Uniting Air Quality and Erosion Control in Placer County Limiting Dust From Dry Straw Mulching

Placer County Air Pollution Control District rules impose regulations that limit or prohibit dust from construction site (and other) operations. At the same time, State and local erosion control and stormwater quality protection regulations necessitate that construction sites be protected from the potential of soil erosion due to rainfall runoff on exposed soils. Both sets of rules work to protect the environment and aid the overall public health. When a contractor chooses to apply dry chopped straw as mulch to protect the soil, it may be difficult to balance both sets of requirements if the straw application methods (i.e. straw blowing) create dust.

Best Management Practices (techniques, or BMPs) to minimize the amount of dust can help reduce or eliminate dust emissions and thereby the potential for the violation of air quality regulations. The expectation is that these BMPs will be used to the extent possible by all contractors immediately in order to limit dust during this current season. Serious violations of the air quality standards may result in enforcement action being taken. After the 2005/2006 rainy season, dust violations that result from the use of dry straw blowing techniques that do not incorporate BMPs and/or dust emission controls will be subject to enforcement. We encourage the industry to continue to actively develop additional techniques and technologies to make it easier to comply with both air and water quality regulations. Air Pollution Control District and Placer County Resource Conservation District personnel are ready to evaluate the compliance of the techniques if needed. For more information see the Air Pollution Control District's website at http://www.placer.ca.gov/apcd or call 530-745-2330. For further assistance on methods and options for erosion control, call the Resource Conservation District at 530-885-3046 X117. Placer County Public Works can be reached at 530-889-7500.

BEST MANAGEMENT PRACTICES TO MINIMIZE DUST FROM DRY STRAW MULCHING

SCHEDULING:

- Don't work when it is windy, or limit your work when it's windy to the less dusty inputs (such as fertilizer, some seeds, etc).
- Immediately stop work if dust crosses a property boundary, including into public rights of way (roads), or if obvious visible dust is created.
- Apply straw on days when more humidity is present.
- If site lighting, allowable work hours, and noise regulations allow, consider applying at night when winds are generally less and the humidity is higher.

USE OF STRAW CHOPPER/BLOWER:

- Set the chopper for longer straw length (6-8 inches if possible).
- Use hoses, water trucks, power washers, etc., to inject water into the straw, or onto the straw as it's blown, to knock down dust before it becomes a problem.
- Use a shorter throw reach when applying to minimize dust production.
- Watch wind direction, spray with the prevailing winds, not against, to minimize height/velocity of throw and thus dust potential.
- Choose to purchase cleaner material.

ALTERNATIVE METHODS:

- Apply the straw by hand or other non-blown method.
- Use erosion control matting rather than dry chopped straw.
- Use wet methods of applying erosion control, such as hydromulching.