

Supporting California Agriculture in Protecting Air Quality

Concerned with:

Limiting dust or smoke from agricultural activities? Tailpipe emissions from old diesel-powered equipment? Reducing odors and greenhouse gases from livestock? The USDA Natural Resources Conservation Service can help!

Improving Air Quality in California

California, facing some of the most challenging air quality settings in the nation, is also experiencing significant improvement to its air quality. Much of this improvement is thanks to farmers, working with NRCS and others, to adopt new cleaner air-technologies and measures in their day-to-day operations.

The air pollutants posing the greatest health and welfare concerns are ozone and particulate matter. In addition, the State of California has adopted aggressive environmental goals for reducing greenhouse gas emissions.

Through effective conservation planning, the NRCS can assist landowners and producers with identifying new technologies and management treatments to help decide how to best address the air quality resource concerns on their lands.



Real emission reductions are achieved when high-polluting diesel engines (bottom) are replaced with new, cleaner emissions diesel engines (top) earlier than through normal turnover.

GETTING STARTED...

Go to the Office

We have 54 offices across the state. NRCS will work with you to develop a conservation plan tailored to help you improve air quality. This voluntary plan will be based on your priorities and solid science. The plan may also be the basis to apply for financial assistance.

Financial Assistance

The Environmental Quality Incentives Program (EQIP) is a voluntary program that has been widely used to improve air quality in California. EQIP shares with landowners the cost of conservation practices (see sidebar on back) to improve air quality and mitigate associated conservation concerns.

Apply

Any time during the year. Eligible projects will be evaluated, prioritized and selected for funding as budget allocations permit.



Air Quality Issues in California

- California is uniquely challenged by several regions within the state experiencing the worst air quality in the nation.
- Improving agricultural air quality is an NRCS California priority.
- The agricultural community can partner by implementing appropriate conservation practices that benefit air quality.



Applying dust suppressants on unpaved roads and surfaces can stabilize the surface to help reduce PM10 and visible dust emissions, minimize dust deposition onto sensitive crops, improve traffic safety, and avoid nuisances.

About NRCS, FSA and RMA

In more than 80 years of helping farmers, ranchers and private forestland owners, NRCS has assembled technical standards (like those in the sidebar at right) to address natural resource concerns. The USDA's Farm Services Agency (FSA) and Risk Management Agency (RMA) provide other critical resources such as farm loans, crop insurance and disaster assistance.

For more information
on NRCS Farm Bill conservation programs visit
www.nrcs.usda.gov/wps/portal/nrcs/main/ca/programs/

Air Quality Conservation Practices Available



COMBUSTION SYSTEM IMPROVEMENT

Repowering or replacing old, uncontrolled diesel engines powering irrigation systems or off-road agricultural vehicles with new electric motors or diesel engines meeting the latest EPA and ARB Tier-level emissions certification.



DUST CONTROL ON UNPAVED ROADS AND SURFACES

Applying dust suppressants on unpaved roads and surface areas to control dust emissions produced by vehicular traffic and wind actions across unpaved surfaces.



TILLAGE AND RESIDUE MANAGEMENT

Adopt a no-till or reduced-till conservation tillage practice to reduce soil disturbances and leave crop residue on the surface to reduce particulate and greenhouse gas emissions, sequester carbon, and improve soil health.



FIELD OPERATIONS EMISSIONS REDUCTIONS

Utilize a combined-tillage implement equipped with multiple tools mounted on a single frame designed to perform multiple tasks in a single pass, implement a reduced-pass field entry management system, or utilize "low-dust" harvester technologies for surface harvesting of nut crops.



WOODY RESIDUE TREATMENT

Apply open burn alternatives by chipping woody debris from orchard or vineyard removals.



INTEGRATED PEST MANAGEMENT

Apply precision spray application technologies with integrated pest management to reduce emissions of volatile organic compounds from pesticide application.



MULCHING

Apply wood chips or woody mulch materials to the land surface to manage soil moisture, soil temperature, weeds, and airborne particulate. Promotes carbon sequestration and improves soil health.



WINDBREAKS AND SHELTERBELTS

Establish or renovate windbreaks and shelterbelts at animal feeding operations for managing dust and odors from animal activities.