



[Notice of Proposed Changes to the National Handbook of Conservation Practices for the Natural Resources Conservation Service](#)

[\[Docket No. NRCS-2026-00XX\]](#)

[PROPOSED FULL TEXT FOR PRACTICE STANDARD CODE 373](#)

Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

DUST CONTROL ON ~~UNPAVED ROADS AND TRAVELED~~ SURFACES

CODE 373

(sf)

DEFINITION

~~Treatments~~ [The treatment of unpaved roads and surfaces](#) to reduce dust (airborne particulate matter) produced by vehicle and machinery traffic or wind action.

PURPOSE

This practice ~~may be applied to~~ [is to reduce emissions of particulate matter.](#)

- ~~Improve air quality by reducing emissions of particulate matter (PM).~~
- ~~Improve visibility by reducing emissions of PM.~~
- ~~Improve plant health and vigor by reducing emissions of PM.~~

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to any [agriculture-related land use with existing](#) nonvegetated, ~~unpaved surface surfaces~~ where vehicle or machinery movement or wind action would normally occur, such as ~~an unpaved~~ road, traffic area, parking lot, staging or assembly area, equipment storage lot, runway, loading and unloading area, ~~and associated agricultural land etc.~~

~~This practice~~ does not apply to ~~paved~~:

- ~~Travel surfaces, active rangeland and cropland, where the landowner does not have control or another entity is responsible for maintenance of the travelway.~~
- ~~Areas where vehicle or machinery activity is only due to surfaces field operations (e.g., tillage, planting, harvesting, nutrient or pesticide application, etc.). Use NRCS Conservation Practice Standard (CPS) Field Operations Emissions Reductions (Code 376) for reducing dust from normal field operations.~~
- ~~Surfaces that are normally subject to animal activity (such as e.g., pens and corrals). Use NRCS Conservation Practice Standard (CPS) Dust Control from Animal Activity on~~

NRCS reviews and periodically updates conservation practice standards. To obtain the current version of this standard, contact your Natural Resources Conservation Service State office or visit the Field Office Technical Guide online by going to the NRCS website at <https://www.nrcs.usda.gov/> and type FOTG in the search field.

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~~Open Lot~~ Management for Pen Surfaces (Code 375) for applications where confined animal activity is the primary source of dust. Use NRCS CPS Heavy Use Area Protection (Code 561) for applications where grazing animal activity is the primary source of dust.

- Establishment or construction of a new road. Use NRCS CPS Access Road (Code 560) when establishing new access roads.

CRITERIA

General Criteria Applicable to All Purposes

Select an appropriate surface-treatment based on—:

- Site-specific dust mitigation goals.
- Typical frequency, timing, and duration of dust generation at site, based on observations, as well as—
 - Expected traffic (typical number and frequency of vehicles, average vehicle weight, average vehicle speed, number and types of wheels per vehicle, etc.).
 - Characteristics of the existing travelway and subsurface material (particle size distribution of the surface material (~~gradation on the travelway~~, compaction, cohesiveness/bonding, durability, shrink-swell potential, etc.).
 - Climate of the site and relationship to dust generation (precipitation, temperature, humidity, evaporation potential, erosive wind potential).
- Environmental factors (potential for runoff, proximity to water bodies, etc.).

~~Properly prepare the unpaved surfaces for treatment and ensure good drainage from the surface.~~

Properly prepare the area to be treated. Repair unstable surfacing and subgrade areas. Shape the surface in a manner that supports water runoff and drainage by removing potholes, washboards, berms, tire ruts, and road surface erosion. Moisten the road surface prior to performing any grading or mechanical work to limit visible dust emissions caused by mechanical work and because dry conditions will fill ruts and potholes with dust and dry materials that will blow away or washout out during rain events.

Additional Criteria For Dust Suppressants

Allowable dust suppressant categories are—:

- ~~Water.~~
- ~~Water-absorbing products.~~
- ~~Petroleum-based products.~~
- Clay additives.
- Organic nonpetroleum-based products.
- Petroleum-based products.
- Polymer products.
- Electrochemical products.
- ~~Clay additives.~~
- Polymer~~Water-absorbing~~ products.
- ~~Fiber-based products.~~
- Water.

Apply the dust-control product as prescribed by the product specifications. Follow all ~~manufacturer's~~manufacturer label directives, in accordance with ~~Federal, State~~federal, state, and local laws and regulations. If manufacturer's specifications are not available, develop a plan for site-specific product application and maintenance to meet the intended purposes for dust suppression.

~~Dust suppressants require periodic reapplication based on traffic and other factors. Reapply dust suppressants as prescribed by the product guidance, or as identified in the plan for product application and maintenance.~~

~~When using water as a dust suppressant or as a component of a dust suppressant, ensure~~Water is a temporary dust suppressant with limited temporal effectiveness and will need to be reapplied frequently to maintain effective dust control. Ensure that an adequate water supply is available for the calculated application and reapplication needs. ~~It may be necessary to reapply water frequently to maintain effective dust control.~~ Obtain all permits or water rights as required by Federal, State, Tribal, and local agencies.

Additional Criteria For Vehicle and Machinery Restrictions

If speed limits are implemented and enforced, post speed limit signs in a visible location and document procedures for enforcing posted speed limits.

When using speed bumps or other speed control structures, design the speed controls (height, depth, length, distance between, construction materials) to accommodate and promote the intended speed of the allowed vehicles and machinery.

For fences, gates, or other barriers used to restrict the amount or frequency of vehicle and machinery traffic, use the design criteria in NRCS CPS Access Control (Code 472).

Additional Criteria For Surface Improvements

Stabilize and improve the surface characteristics of the travelway based on site conditions, such as underlying soils, climate, anticipated traffic, etc. Use the surfacing criteria in NRCS CPS Access Road (Code 560) and NRCS CPS Heavy Use Area Protection (Code 561) to design surface improvements.

CONSIDERATIONS

General Considerations

~~Consider additional activities such as speed control, or minimizing or restricting vehicle and equipment movement on unpaved roads and surfaces.~~

Consider particle size distribution, plasticity, and compaction on the surface layer when evaluating an effective dust-control measure. Consider using a number 200 sieve analysis of the upper layer of the unpaved surface to determine percent fines less than 75 micrometers (μm). Use this information as part of the process to select an appropriate treatment based on this analysis.

~~Consider both effectiveness and economics in the selection of an appropriate dust suppressant.~~

~~Use of water as the primary means of dust suppression is discouraged. Consider using water on a temporary or supplemental basis only.~~

~~Consider adding a surfactant with water application to increase the effectiveness period, reduce water reapplication frequency, and amount of water used.~~

Implement Prevent damage to the treated surface by heavy equipment and farm tillage equipment. Repair damage to prevent further deterioration of the treated surface.

Consider implementing track-out control measures such as gravel pads at intersections with paved roads.

Consider using additional practices or activities such as filter strips (use NRCS CPS Standard Filter Strip (Code 393)) on the side of the road or unpaved area to minimize runoff of sediment or dust suppressants to a water body.

Consider using other associated conservation practice standards including NRCS CPSs Mulching (Code 484), Critical Area Planting (Code 342), Heavy Use Area Protection (Code 561), Hedgerow Planting (Code 422), or Windbreak/Shelterbelt Establishment (Code 380).

Considerations for Dust Suppressants

Dust suppressants are not intended to be applied across the whole area of cropland, rangeland, pastureland, or forestland. They are intended only to control dust from vehicle or machinery movement or wind action on traveled surfaces.

Dust suppressants may require periodic reapplication based on traffic and other factors. Reapply dust suppressants as prescribed by the product guidance, or as identified in the plan for product application and maintenance.

Consider both effectiveness and economics in the selection of an appropriate dust suppressant.

Consider avoiding application of dust suppressants near sensitive areas, such as surface water, groundwater, certified organic operations, wildlife habitat areas, or sensitive vegetation. Identify any potentially sensitive areas, such as stream crossings, drains and culverts, roadside wetlands or canals, and other unique surroundings. It may be necessary to flag these areas and install berms or windrows to limit product overspray and runoff. Application during dry conditions may help minimize runoff of any uncured or unbound product. Avoid applying dust suppressants on bridges, over cattle guards, and other structures.

Avoid applying dust suppressants when weather conditions are unsuitable; the weather forecasts rain, strong winds, or extremely hot and dry conditions; forecasted ambient temperatures are below the product specified minimum temperature; or after a heavy rain.

When dust suppressant is applied and for a period after application, it may be necessary to restrict vehicular traffic during pre-treatment activities to allow time for the product to cure. Waiting until the product surface cures can limit unsafe driving conditions and reduce product from adhering to vehicles. Restrict access and vehicular traffic over the treated area for a 7-to-10-day period after application to allow time for the product to cure.

Avoid any puddling or runoff of dust suppressant solution. If product is not dry after the normal curing period, consider adding sand or other non-dusty absorbent materials to aid in the curing process.

Use of water as the primary means of dust suppression is discouraged. Consider using water on a temporary or supplemental basis only.

Consider adding a surfactant with water applications to increase the effectiveness period, reduce water reapplication frequency, and for the amount of water used.

The use and amount of water needed for dust suppression is dependent on available water supplies and the amount and timing of local precipitation. Areas with more frequent rainfall

will require less water application for dust suppression.

Never apply waste oils or other materials not intended for use as a dust suppressant.

Considerations for Vehicle and Machinery Restrictions

Speed limits may be difficult to enforce.

When using speed restrictions, consider placing at least one speed limit sign in each direction for every one mile of unpaved road area or at least one speed limit sign at the entrance to the trafficked area (e.g., parking lot, equipment lot, etc.).

Speed control structures with height or width requirements may be damaged by equipment or implements with limited clearance. Repair any damage promptly.

Considerations for Surface Improvements

Proper surface improvements include adequate drainage, a well-constructed base, and appropriate surface material.

Ensure a gradation of particle sizes in surface gravel, with a percentage of stone to give strength to support loads, a percentage of sand-sized particles to give stability and to fill voids between the stones, and a percentage of fines with plasticity to bind the material together and shed water.

Avoid build-up of fine particles on paved surfaces. If build-up occurs, periodically sweep or otherwise remove the fine particles to maintain a clean travel surface.

Promoting vegetative cover to reduce entrainment of soil particles on a travel surface where the vegetation can withstand the traffic can be effective for non-improved surfaces. Adding mulch to non-improved surfaces can also help to protect the soil and reduce dust emissions from lightly-trafficked areas.

PLANS AND SPECIFICATIONS

Prepare specifications for installation of ~~CPS Dust Control on Unpaved Roads and Surfaces (Code 373)~~ this practice for each site or planning unit according to the criteria. Record specifications for this practice using approved specification sheets, job sheets, implementation requirements, worksheets, narrative statements from the conservation plan, or other documentation.

At a minimum, include the following in the plans and specifications:

- ~~Location or area of the treatment.~~
- A plan view showing the location or area of the treatment, including soils information and any nearby sensitive areas, such as surface water, groundwater, certified organic operations, wildlife habitat areas, sensitive vegetation, stream crossings, drains and culverts, roadside wetlands or canals, and other unique surroundings.
- Identification of the treatment selected, including the dust mitigation goals and other factors used to select the treatment.
- Identification of any ~~surface preparation and grading requirements prior to application of~~ supporting and facilitating practices used in conjunction with the selected treatment.
- Identification of any surface preparation requirements prior to application of the selected treatment.
- For dust suppressants:

- [Manufacturer's Material Safety Data Sheet, Product Safety Data Sheet, product application specifications, or other information from the supplier specific to the dust suppressant that is to be applied.](#)
- Identification and description of the type and amount of material used for dust control, and method of application. Include any plans for required periodic reapplications of dust suppressants.
- ~~Identification of any adjacent sensitive areas (e.g., fish spawning areas and water bodies).~~
- [Identification For vehicle and machinery restrictions:](#)
 - [A listing and schematic of any speed restrictions, speed control structures, or other barriers.](#)
- [For surface improvements:](#)
 - [Typical sections showing the type and required thickness of any supporting and facilitating practices base material and surface material to be used in conjunction.](#)
 - [Construction specifications with dust suppressant site-specific installation requirements, as applicable.](#)

~~Records of product information sheets or material safety data sheets or equivalent, if applicable and available.~~

OPERATION AND MAINTENANCE

Develop an operation and maintenance plan consistent with the purposes of this practice, its intended life, safety requirements, and the criteria used for its design. The plan must contain requirements including but not limited to—

- Maintenance of the [surface treatment or reapplication of the dust suppressant area](#), as needed, ~~and~~ including any additional surface preparation or maintenance requirements. Reapplication of the treatment if the planned area is heavily disturbed by grading ~~or~~ other major disturbance, [or wear and tear](#) following the initial ~~dust suppression~~ treatment.
- [Requirements for regular inspection of treated surfaces.](#)
- [For dust suppressants:](#)
 - Requirements for reapplication of the [treatment dust suppressant](#) if natural weathering has reduced the effectiveness of the initial treatment to the point where [airborne PM dust](#) from the surface is visible.
- [For vehicle and machinery restrictions:](#)
 - [Requirements for annual evaluations of the effectiveness of the restrictions, including any periodic maintenance required.](#)
- [For surface improvements:](#)
 - [Requirements for periodic removal of surface dust build-up on paved surfaces.](#)

REFERENCES

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~~These references are available in the documents section of the NRCS Air Quality website.~~

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[Kennebec County Soil and Water Conservation District and Maine Department of Environmental Protection Bureaus of Land Resources and Water Quality. 2016. Gravel Road Maintenance Manual – A Guide for Landowners on Camp and Other Gravel Roads.](#)

[Piechota, T., J. van Ee, J. Batista, K. Stave, and D. James. 2004. Potential Environmental Impacts of Dust Suppressants: "Avoiding Another Times Beach, An Expert Panel Summary. U.S. Environmental Protection Agency Report No. EPA/600/R-04/031.](#)

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Pre-Decisional/Debatable