Major New Source Review (NSR) Updates

I. 1997 vs. 2008 Ozone Nonattainment Standards

A. Dallas/Fort Worth (DFW) nonattainment area.

1. The following counties are classified as nonattainment for ozone. The specific county and ozone classification depends upon the ozone standard being considered.

Table 1. 1997 vs. 2008 Ozone Nonattainment Standards-DFW

1997 Ozone Standard Classified as a "Serious" nonattainment area	2008 Ozone Standard Classified as a "Moderate" nonattainment area
Collin	Collin
Dallas	Dallas
Denton	Denton
Ellis	Ellis
Johnson	Johnson
Kaufman	Kaufman
Parker	Parker
Rockwall	Rockwall
Tarrant	Tarrant
	Wise

2. For major NSR purposes, use the most stringent criteria (Serious nonattainment) to determine nonattainment applicability:
   - Major Source Significant Emission Rate = 50 tons/year
   - Major Modification Significant Emission Rate = 25 tons/year
   - Offset Ratio = 1.2:1

3. For major NSR purposes in **Wise County only** (Moderate nonattainment) the following significance rate criteria applies:
    - Major Source Significant Emission Rate = 100 tons/year
    - Major Modification Significant Emission Rate = 40 tons/year
    - Offset Ratio = 1.15:1

B. Houston/Galveston/Brazoria (HGB) nonattainment area.

1. The following counties are classified as nonattainment for ozone. The specific county and ozone classification depends upon the ozone standard being considered.

Table 2. 1997 vs. 2008 Ozone Nonattainment Standards-HGB

1997 Ozone Standard Classified as a "Severe" nonattainment area	2008 Ozone Standard Classified as a "Marginal" nonattainment area
Brazoria	Brazoria
Chambers	Chambers
Fort Bend	Fort Bend
Galveston	Galveston
Harris	Harris
Liberty	Liberty
Montgomery	Montgomery
Waller	Waller

2. For major NSR purposes, use the most stringent criteria (Severe nonattainment) to determine nonattainment applicability.
    - Major Source Significant Emission Rate = 25 tons/year
    - Major Modification Significant Emission Rate = 25 tons/year
    - Offset Ratio = 1.3:1

II. Major NSR – Credible Emission Reductions

Credible emission reduction means:

A. The new potential to emit (PTE) must be less than the baseline actual emission rate before the project under consideration.

B. The emission reduction cannot have been relied upon in the issuance of a major NSR permit. A major NSR permit is a Prevention of Significant Deterioration (PSD) permit or a nonattainment permit.

C. The emission reduction cannot be required by a State Implementation Plan (SIP).

D. The emission reduction has the same qualitative significance for public health and welfare.

E. Planned maintenance, startup, and shutdown (MSS) emissions must have been reported into the emissions inventory (EI) in a timely manner.

F. Emission decreases are "not credible" if the baseline actual emission rate is greater than the enforceable PTE before the project under consideration.

III. Credible Emission Reduction Examples

A. Example 1.

1. A company operates a facility with the following PTE and baseline actual emission rates:

   a. Current PTE is 300 tons/year.

   b. Baseline actual emissions are 110 tons/year.

2. In 2008, a permitting action requires the application of a control device, which can achieve a 98% control efficiency.

3. What is the credible emission reduction, and how is the baseline actual emission rate affected for subsequent projects?

   a. The PTE after the project is: 300 (0.02) = 6 tons/year.

b. The credible emission reduction is the baseline actual emission rate minus the PTE after the project, or

   110 tons/year – 6 tons/year = 104 tons/year.

c. For subsequent projects, the baseline actual emission rate can be no greater than 6 tons/year. A baseline actual emission rate greater than 6 tons/year would mean that the facility is out of compliance with its maximum allowable emission rate. After the application of BACT, the baseline actual emission rate for subsequent projects starts out with:

   110 tons/year (0.02) = 2.2 tons/year.

B. Example 2.

1. A company operates a facility with the following PTE and baseline actual emission rates:

   a. Current PTE is 300 tons/year.

   b. Baseline actual emissions are 110 tons/year.

2. In 2008, a permitting action requires the application of a control device, which can achieve a 98% control efficiency. There is also a SIP requirement to obtain a 90% control efficiency.

3. What is the credible emission reduction? Remember that both BACT and SIP control requirements apply.

   a. The PTE after the project is: 300 (0.02) = 6 tons/year; however,

   b. The baseline actual emission rate must be adjusted to account for the 90% control efficiency required by the SIP. The adjusted baseline actual emission rate is:

      110 tons/year (0.1) = 11 tons/year.

   c. The credible emission reduction is the baseline actual emission rate minus the PTE after the project, or

      11 tons/year – 6 tons/year = 5 tons/year.

IV. Alternative approaches for Nonattainment New Source Review (NNSR).

These alternatives are applicable for Serious and Severe nonattainment classifications only.

A. At major sources with a PTE of less than 100 tons/year, NNSR is not required if:

   1. Project increases are offset with internal offsets at a 1.3:1 ratio.

   2. BACT can be substituted for lowest achievable emission rate (LAER).

B. At major sources with a PTE greater than or equal to 100 tons/year, BACT can be substituted for LAER if project increases are offset with internal offsets at a 1.3:1 ratio.