GUIDELINES FOR A NETTING DEMONSTRATION

Applicability

Rule 220 applies to a major source and/or a major modification at a source which is located in a non-attainment area. A non-attainment area is one where the National Ambient Air Quality Standards (NAAQS) are not being met. Rule 220 requires compliance with the lowest achievable emission rate (LAER) and an emission reduction (offset) for each non-attainment air contaminant emitted in significant quantities as defined by Rule 119(e). However, a source may choose to "net out" of the requirements of Rule 220.

Federal Prevention of Significant Deterioration (PSD), 40 CFR Part 52.21. The federal PSD regulations apply to a major source and/or a major modification at a source which is located in an attainment area. An attainment area is one where all the NAAQS are being met. However, as with the non-attainment permitting, a source subject to the PSD regulations may choose to "net out" of the requirements.

Determining Baseline Actual Emissions

Baseline Actual Emissions (BAE) is the starting point for all federal New Source Review (NSR) applicability determinations. This includes Rule 220 and PSD regulations. BAE represent the benchmark from which the magnitude of emission changes at an existing facility is determined. BAE have been established for three specific purposes:

- For modifications - to determine the pre-change emissions of a modified emission unit as part of an NSR applicability determination.
- For netting - to determine the pre-change actual emissions of an emission unit that underwent an emissions increase or decrease during a contemporaneous period of a specific project.
- For Plant wide Applicability Limits (PAL) - to establish the level of a PAL.

For each of these three purposes, BAE are calculated on an emission unit-specific basis. However, there are minor differences in the methodology for different types of emission units.

A new emission unit is defined as a unit that is newly constructed and that has existed for less than two years from the date it first operated. An existing emission unit is defined as a unit that is not a new emission unit. New emission units that have not yet begun normal operation (i.e., are still under construction or are conducting initial shakedown operations) are included in the BAE at zero emissions. New emission units that have begun normal operation are included in the BAE at their potential to emit.

BAE are the average actual emissions calculated over two consecutive years of actual operation. Electric Utility Steam Generating Units (EUSGUs) must identify actual emissions that occurred during any consecutive 24-month period during the five years immediately preceding the date on which construction actually begins for a specific project. Non-EUSGUs must identify actual emissions that occurred during any consecutive 24-month period during the ten years immediately preceding the date on which construction actually begins for a specific project or the date on which a complete permit application was submitted.

To use a selected 24-month period, the facility must possess adequate documentation to allow the calculation of actual emissions throughout the selected period. If documentation is incomplete for any part of the selected 24-month period, a different 24-month period must be selected. When a proposed project involves, or affects, multiple emission units, only one 24-month period can be selected for the combination of all affected emission units. When a proposed project involves more than one regulated NSR pollutant, a different 24-month period may be selected for each pollutant. Any emissions during the selected period that resulted from facility operation in excess of any applicable emission limit must not be included in the BAE.

BAE and Netting

Federal NSR applicability for modifications at an existing source depends on the modification resulting in both a significant emission increase by itself and a significant net emissions increase at the whole facility. If a

proposed project does not result in a significant emissions increase, then netting is not required. The process of evaluating the net emissions increase at the whole facility involves evaluating all recent (i.e., contemporaneous) increases and decreases in actual emissions at the entire facility and determining if they are creditable. These contemporaneous, creditable emission changes must be unrelated to the specific project. If they are related to the project, then their emissions must be included in the determination of its emissions increase, not the net emissions increase. (This sentence is unclear) If the analysis demonstrates that net emissions will increase less than the significant amount above BAE for any regulated NSR pollutant, the proposed project will not be subject to federal NSR for that pollutant.

Procedure

The steps involved in conducting a netting analysis are as follows:

1. Identify the contemporaneous period. The regulations define the contemporaneous period as beginning five years prior to the start of construction on the proposed project and ending when the project begins operation. Therefore, to be considered in a netting analysis, a change must have occurred within 5 years of the beginning of construction on the proposed project or after the beginning of construction and before the initial operation of the proposed project.

2. List each physical change, or change in the method of operation that occurred or will occur, during the contemporaneous period with a corresponding increase or decrease in actual emissions (include the date of each change).

3. Evaluate each change on the list to identify only those changes that are creditable. To be creditable, a contemporaneous emissions decrease must be federally enforceable on and after the date that construction begins on the proposed project. The emissions decrease must take place prior to the emissions increase with which it is being netted.

   Most creditable emissions changes result from either a physical change or a change in the method of operation of one or more emission units. In Michigan, most of these changes are required to be permitted through the Permit to Install (PTI) program. The potential to emit for each creditable, contemporaneous change must be used. The potential to emit may be determined by permit limits, applicable requirements, or by operation at the maximum design capacity.

   Emission increases and decreases that occur at a Clean Unit are not creditable unless the reduction occurs prior to, or after expiration of, the effective date of the Clean Unit designation, except as follows. Reductions at Clean Units, or from implementation of a Pollution Control Project (PCP), may be creditable to the extent that the reductions exceed the level of reduction on which the Clean Unit designation, or PCP exclusion, was granted and the reductions are surplus, quantifiable, permanent and enforceable as a practical matter.

4. List each creditable, contemporaneous change (including the date of each change).

5. Separately calculate the BAE for each creditable, contemporaneous change.

6. Identify the post-change potential emissions for each emission unit affected by each creditable, contemporaneous change.

7. Calculate the emissions increase or decrease for each emission unit as post-change potential minus BAE. The magnitude of a creditable change is determined based on the difference between the post-change potential emissions and the pre-change baseline actual emissions for the change.

8. Sum all emission increase and decreases with the significant emissions increase from the original proposed project. When conducting a netting analysis, ALL creditable contemporaneous emissions increases and decreases for the specific pollutant must be used. A netting analysis cannot be based on the decreases alone.

For additional assistance or technical questions pertaining to this document, contact the AQD Permit Section at 517-373-7074.