

Special Advisory

Water-Dependent Dust Control at Agricultural Operations

August 3, 2015

INTRODUCTION

According to the United States Geologic Survey, California is entering the fourth year of its worst drought in over a century. Recognizing the dire situation faced by the state, the Governor declared a drought emergency for all of California in January 2014. In response to the drought emergency, state and federal water agencies have taken historically unprecedented emergency actions over the past 2 years in an attempt to safeguard remaining water supplies. These actions not only affect agricultural water users, which have borne much of the brunt of the drought to date, but for the first time in state history, will also mandate that cities and towns across California reduce water usage by 25 percent.

San Joaquin Valley Air Pollution Control District's Rule 4550 (*Conservation Management Practices*) requires most agricultural operations to develop and implement Conservation Management Practices (CMP) plans to control dust emissions from their unpaved roads and unpaved vehicle equipment traffic areas during periods of peak activity. Furthermore, for highly utilized unpaved agricultural roads and vehicle equipment traffic areas, the District's Regulation VIII (*Fugitive PM₁₀ Prohibitions*) requires more extensive measures to control dust emissions. The emission reductions achieved through agriculture's efforts to comply with Rule 4550 and Regulation VIII were essential in the District's attainment of the federal PM₁₀ standard.

Historically, water has often been employed as a measure to control dust on unpaved roads and unpaved vehicle equipment traffic areas at agricultural operations. With the state mandates restricting access to irrigation water and requiring that cities and towns across California reduce water usage by 25 percent, it appears inconsistent with the state's water conservation goals if the District is requiring water for dust control for agricultural operations.

Recognizing that reasonable actions to accommodate drought relief efforts in the Valley are imperative in averting the public health crisis faced by Valley residents and communities experiencing shortages of drinkable water and in minimizing the negative impacts on the Valley's agriculturally driven economy, the District is issuing this advisory to:

- educate growers on non-water-dependent dust suppression alternatives available to comply with District Rule 4550 and Regulation VIII, and
- implement changes to the District's enforcement policies regarding water-dependent dust control requirements of Rule 4550 and Regulation VIII at agricultural operations during the drought emergency.

Rule 4550 (Conservation Management Practices) for Unpaved Roads and Equipment Areas

Agricultural operations that farm greater than 100 contiguous acres, have 500 or more mature dairy cows, or 190 or more of any other cattle are required to have and implement a Conservation Management Practices Plan (CMPP) with the District. Within the CMPP, an operation is required to

select and implement practices to limit dust emissions from unpaved roads and vehicle equipment traffic areas. Although water remains an effective dust suppression tool, there are numerous non-water-dependent dust suppression alternatives that can satisfy the requirements of the District Rule 4550 as well, including but not limited to the following:

- Restricting access to unpaved roads and open areas
- Posting and enforcing speed limits
- Covering an unpaved road or open area with a dust suppressant (resins/emulsions, polymers, surfactants, adhesives, bituminous materials, salts)
- Covering an unpaved road or open area with road oil
- Covering an unpaved road or open area with organic materials such as almond shells
- Applying gravel or decomposed granite

Switching previously approved CMPs requires District action to formally approve the revised CMPP. The District has developed and implemented streamlined measures to approve modifications to CMPPs expeditiously and at no cost to the grower. To switch to a non-water-dependent dust suppression alternative, please complete and submit to the District a CMPP Modification Form located at <http://www.valleyair.org/farmpermits/applications/cmp/cmp17.pdf>.

If water-dependent dust control measures cannot be implemented and alternate measures are not feasible, the agricultural operation may enter into an *Emergency Drought Relief Dust Control Mutual Settlement Agreement* as discussed in the last section of this advisory.

Regulation VIII (Fugitive PM10 Prohibitions) for Agricultural Unpaved Roads and Equipment Areas

Agricultural operations that have unpaved roads or vehicle equipment traffic areas that have 75 or more vehicle trips in a single day are required to limit fine particulate matter emissions by implementing practices to limit visible dust emissions and ensure a stabilized surface. Some of the most cost-effective, non-water-dependent dust control measures allowed under Rule 4550 are not sufficient to ensure on-going compliance with the more stringent visible dust emissions and stabilized unpaved road surface requirements of Rule 8081 (*Agricultural Sources*). Rule 8081 does, however, allow agricultural operations to implement a Fugitive PM10 Management Plan (FPMP) as an alternative means to control dust emissions in lieu of complying with the visible dust emissions and stabilized unpaved road surface standards. The District recently updated the FPMP program to incorporate additional cost-effective non-water-dependent measures. The additional flexibility provided under an FPMP allows for the implementation of non-water-dependent dust control measures (such as speed limits in combination with restricted access) while ensuring compliance with Rule 8081 emissions reduction requirements. To implement an FPMP to comply with Regulation VIII, please complete and submit an FPMP for review and approval to the District or:

Mr. Johnnie Siliznoff
USDA Natural Resources Conservation Service
1907 N Gateway Blvd, Suite 101
Fresno, CA 93727

The FPMP can be located at <http://www.valleyair.org/busind/comply/PM10/FPMP2015.pdf>.

Switching to an FPMP may also require modification of your CMPP. To switch to an FPMP, please also complete and submit to the District a CMPP Modification Form located at the link referenced in the above Rule 4550 section of this advisory.

If water-dependent dust control measures cannot be implemented and the alternate non-water-dependent measures allowed under an FPMP are not feasible, the agricultural operation may enter into an *Emergency Drought Relief Dust Control Mutual Settlement Agreement* as discussed below.

Emergency Drought Relief Dust Control Mutual Settlement Agreement

Under the modified enforcement approach, agricultural operations will be allowed to operate without implementing water-dependent dust control mitigation measures during the drought emergency where such action will not create a public nuisance or health risk to nearby sensitive individuals, and where atmospheric conditions are taken into account to ensure that the resulting increased particulate matter emissions would not significantly contribute to an exceedance of an ambient air quality standard. To take advantage of the relief offered through this modified approach, agricultural operations must not create a public nuisance as defined by district Rule 4102 (*Nuisance*), must not be located within 1,000 feet of a school or hospital, and must enter into an *Emergency Drought Relief Dust Control Mutual Settlement Agreement* with the District. The terms of such an agreement, including the potential for monetary penalties which may be assessed, will be limited to a portion of the avoided costs of not implementing water-dependent dust control measures.

The relief offered under this advisory will be limited to the Valley's non-peak particulate season. All Rule 4550 and Regulation VIII requirements, including the requirements to implement water-dependent control measures, will be enforced during the Valley's peak particulate matter season (November through February) beginning November 1, 2015.

Questions

If you have any questions regarding this advisory, please contact Mr. Daniel Martinez by phone at (559) 230-5959 or by email at daniel.martinez@valleyair.org.

This advisory will remain in effect until formally rescinded by the District.