4) No _____

5. When you hire a new employee, do you require him to take a medical examination?

Yes, all employees _____

Yes, some employees _____

No X

6. Do you provide any periodic physical examinations for your employees?

Yes X No _____ How Often _____

Whenever they request one.

7. Do you provide special job related medical tests for your employees, such as:

Chest X-Ray Yes X Yearly No _____

Hearing Tests Yes _____ No X

Visual Tests Yes _____ No X

Lung Function Tests Yes _____ No X

Blood Tests Yes _____ No X

Urine Tests Yes _____ No X

Other Yes _____ No X

Specify: Company pays for a complete physical if an employee asks for one

8. A) Does your company have a formal safety program? Yes _____ No X

B) Safety and Health Supervisor _____

C) How many people are involved in this program? _____

D) How many lost-time accidents did you have last year?

Frequency 0 Severity _____

9. Has there been any medical abnormalities among workers which can be contributed to an occupational exposure?

Explain Hearing loss. Another worker who bagged a tale asbestos mixture (1000 tons per month) up until about 1953, was on disability for about 10 years, and died about 2 years ago.

10. What protective equipment is required:

Equipment Provided by Employer

Clothing Yes _____ No _____

~~XXXXXX~~ Goggles Yes x No _____

Shoes Yes _____ No X but required

Respirators Yes x No _____

Type Dustfoe 66 (MSA)

Where Used _____

Other Hard Hats, swedish cotton

11. A) Are there facilities for taking showers? For most part, not used.

Yes x No _____

B) Are there facilities for changing clothes? For most part, not used.

Yes x No _____

C) Obtained descriptive literature on products?

Yes _____ No x

Very low worker turnover, in fact almost none.

V. Narrative:

1. Description of Medical, Safety and Industrial Hygiene Program:

Annual chest x-rays are required and the company will pay for physical
exams if an employee asks for one. Hearing protection (Swedish cotton)
and respirators are provided along with goggles.

2. Potential Health Hazards:

Noise, dust

3. Have product lines changed over the years? (If they have, include any other raw materials used).

No - not the Kaolin or Saline Valley Talc. Just recently started process-
ing Interpace "talc". Johns-Manville was grinding the Desert Talc for
Interpace before. No talc to be micronized from Johns-Manville in about
3 months, some in past, however

4. Are waste products reused: (If not, how are they disposed?)

No.

5. Briefly describe any past air sampling data.

Smith-Emery Co. 781 East Washington Blvd in L.A. 15, Cal. does lab
analysis for Laws Mill.

6. Completeness of Personnel Records:

Social Security Numbers - Yes _____

Work History - Yes _____

Lost Time Accident Data - Yes _____

Records Available Since at least 1962 (probably before) _____

7. Ventilation: (Include type, size, kinds of collectors, H.P. of blowers, history of changes, etc.)

Waters down yard to keep dust down. Exhaust ventilates hoppers, bin, conveyors and bagging machines to bag houses (5).

8. Housekeeping:

Warehouse was well kept up but rather heavy accumulations of talc/Kaolin on floor in milling and bagging areas, as well as on stairways leading to mill.

9. Miscellaneous:

