



Train. Protect. Prevent.

DEMOLITION DUST

Demolition dust has the potential to cause a myriad of health problems. Demolition site workers should be aware of the dangers that demolition dust presents and take the proper precautions. Let's take a look at why the dust is so harmful and what workers can do to stay safe.

During a demolition and debris recycling, significant amounts of harmful dust arises into the air. For years, site workers treated these airborne particles as merely an annoyance and didn't consider them to be a potential hazard. Fifty years ago, an industrial hygienist named Marion Trice outlined the negative health consequences of exposure to concrete and stone dust. Over the past few decades, we've recognized these dangers and determined that the heaviest particles settle out of our air while the smallest particles hang around in the air for extensive periods of time. They're referred to as respirable and inhalable.

An infectious disease known as histoplasmosis can result from the inhalation of airborne dust. Demolition and excavation work can free up the spores from fungus that is typically found in bat and bird droppings. Histoplasmosis symptoms include fever, coughing, shortness of breath, chills, headaches, chest pains and loss of appetite. Although it is not contagious, histoplasmosis can harm the lungs by causing chronic lung disease. This is similar to tuberculosis and it can get much worse as time goes on. The fungus inhaled by site workers can even spread to organs beyond the lungs. In the worst case scenario, a demolition site worker who comes down with histoplasmosis can die.

When workers are exposed to airborne dust with crystalline silica, a lung condition caused silicosis can result. Silicosis is irreversible and disabling as crystalline silica is a Group I carcinogen. It can result in fever, chest pains, weight loss, kidney disease and even lung cancer. In the worst case scenario, it can result in death. Dust can harm machines as well. Accumulations of significant amounts of dust will lead to more wear and tear and extra maintenance.

As a result of these dangers, demolition sites typically have dust control measures and safety services in place to preserve the health of onsite workers. Mitigation techniques include airborne capture and wetting. Sprinklers and hand-held hoses are used to wet the source ahead of particles reaching the air. Dust can be captured with either an atomized spray or an electrostatically charged fog. A fog system creates small water droplets with a charge that opposes those of the airborne dust. This generates an attraction to control the particles. Atomized sprays are emitted from powerful fans at high speeds to collide with airborne dust particles and bring them to the ground.



Work Site Review: Hazards/Safety Suggestions

Company Name: _____ Work Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Employee Signatures: (continue on back of sheet if necessary)

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness)

Manager/Supervisor's Signature: _____

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