

## HEALTH CONCERNS FROM DUST AT WEST MILWAUKEE SILO DEMOLITION SITE December 2022

The purpose of this fact sheet is to provide information to Milwaukee residents or others who may live or work near the Malteurop (old Froedtert Malt) silo demolition project near 3830 W Grant Street. Malteurop had produced barley malt for the beer industry, which was stored in the concrete silos prior to processing.

Questions have been raised about possible health impacts from the dust generated by the demolition of the tall silos moving off the construction site (called fugitive dust). "Fugitive dust" means solid airborne particles emitted from any source other than a flue or stack. (Ch. NR 415.02(2), Wis. Adm. Code). The project began on September 9, 2022 with initial asbestos abatement. The demolition of the structures is expected to continue for approximately 12 months. After the demolition is complete, the land is anticipated to be available for future development.

In response to community concerns, the Milwaukee Health Department, in consultation with the Wisconsin Department of Health Services, assessed potential health risks from exposure to fugitive dust from the site. **Public health professionals have determined that there are low overall health risks to area residents associated with this operation.** However, the dust created can potentially create short term eye, sinus, and throat irritation. It can also settle on cars, outdoor appliances, etc., causing some aesthetic concerns.

### What are potential long-term health risks from these types of dust exposures?

Possible health impacts could be posed by asbestos, if it were present in the dust, or from tiny particles of silica or any other fine material, which when breathed in can cause heart, lung, or other problems.

### What are the short-term health impacts from dust exposure?

High levels of fugitive dust from the demolition activities can irritate your eyes, nose, or throat, causing coughing, a runny nose, or stinging eyes. These symptoms should end shortly after leaving dusty areas. Kids, older adults, or people with heart or lung conditions (heart disease, asthma, bronchitis, COPD) might also experience wheezing, chest tightness, or difficulty breathing from exposure to dust.

### Does the fugitive dust contain asbestos?

No, the asbestos is safely removed and contained before any demolition begins in each area. In addition to the demolition contractor, a certified asbestos abatement contractor is also on-site assessing the need for proper removal of materials that contain asbestos **before** structures are demolished. The asbestos contractor has notified the Wisconsin Department of Natural Resources (WDNR) about the asbestos removal process and the demolition of the structures in accordance with WDNR requirements ([Ch. NR 447, Wis. Adm. Code](#)). A WDNR asbestos inspector has also evaluated compliance with all WDNR requirements during several site

inspections. The WDNR will continue to monitor the need for any asbestos removal before demolition of all structures.

### **How does fugitive dust or particulate matter from the demolition affect my health?**

Particulate matter (PM) includes tiny particles (PM<sub>2.5</sub>), which are 2.5 micrometers in diameter and smaller, and coarse particles (PM<sub>10</sub>), which are 10 micrometers in diameter and smaller. (By comparison, a human hair is about 60 microns thick)

**Fugitive dust from demolition activities is generally comprised of PM<sub>10</sub> and higher diameter particles, which have fewer impacts on people's health.** PM<sub>2.5</sub> poses the greatest health risk, as fine particles can get deep into lungs and even into the bloodstream, causing more serious health harms. Mechanical processes, such as crushing, grinding, and screening occurring at this demolition project are not significant sources of PM<sub>2.5</sub>.

Dust that is PM<sub>10</sub> or larger can create breathing challenges for kids, older adults, and people with heart or lung conditions, such as heart disease, allergies, asthma, COPD, or bronchitis. People who are sensitive to dust can prevent exposure by wearing a N95 mask if they must be outdoors during periods when dust is floating in the air. Buildup of dust indoors can be controlled by regular dusting and vacuuming, use of higher efficiency HVAC filters and changing them regularly, using portable HEPA air cleaners, and keeping windows closed during periods when construction dust is present at higher levels in outdoor air.

### **Can silica dust cause health issues?**

Concrete is made of sand and other aggregate which contain silica. Silica dust is a known health hazard for workers in certain industries and is regulated by the [U.S. Occupational Safety and Health Administration \(OSHA\)](#). Health risks stem from close exposure over long periods of time from manual work that generates large quantities of silica dust in the PM 2.5 range, such as sand blasting. Foundry work also creates breathable silica particles from the intense heat of molten metal in sand molds. Because respirable dust and molten metal are not being generated in significant quantities from the mechanical forces involved in this demolition, **people in the neighborhoods surrounding this demolition site are not expected to be exposed to unhealthy levels of silica dust.**

WDNR has inspected the property several times before the demolition started. They will continue to monitor activities at the site to verify compliance with asbestos removal requirements and to minimize fugitive dust. The contractor is currently spraying the area with water to limit the amount of fugitive dust generated during the demolition process.

### **Who can I contact if I have questions or concerns?**

If you have further questions about possible health impacts from the demolition activities, call the Milwaukee Health Department at 414-286-6800.

If you want to report excessive dust conditions or feel the work is not proceeding according to the permit or other regulations please contact Kim Egan, the Village Administrator of West Milwaukee [kim.egan@westmilwaukee.gov](mailto:kim.egan@westmilwaukee.gov).