

# POTPOURRI

## Department of Environmental Quality Office of Air Quality and Radiation Protection Air Quality Division

### Permit Procedures Implementation (LAC 33:III.507)

On September 12, 1995, the United States Environmental Protection Agency (EPA) granted final full approval to the Louisiana Operating Permits Program under Title V of the federal Clean Air Act Amendments of 1990 and 40 CFR Part 70. That approval rendered effective certain provisions of LAC 33:III.Chapter 5, Permit Procedures, in particular Section 507, Part 70 Operating Permits Program. Implementation of the operating permits program will require permit applications to be submitted by all major sources of regulated air pollutants in the state. Several questions regarding implementation of the program have been raised, and are being addressed by this notice.

#### **Permitting of Research and Development (R&D) Facilities**

Section 501.B.7 of Chapter 5 provides that a research and development facility may be considered a separate source provided that the facility has a different two-digit Standard Industrial Classification (SIC) code from, and is not a support facility of, the source with which it is co-located. Recent EPA guidance, July 10, 1995, clarifies that EPA expects R&D facilities will generally be exempt from Part 70 requirements as independent, nonmajor sources. Proposed EPA revisions to Part 70, August 31, 1995, further clarify that R&D facilities by definition shall be treated as belonging to a separate industrial classification. The Office of Air Quality and Radiation Protection concurs with the EPA regarding classification of R&D facilities. Under §501.B.7, such facilities will be considered as belonging to a distinct industrial classification consistent with federal guidance, and as such may qualify as a separate facility from the co-located source.

#### **Speciation of Hazardous Air Pollutant Emissions from Combustion Sources**

Chapter 5, at §517.D.3, requires that permit applications contain information regarding regulated air pollutants, including the rate of emissions of each pollutant in tons per year and the composition and description of the air pollutants being emitted from each point and as fugitive emissions. Questions have been raised with regard to the level of detail of emissions data required under this Section for the emissions of hazardous air pollutants (toxics) from combustion sources burning virgin fossil fuels. In implementing §517.D.3, DEQ generally expects that emissions information provided will be based upon the most comprehensive and accurate data reasonably available. Emissions estimates are typically generated from nationally available emission factors or are extrapolated from source testing. In the case of hazardous air pollutant emissions from combustion sources burning virgin fossil fuels, currently available emission factors do not provide a reliable and comprehensive prediction of emissions. Various emission profiles are in conflict and yield widely varying estimates of the type and quantity of pollutants emitted. For some methods of combustion, no emission factors are readily available. Development of site-specific emission factors for these combustion sources by each applicant would require extensive testing and analysis, usually at a high cost relative to the expected level of emissions. During the development of the Louisiana air toxics program, DEQ recognized that addressing hazardous air pollutants from such sources in the absence of reliable emissions data would impose an unreasonable burden, and therefore exempted sources burning virgin fossil fuel from the requirements of that program. Further, it is anticipated that toxic emissions from small sources burning virgin fossil fuels are usually of a level which is considered insignificant under §501.B.5, and would therefore qualify for an exemption from permitting requirements upon approval of the permitting authority.

Because comprehensive and reliable emission factors are not currently available for quantifying hazardous air pollutants from natural gas combustion sources, and because extensive source testing and development of emission factors by each applicant would impose unreasonable burdens, initial Title V permit applications will generally not be required to contain speciation and quantification of toxics from such combustion sources. Emissions of volatile organic compounds and other criteria pollutants from such sources should be reported in the permit application. The department may request that the applicant provide additional information or speciation of emissions in reviewing the application.

A comprehensive research project jointly sponsored by the U.S. Department of Energy, EPA, the Gas Research Institute, Lawrence Livermore Laboratories, and others is currently underway to develop a uniform and reliable set of emission factors addressing hazardous air pollutant emissions from combustion sources. That study is expected to be complete within the next three years. DEQ will require a full speciation and quantification of hazardous air pollutant emissions from combustion sources at the time of permit renewal when nationally accepted factors are available.

**Emissions Data for 112(r) Pollutants,  
Nontoxics, and Non-VOCs**

Questions have also been raised regarding the emissions data needed to satisfy §517.D.3 for pollutants regulated under the Accident Prevention Program mandated by Section 112(r) of the federal Clean Air Act, but not specifically regulated under any other air program.

Some 112(r) compounds, such as pentane and butane, are not listed as hazardous air pollutants under Section 112(b) of the Act or under LAC 33:III.Chapter 51, but are generically regulated as volatile organic compounds (VOC) under title I of the Act. Under Chapter 5, emissions of 112(r) pollutants which are also VOC, but which are not toxic air pollutants under Chapter 51, should be listed and quantified in the permit application as nontoxic VOC. The §517.D.3 requirement to provide the composition and description of these pollutants should be met by listing the primary components of the VOC stream (for example; VOC 5 tpy, consisting primarily of pentane and butane). Quantification of the speciated VOC components will not generally be required.

Some 112(r) pollutants, such as methane and ethane, are not listed as toxic air pollutants under Chapter 51 and are also not regulated as VOC. These compounds are generally considered air contaminants under Louisiana law and are subject to §517.D.3 requirements. The Office of Air Quality and Radiation Protection has taken under consideration a request to list these pollutants as insignificant under Chapter 5, thus exempting them from permitting requirements. At this time, these compounds should be included with "other" pollutants in the permit application, quantified to the extent that data is reasonably available, and described by primary components (for example; methane 10 tpy). Sources emitting less than five tons per year may qualify for an exemption under §501.B.6.

**Permitting Requirements for Minor Sources**

Only those sources designated as Part 70 sources are required to obtain operating permits under the Louisiana Part 70 Operating Permits Program (LAC 33:III.507). LAC 33:III.507.A.1 includes a list of those sources which are designated Part 70 sources. DEQ has received many questions with regard to the wording of this list for minor sources subject to a federal NSPS or NESHAP standard. DEQ would like to clarify that the applicability of a federal NSPS or NESHAP standard to a minor source does not in and of itself trigger the requirement to obtain a permit under §507. Only if EPA designates by rule that minor sources subject to a particular NSPS or NESHAP must obtain an operating permit does the designation under §507.A.1.b, or c, apply. At this time EPA has deferred the Part 70 permitting requirements for such minor sources, and is undertaking rulemaking to extend that deferral for most minor or area sources. DEQ will implement Part 70 requirements for minor sources in accordance with final rulemaking by EPA.

James H. Brent  
Administrator

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