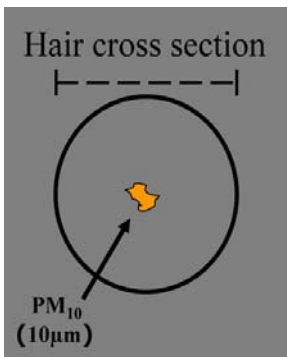


What is Fugitive Dust? It's Air Pollution

Dust is particulate matter (PM) consisting of very small particles. Fugitive dust is PM suspended in the air primarily from soil that has been disturbed by wind or human activities, such as earthmoving and vehicular/equipment traffic on unpaved surfaces.

Particulate Matter Can Be Hazardous to Your Health



Fugitive dust particles most significant to human health are particles ten micrometers (μm) in diameter or smaller, while the average human hair is 70 micrometers in diameter. Due to its very small size and weight, when inhaled, PM_{10} can travel to deep parts of the

lungs and remain there, contributing to respiratory illness, lung damage, and even premature death in sensitive individuals.

Hot and Dry Climates in Idaho

Many areas of Idaho have long and hot summers with very little rain, causing soil to dry out. If the soil is disturbed, it may have months to blow around before normal rainfall can again saturate and hold it in place. Some areas are also prone to high winds, which can increase the occurrence of fugitive dust.

For More Information

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Log on:

Air Quality: Controlling Fugitive Dust

www.deq.idaho.gov/air/prog_issues/pollutants/dust.cfm

Developing a Dust Prevention and Control Plan

www.deq.idaho.gov/air/prog_issues/pollutants/dust_control_plan.pdf

Environmental Assistance: Construction Industry

www.deq.idaho.gov/multimedia_assistance/construction/overview.cfm

DEQ's Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01.650 and .01.651) contain the full text and complete requirements for fugitive dust control.



Printed on recycled paper. July 2008. Costs associated with this publication are available from the Department of Environmental Quality in accordance with Section 60-202, Idaho Code.

Air Quality In Idaho

Controlling Fugitive Dust at Construction Sites



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www.deq.idaho.gov

Regulating Fugitive Dust in Idaho

The Idaho Department of Environmental Quality (DEQ) regulates fugitive dust emissions in Idaho. The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.651, state in part:

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

In determining what precautions to take, consider the following:

- proximity of dust-emitting operations to where people live, work, and play, and
- weather conditions, which might affect the movement of dust, dirt, soot, or smoke.

Benefits of Preventing Fugitive Dust Emissions

- ✓ Lower operating costs
- ✓ Safer conditions for workers
- ✓ Increased productivity
- ✓ Reduced future liability

Preventing Fugitive Dust Emissions

- ✓ **Plan ahead** by developing a dust prevention and control plan.
- ✓ **Minimize the disturbed surface area** by reducing the excavation size and/or number of excavations.
- ✓ **Limit dusty work on windy days.**
- ✓ **Pave haul roads and storage areas.** If wholesale paving is too costly, pave just the entrance and exit to minimize carryout and gravel the remainder.

- ✓ **Water and/or sweep roadways often** to ensure that vehicle traffic is not picking up dust.
- ✓ **Reduce speed limits** on unpaved surfaces to 10 mph.
- ✓ **Prevent transport of dusty material off-site** by rinsing vehicles and equipment before they leave the property and tightly covering loaded trucks.
- ✓ **Enclose storage and handling areas** if dusty materials are frequently loaded and unloaded at these sites. Use storage silos, three-sided bunkers, or open-ended buildings. If handling is less frequent, try wind fencing.
- ✓ **Keep storage piles covered when not in use.** Apply a dust suppressant spray or cover with a tarp. Limit the working face of the pile to the downwind side. Most dust emissions come from loading and unloading the pile and from truck and loader traffic in the immediate area. Keep the drop height low to reduce dust and the ground at the base of the pile clear of spills.

Controlling Fugitive Dust Emissions

- ✓ **Use dust suppression measures when needed,** such as applying water or using control equipment, even if it may alter your schedule.



- ✓ **Clean up dusty spills immediately.** Waiting will increase the mess and prolong cleanup.
- ✓ **Cover open areas** with vegetative ground cover to hold soil in place. Growing grasses or other native plants is the most effective, easiest, and economical control because these plants provide a dense, complete cover. Even when the vegetation dries up, the roots will help hold the soil in place.



- ✓ **Use wind erosion controls.** Plant bushes or trees, construct wood or rock walls or earthen banks as permanent windbreaks, or install porous wind or snow fences as temporary measures. Reduced wind velocity allows larger particles to settle to the ground.



Consequences of Noncompliance

Failure to reasonably control fugitive dust may result in enforcement action by DEQ, which can include monetary penalties.