



Centers for Disease Control
and Prevention (CDC)
National Institute for Occupational
Safety and Health (NIOSH)
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April 7, 2023
HETA 2023-0065

Brian Peterson
Vice President of Operations
Billerud
7100 County 426 M.5 Rd.
Escanaba, MI 49829

Dear Mr. Peterson:

Thank you for hosting our informative visit to Billerud Escanaba Mill on March 27 and 28, 2023. The site visit was in response to a management request from Billerud Escanaba Mill for a health hazard evaluation from the National Institute for Occupational Safety and Health (NIOSH) to investigate potential exposure to *Blastomyces* due to an increasing number of blastomycosis cases among workers at Billerud Escanaba Mill. This letter summarizes our recent visit and initial observations.

The NIOSH field team, consisting of a health scientist, industrial hygienist, epidemiologist, laboratorian, and medical officer, was accompanied by a fungal epidemiologist and fungal laboratorian from the Mycotic Diseases Branch in the Centers for Disease Control and Prevention and state and local health department officials.

On Monday, March 27, 2023, we held an opening meeting with Billerud Escanaba Mill management and union and employee representatives to discuss the health hazard evaluation objectives. Billerud management and employees provided a detailed guided tour of the facility including the woodyard, mills, finishing and shipping (PS&D), lagoons, and outlying areas to understand work processes, practices, and workplace conditions. We also had the opportunity to speak with you, the health and safety director, the company occupational health physician and nurse, managers from multiple departments, and an industrial hygienist contracted by the company to assess potential *Blastomyces* exposures. Additionally, we spoke with some employees to discuss workplace health and safety concerns.

On the afternoon of March 28, we held a closing meeting, attended by the same participants as the opening meeting and the President of Billerud North America who joined by phone. Everyone was very welcoming, and we appreciated the time spent by all to make sure we had the opportunity to learn about the mill and how it operates.

The following points were discussed during the closing meeting:

- Continue to provide voluntary use of N95 filtering facepiece respirators to employees to minimize potential exposure to *Blastomyces*, especially for employees who might have a weakened immune system.
- Encourage employees who experience signs and symptoms, such as cough, fever, chills or night sweats, shortness of breath, poor appetite or weight loss, muscle pain, joint pain or bone pain, fatigue (extreme tiredness), or skin lesions to contact their healthcare providers. Blastomycosis is a treatable illness, and illness can be minimized when diagnosed and treated early.
- Give careful consideration to activities beyond regular mill operations (within and outside) with the potential to disturb dirt, soil, or organic material on mill property that may be contaminated with *Blastomyces*. Such activities could generate potential for exposure, particularly if disturbed *Blastomyces* spores are carried by wind.
- Limit the time exterior doors are open, when possible.
- Leverage your safety advocates, safety committees, and leadership teams to share information with all employees.

As discussed at the closing meeting, we are working on the logistics for a second visit later this month (in April 2023). NIOSH plans to offer a *Blastomyces* urine antigen test to employees and administer a work and health questionnaire. The urine antigen test is a screening test for potential exposure to *Blastomyces*. The urine antigen test combined with the questionnaire will enable us to better determine potential sources of exposure to *Blastomyces* based on reported work locations, underlying health conditions, and activities in the past few months. We are exploring options for testing environmental samples and will follow up with you to schedule a potential return visit to collect environmental samples. As soon as available, please provide us with a copy of the report and sampling results from Trimedia Environmental & Engineering Services.

In the meantime, we recommend the following actions to reduce the potential for exposure to *Blastomyces*:

1. Continue to make N95 disposable filtering-facepiece respirators available to all employees for voluntary use, especially to those involved in any soil disrupting activities within or outside the mill. N95 respirators should be available in various sizes.
 - a. Each user should receive a copy of [Appendix D](#) of the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard which provides information for employees about using respirators when not required under the standard.
 - b. Information about [voluntary use of respirators](#) can be found on the [OSHA website](#).
2. Inspect all heating, ventilation, and air-conditioning (HVAC) systems and follow the manufacturers' recommended maintenance schedules including replacing air filters, checking drip pans, ensuring thermostats are in working order, and checking and cleaning ventilation system dampers to ensure proper functioning. A building's HVAC systems include all of the equipment used to ventilate, heat, and cool the air in the building; to move the air around the building (ductwork); and to filter and clean the air. These systems can have a significant impact on how pollutants are distributed

in and removed from spaces.

3. Contract a licensed ventilation engineer or building scientist to inspect the ductwork for evidence of water incursion and microbial growth. The National Institutes of Health has a [fact sheet](#) on duct contamination.
4. Limit activities beyond your regular mill operations within and outside the mill that involve disrupting soil, such as excavation.
5. Continue to encourage employees that have or develop signs and symptoms such as cough, fever or chills or night sweats, shortness of breath, poor appetite or weight loss, muscle pain, joint pain or bone pain, fatigue (extreme tiredness), or skin lesions to follow up with their healthcare providers.

As noted during the closing meeting, the primary focus of the health hazard evaluation is protecting the workers at Billerud Escanaba Mill. NIOSH plans to investigate factors associated with blastomycosis infection among workers at the paper mill. This will inform recommendations to reduce the risk of *Blastomyces* exposure and help prevent future cases of blastomycosis.

Thank you for your cooperation with this ongoing evaluation. We welcome further communication to assist in our common objective of protecting the health of your workforce. We encourage you to share this letter with employees. If you have any questions, please do not hesitate to contact me at 304-285-6339.

Sincerely,



Marcia Stanton
Health Scientist
Respiratory Health Hazard Evaluation and
Technical Assistance Program
Field Studies Branch
Respiratory Health Division

cc:

Ms. Pamla Versailles, Billerud, Health and Safety Director, North America
Mr. Gerald Kell, USW Local 21 President
Mr. Jamie Dier, USW Local 21 Vice President
Mr. Bryan Fisher, USW Staff Representative
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Ms. Karen LaCrosse, Teamsters 406 Steward
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Mr. Bart Pickelman, Director, Michigan Occupational Safety & Health Administration
Mr. William Donovan, Regional Administrator, OSHA Region 5