

Air Quality Update

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June 2010

TITLE V THRESHOLDS - WHAT ARE THEY, WHY DO THEY VARY WITH AREA?

Title V of the Federal Clean Air Act Amendments of 1990 required the USEPA to establish a national, Operating Permit Program for "Major Sources". Permitting in California is delegated by EPA to the local air districts through approval of each district's Title V permitting rules. However, unlike other local permits, Title V permits must also be reviewed by EPA prior to issuance. Title V permits are required only for facilities that are Major Sources for one of the criteria pollutants or Hazardous Air Pollutants (HAPs).

What is a "Major Source"?

A Major Source under Title V is a facility that has the potential to emit (PTE) any criteria pollutant or HAP at levels equal to or greater than the Major Source Thresholds (MST). The MST for criteria pollutants vary depending on the attainment and non-attainment status (e.g. marginal, serious, extreme) of the geographic area in which the facility is located.

How do the major source thresholds vary?

Areas of California are designated as attainment or nonattainment based on whether the ambient air quality in that area exceeds the National Ambient Air Quality Standards for each criteria pollutant (ozone, NO₂, SO₂, CO, PM₁₀, PM_{2.5}, etc.). Nonattainment is then further classified as Marginal, Moderate, Serious, Severe, or Extreme, each with associated MSTs. As an example, the MSTs for ozone are

shown in the table below. For HAPs, a Major Source is defined as a facility with a PTE greater than 10 tons of any single HAP or 25 tons of any combination of HAPs.

| Major Source Thresholds for Ozone | |
|-----------------------------------|------------------------------|
| Non-Attainment Area Designation | Ozone Precursors: VOC or NOx |
| Marginal | 100 tpy |
| Moderate | 100 tpy |
| Serious | 50 tpy |
| Severe | 25 tpy |
| Extreme | 10 tpy |

What if a Facility Exceeds the Major Source Threshold?

If a facility exceeds the Major Source Threshold, the facility must apply for and obtain a Title V Operating Permit. (It is the responsibility of the facility's operator, not the regulatory agency, to determine Major Source status.) In the SCAQMD and San Joaquin Valley, there are rules which allow a facility to be a "non-Major Source" if their actual emissions do not exceed 50% of the MST.

What is Your Attainment Status?

In the San Joaquin Valley, the EPA has just approved the SJVAPCD's request to become Extreme Non-Attainment, so the threshold has now been lowered to 5 tons of actual and 10 tons of potential emissions of NO_x and VOC's. Applications for Title V permits in the SJVAPCD will be due over the next year for affected facilities. District staff is working on the due dates.

For more information, refer to: <http://www.valleyair.org/>

For more information on Title V in California, refer to the CARB's site: <http://www.arb.ca.gov/fcaa/tv/tvinfo/tvwebpag.htm>

Air Quality Tip...

Air Quality Compliance requires the operator to follow the conditions on the air permits and the regulations in the local air district rules. Not all rule requirements are listed on the permits. In addition, older permits often list permit conditions such as emission limits, source testing, and record keeping that may conflict with the most recent air district rules. For facility compliance follow the most stringent permit or rule requirement.

Upcoming Training Offered by UCI or Yorke Engineering:

- San Joaquin Air Quality Permitting and Compliance Seminar: Sept. 22nd in Bakersfield ; Sept 23rd in Fresno, 2010
<http://www.yorkeengr.com/classes.htm>

Upcoming Due Dates:

- Title V – SAM; Every 6 months, 30 days after "reporting period"
- Title V – Compliance Cert.; annually, 30 days after reporting period
- Title V for VOC and NO_x due to new threshold TBD
- TRI EPA Form R 7/1
- Annual Storm Water Monitoring Report 7/1

All due dates listed are the statutory dates; sometimes dates are extended when they fall on a day the agency is closed.

CARB MOBILE SOURCE RULES

The California Air Resources Board (CARB) is responsible for regulating mobile sources and has promulgated a number of new rules over the past few years. We are seeing some industrial facilities that are still not aware of these CARB rules. Enclosed is a short review of the established Off-Road Large Spark Ignition (LSI) Equipment regulation that may affect your facility. For diesel vehicles, the Off-road Diesel Vehicle Regulation applies which will be covered in a subsequent Air Quality Update.

LARGE SPARK-IGNITION (LSI) ENGINE FORK LIFT RULE

The LSI engine forklift regulation applies to any business or agency that owns or operates gasoline, propane, or CNG off-road LSI fleets in California.

This CARB LSI rule has many provisions, but the one that has the greatest impact on most industrial facilities is the forklift fleet average emission requirement. The requirement levels are shown in the table below (for forklifts over 25 hp):

Required Grams/KWH Fleet Average Emission Levels

| Fleet Type | # of Units | Jan 1 2009 | Jan 1 2011 | Jan 1 2013 |
|------------|------------|------------|------------|------------|
| Forklift | 26+ | 3.2 | 2.3 | 1.5 |
| Forklift | 4-25 | 3.5 | 2.7 | 1.9 |

For the LSI rule, a fleet is defined as more than three units in each of the following categories: forklift, sweeper/scrubber, airport GSE, and industrial tow tractors. As an example, 3 forklifts and 2 sweepers would still not be considered a fleet. The determination of the fleet size will include multiple facilities if the procurement decisions and/or budgeting occur at a higher echelon such as a corporate headquarters.

Electric forklifts are counted in the fleet size also which helps reduce the average emissions since they are considered to have zero emissions.



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Companies are required to take an inventory of equipment that falls into the fleet category including the type, make, model, serial number and emission certification standard. After the fleet is defined, the rule requires the calculation of the fleet average emissions to compare with the required fleet average for compliance. Depending on the average there may be a requirement to retrofit some or all of the units with equipment such as catalytic converters. The modifications are required to be completed by the rule compliance dates.

The LSI rule (section 2775.2) requires that the facility keep records of fuel usage specifications and proof that the fleet meets the average emission level standard (section 2775.1(a)). There are exemptions from the rule that

apply to the calculations and applicability.

Below are a few links to CARB fact sheets and the rule language:

<http://www.arb.ca.gov/msprog/offroad/orspark/documents/lsioverviewfs.pdf>

<http://www.arb.ca.gov/msprog/offroad/orspark/documents/lsifleetaveragefs.pdf>

SJVAPCD AGRICULTURAL BURNING CHANGES

Effective June 1st, burn permits will no longer be issued for some crops:

<http://www.valleyair.org/BurnPrograms/Rule4103Amended2010/Documents/TableOfCrops.pdf>.

On May 27, 2010, the CARB agreed with the SJVAPCD's changes to agricultural burning. CARB's agreement is subject to the District's re-evaluation of the determinations within two years. The District's determinations established additional open burning prohibitions and postponed burning only in cases where economically feasible alternatives were not available. The limited remaining burning is tightly regulated under the District's Smoke Management System.

For more information on the Valley's Burning Regulations, go to:

http://www.valleyair.org/BurnPrograms/Ag_Burning.htm

To file for a burn permit, go to:

<http://sms.valleyair.org/index.htm?http&&sms.valleyair.org/>

Yorke Engineering, LLC specializes in environmental and air quality consulting for stationary and mobile sources including dispersion modeling, health risk assessments, permitting, emission inventories, compliance systems, etc. Yorke Engineering has assisted 200 customers including a wide variety of industrial facilities and government organizations throughout California.