



United States Department of Agriculture
Natural Resources Conservation Service

Air Quality & Atmospheric Change

Air Quality Conservation Activities – Particulate Matter



Conservation Activities

There are a variety of conservation activities that directly or indirectly address air quality and atmospheric change issues related to agricultural operations. Some of these may be applicable for payments under USDA Conservation Programs such as the Environmental Quality Incentives Program (EQIP), or the Conservation Security Program (CSP).

Benefits

Particulate matter (PM) may be generated from a variety of agricultural activities, and can sometimes be transported off-site. The following activities will provide observable improvements in air quality by reducing airborne particulate matter from agricultural operations, feedlots and transportation. These activities will also help to reduce particulate matter generation from wind erosion events.

- Utilize residue management, strip cropping, cover crops, or herbaceous wind barriers to reduce dust

generation and emissions from agricultural fields

- Reduce travel and speed on unpaved roads, or treat unpaved roads with dust suppressant
- Implement a prescribed burning management plan (especially in PM non-attainment areas) to minimize PM generation from incomplete combustion of fuels, to manage fuel load, and to prevent or reduce wildfires
- Replace smudge pots with clean powered burners or wind machines
- Replace burning of orchard residues with chipping, grinding, or shredding
- Install, maintain, and enhance windbreaks to protect fields from erosive winds
- Handle animal mortality offsite or with an approved incinerator
- Remove manure from feedlot pens, and sprinkle water over the pens to reduce dust generation
- Utilize implements which combine operations to reduce the number of trips across a field
- Use precision farming (satellite navigation) to accurately manage and treat all applicable agricultural area