

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TECHNICAL STANDARD
DUST CONTROL ON CONSTRUCTION SITES
1068

DEFINITION

Dust control includes practices used to reduce or prevent the surface and air transport of dust during construction.

Dust control measures for construction activities include minimization of soil disturbance, applying mulch and establishing vegetation, water spraying, surface roughening, applying additives (polymers), spray-on tackifiers, chlorides, and barriers.

PURPOSE

This practice may be used to:

- (1) Reduce wind erosion and dust.
- (2) Minimize deposition of dust and wind transported soils into water bodies through runoff or wind action.
- (3) Reduce respiratory problems.
- (4) Minimize low visibility conditions caused by airborne dust.

CONDITIONS WHERE PRACTICE APPLIES

Dust control measures may be applied at any construction site, but is particularly important for sites with dry exposed soils which may be exposed to wind or vehicular traffic.

CRITERIA

Comply with applicable federal, state and local laws, rules, regulations or permit requirements governing this practice. This standard does not contain the text of federal, state, or local laws.

This section establishes the minimum standards for design, installation and performance requirements.

Limit the area exposed for dust generation prior to implementing dust control practices.

Asphalt and petroleum based products cannot be used for dust control.

Mulch and Vegetation. Mulch or seed and mulch may be applied to protect exposed soil from both wind and water erosion. Refer to WDNR Technical Standards Mulching for Construction Sites (1058) and Seeding for Construction Site Erosion Control (1059) for criteria.

Water. Water until the surface is wet and repeat as needed. Water at rates so that runoff does not occur. Provide a stone tracking pad or tire washing station at treated soil surfaces that receive vehicle traffic. Refer to WDNR Technical Standard Stone Tracking Pad and Tire Washing (1057) for criteria.

Tillage. Tillage can be used as a control measure performed with chisel type plows on exposed soils. Begin tillage on the windward side of the site. Tillage is only applicable to flat areas.

Additives. Additives can be an effective practice for areas that do not receive vehicle traffic. Initially apply water to additives for activation to be effective for dust control. Refer to WDNR Technical Standard 1050 - Land Applied Additives for Erosion Control for application criteria.

Tackifiers and Soil Stabilizers Type A. Select products and install at rates conforming to the WisDOT Erosion Control Product Acceptability List (PAL). Examples include vegetable based products such as natural Latex or Guar Gum.

Chlorides. Apply chlorides according to the most recent version of the WisDOT Standard Specifications for Highway and Bridge Construction.

Barriers. Place barriers at right angles to prevailing wind currents at intervals of about 15 times the barrier height. Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and blown soil.

CONSIDERATIONS

Some sites may require an approach that utilizes a combination of measures for dust control.

PLANS AND SPECIFICATIONS

Prepare plans and specifications for dust control practices in keeping with this standard and to describe the requirements for applying the practice to achieve its intended purpose.

OPERATION AND MAINTENANCE

Inspect daily areas that have dust control practices.

REFERENCES

WisDOT's Erosion Control Product Acceptability List (PAL) can be found on the WisDOT web site:

<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/pal/default.aspx>

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