Air Quality

Odor, Dust and Gaseous Emissions

An agricultural research partnership of TAES, WTAMU, TCE, KSU and USDA-ARS funded by USDA-CSREES

Texas Agricultural Experiment Station
THE TEXAS A&M UNIVERSITY SYSTEM

Center for Agricultural Air Quality Engineering & Science

TITLE V PERMITTING

FACT SHEET

The 1990 revisions to the Federal Clean Air Act introduced 11 separate titles to specifically address air quality issues in the United States. Title V under the 1990 Clean Air Act amendments addresses a new federal operating permit program for stationary sources.

A Title V permit grants a major source permission to operate. Under Title V, major sources are required to pay annual fees based on every ton of regulated pollutant emissions, including fugitive emissions. This is to say that if a source is subject to Title V because of its PM_{10} emissions, they are required to pay annual fees on all PM_{10}, SO_x, NO_x, etc. emissions. These annual fees are used by the state air pollution regulatory agencies to finance regulatory operations.

Only major sources are subject to Title V permitting. To be classified as a major source under Title V, a source must have the potential to emit over the specified annual emission threshold for a particular regulated pollutant. For example, the major source threshold for PM_{10} is 100 tons per year in an attainment area but it is reduced to 70 tons per year in a nonattainment area. This threshold reduction for nonattainment areas is common for all regulated pollutants as well as pre-cursors to regulated pollutants. Pre-cursors refer to other compounds that lead to the formation of regulated pollutants. For example, reactive volatile organic compounds (RVOC) are a precursor to ozone, a regulated pollutant.

The best way to illustrate the implications of the Title V program to agriculture is through an example. A concentrated animal feeding operation located in the San Joaquin Valley of California has a stationary diesel engine that emits 25 tons of NO_x per year (point source emission) as it is used to pump irrigation water onto surrounding fields. The facility emits 255 tons per year of PM_{10} from the feeding pens (fugitive emission), 50 tons per year of PM_{10} from the feed mill (point source emission), and 64 tons per year of RVOC from the feeding pens (fugitive emission). Because the San Joaquin Valley is classified as extreme nonattainment for ozone, the Title V threshold for NO_x is reduced to 10 tons per year making the facility subject to Title V. This facility may be required to pay annual fees (typically in the range from $25 to $35 per ton of emissions) on 394 tons of emissions (25 + 255 + 50 + 64 = 394). These fees could be in the neighborhood of $14,000 per year.

In the example above, the emissions from the stationary diesel engine caused the facility to be subject to Title V. Any farming operation with a stationary diesel engine emitting enough NO_x could potentially be subject to paying Title V fees. Since the fees are based on fugitive and point source emissions, the amount of the annual fee will increase as the number of acres farmed increases.