Defining “Major Source”

Louisiana Section A&WMA
Environmental Focus 2007

Bryan D. Johnston
LDEQ/OES/Air Permits Division
P: 225.219.3118
F: 225.219.3309
E: bryan.johnston@la.gov

October 30, 2007
Potential to Emit

In order to determine major source status, you must first determine the facility’s potential to emit.

Potential to Emit — the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by:

a. EPA when PTE is being considered with regard to federally applicable requirements; or

b. LDEQ when PTE is being considered with regard to state applicable requirements.
Potential to Emit

In order to determine PTE, all equipment is generally assumed to operate continuously (8760 hr/yr).

PTE for emergency equipment can usually be based on a more realistic estimate (e.g., 500 hr/yr).

- September 6, 1995 Seitz memo

Back-up equipment cannot be discounted unless the unit cannot be used in conjunction with the primary unit.
Major Source – Permitting

A major source requires a Title V permit (regular or general).

However, keep in mind that some regulations require a facility to obtain a Title V permit regardless of its emissions. For example:

- NSPS WWW (MSW Landfills)
- NSPS CCCC (Commercial and Industrial Solid Waste Incineration Units)
Major Source – HAP & TAP

Any stationary source that has the PTE ≥ 10 TPY of any hazardous air pollutant (HAP) which has been listed pursuant to Section 112 of the Clean Air Act, or ≥ 25 TPY of any combination of such HAP.

HAP emissions from the following source categories shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources.

- oil or gas exploration or production wells (with associated equipment)
- pipeline compressor or pump stations
  - See, for example, the definition of “major source” in 40 CFR 63 Subpart HH.
Major Source – Criteria

Any stationary source that has the PTE \( \geq 100 \text{ TPY of:} \)

- Particulate matter (includes PM\(_{10}\) & PM\(_{2.5}\))
- SO\(_2\)
- NO\(_2\) (NO\(_X\))
- CO
- Ozone (NO\(_X\) and VOC regulated as surrogates)
- Lead
Major Source – Fugitive Emissions

For purposes of Title V, PSD, and NNSR, fugitive emissions of a stationary source shall be considered in determining whether it is a major source:

- for those source categories listed in Table A of LAC 33:III.509; and

- for all other stationary source categories, which as of August 7, 1980, are being regulated by a standard promulgated under Section 111 (NSPS) or 112 (Hazardous Air Pollutants) of the Clean Air Act.

  - These sources categories are identified on Table A-2 of the 1990 NSR Workshop Manual.

- EPA is expected to propose a rule this fall or winter that would require fugitives to be considered for all source categories.
Major Source – NNSR

Major source threshold is dependent on an area’s nonattainment classification.

- See Table 1 of LAC 33:III.504.L, except as modified in §504.M.
## Major Source – NNSR

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Major Stationary Source Threshold Values (tons/year)</th>
<th>Major Modification Significant Net Increase (tons/year)</th>
<th>Offset Ratio Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone VOC/NOx</td>
<td>Trigger Values&lt;br&gt;Marginal: 100&lt;br&gt;Moderate: 100&lt;br&gt;Serious: 50&lt;br&gt;Severe: 25&lt;br&gt;Extreme: Any increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>Moderate: 100&lt;br&gt;Serious: 50</td>
<td>100&lt;br&gt;50</td>
<td>&gt;1.00 to 1&lt;br&gt; &gt;1.00 to 1</td>
</tr>
<tr>
<td>SO2</td>
<td>Moderate: 100</td>
<td>40</td>
<td>&gt;1.00 to 1</td>
</tr>
<tr>
<td>PM10</td>
<td>Moderate: 100&lt;br&gt;Serious: 70</td>
<td>15&lt;br&gt;15</td>
<td>&gt;1.00 to 1&lt;br&gt; &gt;1.00 to 1</td>
</tr>
<tr>
<td>Lead</td>
<td>100</td>
<td>0.6</td>
<td>&gt;1.00 to 1</td>
</tr>
</tbody>
</table>
LAC 33:III.504.M

Notwithstanding the thresholds and offset ratios established by Table 1, the provisions of §504.M shall apply to sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge as long as each parish’s nonattainment designation with respect to the 8-hour NAAQS for ozone is “marginal” or “moderate.”

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
<th>Major Stationary Source Threshold Values (tons/year)</th>
<th>Major Modification Significant Net Increase Values (tons/year)</th>
<th>Minimum Offset Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone (VOC/NOₓ)</td>
<td>Marginal</td>
<td>50</td>
<td>25(25/10)</td>
<td>1.20 to 1</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>50</td>
<td>25(25/10)</td>
<td>1.20 to 1</td>
</tr>
</tbody>
</table>
South Coast v. EPA

On December 22, 2006, and reaffirmed on June 8, 2007, the U.S. Court of Appeals for the D.C. Circuit issued an opinion on challenges to EPA’s Phase I rule for implementation of the 8-hour ozone NAAQS.

In its Phase I rule, EPA made NSR applicability thresholds and offset ratios dependent on an area’s 8-hour attainment status.

The Court stated that EPA improperly determined that areas designated nonattainment under the 1-hour ozone NAAQS would no longer be subject to the 1-hour NSR requirements. NSR is a control measure and subject to the anti-backsliding provisions of Section 172(e) of the CAA.
South Coast v. EPA

On October 3, 2007, EPA issued a memorandum addressing the decision. In the memo, EPA:

1. concludes that the effect of the Court’s ruling is to restore NSR applicability thresholds and emission offsets pursuant to the 1-hour ozone classifications previously in effect (i.e., severe for Baton Rouge);

2. notes its intent to issue an immediately-effective final rule under the Good Cause Provision of the Administrative Procedures Act to restore the NSR applicability thresholds and offset ratios; and

3. encourages states to “comply with the court decision as quickly as possible.”
South Coast v. EPA

Questions posed to EPA:

1. When does EPA expect to promulgate its final rule under the authority of the Good Cause Provision of the APA to restore the NSR applicability thresholds and offset ratios associated with 1-hour designations (e.g., next week, next month, or next year)?

2. Does the fact that the Baton Rouge area achieved compliance with the 1-hour standard after June 15, 2005 matter, or will the major source threshold and minimum offset ratios remain at severe area levels in perpetuity?
Major Source – PSD

Any stationary source listed in Table A of the definition of “major stationary source” that has the PTE $\geq 100$ TPY of any “regulated NSR pollutant.”

- Criteria pollutants; fluorides; $\text{H}_2\text{SO}_4$; $\text{H}_2\text{S}$; TRS; NMOC; municipal waste combustor organics, metals, and acid gases.

For stationary source categories other than those listed in Table A, any stationary source that has the PTE $\geq 250$ TPY of any “regulated NSR pollutant.”

Any physical change that would occur at a source not otherwise qualifying as a major stationary source if the change would constitute a major source by itself.
SIC Codes – Title V

LAC 33:III.502:

Major Source—for the purposes of determining the applicability of 40 CFR Part 70 or of LAC 33:III.507, any stationary source or any group of stationary sources that are:

1. located on one or more contiguous or adjacent properties,
2. under common control of the same person (or persons under common control), and
3. that are described in Subparagraph a, b, or c of this definition.

40 CFR 70.2:

Major Source—any stationary source or any group of stationary sources that are:

2. under common control of the same person (or persons under common control), belonging to a single major industrial grouping and …
SIC Codes – NSR

PSD and NNSR define “stationary source” very broadly as “any building, structure, facility, or installation which emits or may emit any regulated pollutant.”

“Building, Structure, Facility, or Installation” includes all of the pollutant-emitting activities that:

1. belong to the same industrial grouping,
2. are located on one or more contiguous or adjacent properties, and
3. are under the control of the same person (or persons under common control).
SIC Codes – “Industrial Grouping”

Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group.”

- i.e., have the same two-digit code as described in the Standard Industrial Classification Manual, 1987.

According to EPA policy, even if two facilities have different SIC codes, but the modified facility essentially supports the existing facility (e.g., a boiler at a chemical manufacturing plant), the facilities should be considered the same source for NSR purposes. The major function or “primary use” of the facility or emission source is the guiding rule to use in this type of determination.
Contiguity

Sites separated by ¼ mile or less shall be considered contiguous.

Facilities will not be “daisy-chained” together to establish a contiguous grouping.

- One exception: LDEQ may consider sites separated by a distance greater than ¼ mile to be contiguous if they are “interdependent.”
Contiguity

Major Source Considerations

- Each facility is evaluated independently.
- If the Target Facility is contiguous to another facility operating under a Title V, then the Target Facility is not necessarily obligated to obtain a Title V unless potential emissions from it and from other facilities located within ¼ mile of it would also constitute a major source.
Contiguity

**Case 1**

- 1/4 Mile Radius
- 50 tpy
- 25 tpy
- 30 tpy

Total = 105 tpy

Target Facility is a major source and must apply for a Title V Permit.

**Case 2**

- 1/4 Mile Radius
- 50 tpy
- 20 tpy
- 20 tpy

Total = 90 tpy

Target Facility is a minor source and does not need to apply for a Title V Permit.

- **★** - Target Facility
- ☐ - Title V Facility
- ● - Minor Source Facility
Synthetic Minors

Synthetic minors are facilities that would otherwise have a PTE > major source thresholds, but choose to accept federally enforceable operational limitations to remain a minor source. Some limits commonly applied include, but are not limited to:

- Operating time,
- Fuel use, and
- and throughput restrictions.

Public notice is required.
Synthetic Minors

For **throughput dependent sources**, LDEQ Guidance Document 02-02 (November 22, 2002) remains effective.

“…. sources with a PTE of less than 95% of all major source thresholds will not require a federally enforceable condition and the accompanying public notice.”

For the purpose of comparing a permit’s PTE to the 95% threshold, the emissions limits specified in a permit shall not be rounded.

Examples:

- Painting
- Miscellaneous solvent use
- Oil and gas production (e.g., loading, flash gas emissions, working losses, etc.)
Defining “Major Source”

Questions?