

Dust Control On Construction Sites (1068)

Wisconsin Department of Natural Resources
Conservation Practice Standard

I. 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 polymers, spray-on tackifiers, chlorides, and barriers.

II. Purpose

This practice may be used to:

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

III. 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.

IV. Federal, State, and Local Laws

Users of this standard shall 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.

V. Criteria

This section establishes the minimum standards

for design, installation and performance requirements.

- A. The implementation of dust control shall limit the area exposed for dust generation.
- B. Asphalt and petroleum based products cannot be used for dust control.
- C. Mulch and Vegetation - Mulch or seed and mulch may be applied to protect exposed soil from both wind and water erosion. Refer to WDNR Conservation Practice Standards Mulching for Construction Sites (1058) and Seeding for Construction Site Erosion Control (1059) for criteria.
- D. Water - Water until the surface is wet and repeat as needed. Water shall be applied at rates so that runoff does not occur. Treated soil surfaces that receive vehicle traffic require a stone tracking pad or tire washing at all point of access. Refer to WDNR Conservation Practice Standard Stone Tracking Pad and Tire Washing (1057) for criteria.
- E. Tillage - A control measure performed with chisel type plows on exposed soils. Tillage shall begin on the windward side of the site. Tillage is only applicable to flat areas.
- F. Polymers - Polymers can be an effective practice for areas that do not receive vehicle traffic. Dry applied polymers must be initially watered for activation to be effective for dust control. Refer to WDNR Conservation Practice Standard Erosion Control Land Application of Polymers (1050) for application criteria.
- G. Tackifiers and Soil Stabilizers Type A - Products must be selected from and installed at rates conforming to the WisDOT Erosion Control PAL. See Section IX for reference. Example products include Latex-based and

Guar Gum.

- H. Chlorides - Chlorides shall be applied according to the most recent version of the WisDOT Standard Specifications for Highway and Bridge Construction.
- I. Barriers - Barriers shall be placed 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.

VI. Considerations

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

VII. Plans and Specifications

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

VIII. Operation and Maintenance

Areas that have dust control practices shall at a minimum be inspected daily.

IX. References

WisDOT's Erosion Control Product Acceptability List (PAL) can be found on the WisDOT web site:
<http://www.dot.wisconsin.gov/business/engrserv/pal.htm> Printed copies are no longer being distributed.