

# Air Quality Update

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August 2010

## EPA'S TAILORING RULE FOR GHG PERMITTING

Beginning January 2, 2011, the US EPA will begin implementation of permitting for Greenhouse Gas emissions from Major Sources. Specifically, new or modified major stationary sources that meet emissions applicability thresholds will be required to obtain a PSD permit outlining how they will control GHG emissions. PSD requires facilities to apply Best Available Control Technology (BACT), which is determined on a case-by-case basis taking into account, among other factors, the cost and effectiveness of the control.

From January 2 – June 30, 2011, sources that are subject to Prevention of Significant Deterioration (PSD) or Title V for other pollutants (e.g., NO<sub>x</sub>, VOCs, PM<sub>10</sub>, etc.) will trigger GHG BACT requirements if the source exceeds CO<sub>2</sub> equivalent (CO<sub>2</sub>e) increases of 75,000 tons per year.

Starting July 1, 2011, PSD permitting requirements will be required, regardless of other pollutant emissions, for all:

- New projects with emissions  $\geq 100,000$  tpy of CO<sub>2</sub>e, or
- Modifications at an existing Major Source with an increase  $\geq 75,000$  tpy of CO<sub>2</sub>e.

Title V permitting will be required for all new and existing facilities with a potential to emit  $\geq 100,000$  tpy of CO<sub>2</sub>e. For facilities that are not now in Title V, either because they are Minor Sources or because they have taken emission limits to stay out

of Title V, they may have to apply for and obtain a Title V permit solely due to CO<sub>2</sub>e emissions. These applications will be due after July 1, 2011 but before July 1, 2012, depending upon when the local district sets its deadlines.

For existing Title V facilities, any new sources or modifications to existing sources after January 2, 2011 will trigger GHG BACT and other requirements if the addition exceeds 75,000 tpy of CO<sub>2</sub>e.

To accommodate this new permitting requirement, there may be a number of additional changes made:

- The local districts will likely have to modify their permitting rules and regulations to incorporate the GHGs;
- Annual reporting may require GHG reporting to quantify GHG emissions and Title V applicability for all sources; and
- CA AB32 requirements may be incorporated into Title V permits.

Figure 1. Tailoring Rule GHGs

Final Rule Group of Six GHGs	CO <sub>2</sub> Equivalents*
Carbon dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	21
Nitrous oxide (N <sub>2</sub> O)	310
Hydrofluorocarbons (HFCs)	12-11,700**
Perfluorocarbons (PFCs)	6,500-17,340**
Sulfur hexafluoride (SF <sub>6</sub> )	23,900

\* Values per Table A-1 to Subpart A of Part 98  
\*\* Depending upon the exact compound

The EPA will also be developing GHG BACT guidelines and additional rulemaking for smaller facilities. Below is a link to the EPA fact sheet, related information, and the rule language:

<http://www.epa.gov/nsr/actions.html#may10>

## Air Quality Tip....

*Air District Inspectors are sent out to ensure compliance and one of the first things they will look for are records required by the air permit or the source specific rules. Since missing records or records that show noncompliance are proof that there is a violation, inspectors tend to focus on the records, such as material throughputs, source tests, periodic analyzer tests, VOC records, etc. Facilities that make a complete list of all the records required and review their records internally on a quarterly basis will do much better when the air district comes to inspect.*

## Upcoming Training Offered by UCI or Yorke Engineering:

- South Coast Air Quality Permitting and Compliance Seminar: October 12 & 13<sup>th</sup>, 2010  
<http://www.yorkeengr.com/classes.htm>
- UCI Climate Protection and Environmental Sustainability: Fall 2010  
<http://unex.uci.edu/courses/>  
(under Environmental Management)

## Upcoming Due Dates:

- RECLAIM APEP 8/29 (Cycle 2)
- Title V – SAM 8/31
- Title V - Certification 8/29 (RECLAIM Cycle 2 only)
- SCAQMD Rule 1110.2 Quarterly report 10/15
- Title V – Application for Permit Renewal due 180 days prior to permit expiration.

## REMINDER- SCAQMD RULE 1146 BOILER PLANS DUE FOR 5 TO <20MMBTU/HR BOILERS

Rule 1146 was amended on September 5, 2008 as part of the facility modernization rule family. This is a reminder that this rule change requires facilities to submit a compliance plan by January 1<sup>st</sup>, 2011 for boilers greater than or equal to 5 MMBTU/Hr and less than 20 MMBTU/hr (RECLAIM facilities excluded). The plan is a simple submittal to the SCAQMD with a checkbox system to choose how the facility is going to comply with the future NOx limits (9PPM). If a new burner is required to meet the limit the application for the burner must be submitted by Jan 1<sup>st</sup> 2012, with installation/compliance by Jan 1<sup>st</sup> 2013.

## REMINDER- RULE 1147 COMPLIANCE REQUIREMENTS OTHER THAN EMISSION LIMITS

On December 5, 2008 the SCAQMD adopted Rule 1147 – *NOx Reductions from Miscellaneous Sources*. The main purpose of the rule is to reduce NOx emissions from miscellaneous gaseous and liquid-fueled combustion equipment that are not regulated by other existing Regulation XI rules (e.g., Rules 1109, 1111, 1146, 1110.2, etc.). Examples of equipment subject to the rule include: furnaces, cookers, roasters, fryers, afterburners, catalytic or thermal oxidizers, and incinerators. In addition to the NOx limits, other requirements under the rule include combustion system maintenance,

and fuel and timer meter installations. Starting on January 1, 2010, all owner/ operators of applicable equipment must perform combustion system maintenance in accordance with the manufacturer's written instructions and specifications. A copy of these instructions and all maintenance records and source test reports must be retained on site for a minimum of three years. Additionally, the rule requires owner/operators to install a non-resettable totalizing timer and fuel meter on each unit's fuel line by January 1, 2011.

This summary only highlights some of the current requirements of Rule 1147. A copy of the complete rule can be found at [www.aqmd.gov/rules/reg/reg11/r1147.pdf](http://www.aqmd.gov/rules/reg/reg11/r1147.pdf)

## SOUTH COAST AQMD RULE CHANGES ADOPTED

For full details on rule adoptions go to: <http://aqmd.gov/rules/recentrules.html>

- Rule 1144: Metal Working Fluids and Direct-Contact Lubricants (amended) Rule 1144 was expanded to include Direct-Contact Lubricants and Metalworking Fluids by establishing VOC limits effective January 1, 2012, and incorporates a recently validated thermogravimetric test method for determining VOC content. The facilities subject to the proposed rule include machine shops (job shops), aerospace facilities, steel

mills, auto part rebuilders, screw machine shops, steel tube (pipe) manufacturers, steel spring manufacturers and captive machine shops located inside of other types of businesses (approx. 7,000 facilities will be affected).

## SOUTH COAST AQMD RULE CHANGES PROPOSED

For full details on proposed rule changes below go to: <http://www.aqmd.gov/rules/proposed.html>

- Rule 317: *Clean Air Act Non-Attainment Fees* (Amended) - This proposed amendment would raise fees on major stationary sources that do not mitigate emissions of VOC's or NOx below 80% of the source's baseline emissions.
- Rule 1150.1: *Control of Gaseous Emissions from Municipal Solid Waste (amended)* - The primary intent of the amendment is to include GHG emissions in the rule and make the rule consistent with the CARB early adoption measure for landfills. There are also changes to recordkeeping, control requirements for Gas Collection and Control Systems, wellhead pressure monitoring, and others.
- Rule 1420.1: *Emission Standard for Lead from Large Lead-acid Battery Recycling Facilities*- The rule requires large lead-acid battery operations to: install extensive enclosures which vent to control devices at 99% PM efficiency, control fugitive dust, perform source testing, perform ambient air monitoring, and meet ambient air quality standards.

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

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