



# The State of Wisconsin

WISCONSIN STATE BOARD OF HEALTH  
INDUSTRIAL HYGIENE DIVISION  
STATE OFFICE BUILDING  
1 WEST WILSON STREET  
MADISON 2

PLAINTIFF'S  
EXHIBIT

K-1204

September 28, 1951

Mr. G. R. Mercer, Superintendent  
Algoma Plywood and Veneer Company  
Algoma, Wisconsin

Dear Mr. Mercer:

Enclosed are two copies of the report of the Kaylo Dust Survey made in your plant on September 5, 1951. The highest dust count, 14.4 million particles per cubic foot of air, was found at the feed end of the Mattison saw. It is possible to reduce the dust concentration at this point by providing an additional hood or replacing the present hood with a longer one which would capture the dust particles presently being thrown toward the feed end by the rotating saw blade.

If we can be of any further help to you, please feel free to call upon us.

Sincerely,

William L. Lea, Ph.D.  
Director

VLL:zjk

Encl - 2

See attached

128



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## KAYLO DUST SURVEY

Plant: Algoma Plywood and Veneer Company

Location: Algoma, Wisconsin

Date of Survey: September 5, 1951

Officials Contacted: Mr. G. R. Mercer, Superintendent  
Mrs. Gertrude C. Brice, Plant Nurse

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This routine dust study of the Kaylo operations was made at the request of Mrs. Brice.

A total of seven samples were collected at various locations using midget impingers. The dust counts of the samples were made by a light field microscopic technique. The results of the samples are given in the following table:

## KAYLO DUST COUNTS

| Sample No. | Description                                               | Million Particles Per Cubic Foot of Air |
|------------|-----------------------------------------------------------|-----------------------------------------|
| 1          | Drum sander, feed end                                     | 3.3                                     |
| 2          | Drum sander, discharge end                                | 4.1                                     |
| 3          | Greenlee saw, feed end                                    | 7.2                                     |
| 4          | Greenlee saw, discharge end                               | 5.4                                     |
| 5          | Mattison saw, feed end <i>Improvement of construction</i> | 14.4                                    |
| 6          | Mattison saw, discharge end                               | 8.5                                     |
| 7          | Single cut off saw                                        | 2.9                                     |

In the letter of transmittal that accompanied the report of a similar dust study made on August 2, 1949, it was stated that the maximum allowable concentration for Kaylo dust was probably between 5 to 20 million particles per cubic foot of air. Sample #5, taken at the feed end of the Mattison saw, showed a dust count of 14.4 million particles per cubic foot of air. Therefore, it is recommended that a hood be installed to capture the dust particles generated by this saw. This hood should be in addition to the hood already on the saw.

A static suction reading of 4.4 inches water was taken on the exhaust duct of the present hood. This reading indicates a velocity of 6,000 feet per minute in the duct which should be sufficient to convey the dust providing the hood is so designed to capture the dust particles that are projected into the air by this saw.

INDUSTRIAL HYGIENE DIVISION

*Walter H. Poppe, Jr.*

Walter H. Poppe, Jr.  
Engineer

*Edward J. Otterson*

Edward J. Otterson  
Engineer

VHP:mjk  
9/25/51

October 31, 1951

The State of Wisconsin  
Wisconsin State Board of Health  
Industrial Hygiene Division  
State Office Building  
1 West Wilson Street  
Madison 2, Wisconsin

Attention Mr. William L. Lee; Ph.D. Director:

Dear Mr. Lee:

Thank you for the Kaylo Dust Survey report submitted with your letter dated September 28th.

The dust collected on the Mattison saw as covered by sample #5 is being revised so that the dust count at this location will be lowered considerably.

When we are ready for another test we will let you know.

Yours truly,

Gordon R. Mercer  
Superintendent

GRM:mh

cc: R. P. Fulwiler  
Gertrude Brice ✓  
John Laurent