



Protecting Texas
by Reducing and
Preventing Pollution

INTEROFFICE MEMORANDUM

DATE: March 10, 2003, revised May 26, 2003

TO: Interested Parties

FROM: *JS*
5/26 John Steib, Director, Air Permits Division

SUBJECT: Federal NSR Reform Implementation

EPA's New Source Review (NSR) Reform Rules were published in the Federal Register on December 31, 2002 and are scheduled to become effective on March 3, 2003. These rules significantly change the Federal New Source Review (FNSR) applicability procedures, allowing sources more options to avoid FNSR. The TCEQ FNSR Team has completed an initial review of these changes and is developing recommendations on how to implement these changes in our rules and guidance.

Although the federal rules became effective on March 3, 2003 for delegated states, states with State Implementation Plan (SIP) approved programs are given until January 2, 2006 to adopt and submit SIP revisions which implement these changes. Our PSD and Nonattainment permit programs are SIP-approved so that any implementation of the federal reform package must be completed through rule making and an amended SIP submittal to EPA. **The rules governing FNSR in Texas are contained in 30 TAC 116 Subchapter B and these rules remain effective until updated through rulemaking**

APD continues to support the concept of allowing additional flexibility in permitting, and we are working to ensure that FNSR reform rules will be implemented promptly and correctly so that we may continue to allow for prompt reviews and flexibility in NSR, particularly for well controlled sources. This effort will allow for input from stakeholders throughout the process and these opportunities will be identified on the APD web site. The FNSR Team expects to complete its review and recommend that the rulemaking process begin later this year. We plan to complete the process well ahead of the three year deadline.

In our review of the NSR Reform rules, we have identified several areas that we have already implemented or may implement through guidance under current state rules. These areas are discussed briefly below. Questions regarding the portions of the package that have been implemented as discussed below may be directed to any member of the FNSR Team.

Pollution Control Projects

The pollution control standard permit (30 TAC 116.617) has been available to authorize pollution control projects for a number of years. The standard permit was developed using previous EPA guidance on pollution control projects and federal applicability. While some updates to this rule may be needed in view of the new federal rule, the flexibility for sources that plan to implement pollution controls is currently available.

Plant-wide Applicability Limit (PAL)

APD updated its guidance for PALs in March of last year. The APD PAL has a 10 year life and establishes caps for any criteria pollutant requested. The emission caps are initially based on actual site emissions with the final cap based on BACT control on the site facilities at design operating rates. This guidance has been updated again to reflect concerns EPA raised during their review of a recently issued PAL. This TCEQ PAL continues to be available for those sites looking to set emission caps below which federal review is not necessary. Additional information on the TCEQ PAL may be found in the attached paper.

Baseline Emissions

Baseline emissions, the actual emissions used in an actual to allowable FNSR applicability test, have traditionally been considered the emissions from the facility over the most recent 24 months. Exceptions have been made under narrow circumstances as allowed under the previous EPA rule. EPA and TCEQ have allowed the use of periods as far as 10 years ago under the previous federal regulation (such as for PALs). An expanded baseline is not precluded by rule.

Therefore, APD will accept the high 24 consecutive months in the last 10 years as baseline emissions for NSR applicability analysis for sources other than electrical utility steam generating units. The following constraints also apply:

1. The emissions must be authorized. They cannot have exceeded an emissions limit or have been exempted under applicable rules in 30 TAC Chapter 101.
2. When a project involves multiple facilities, one consecutive 24-month period must be used to determine the baseline actual emissions for the facilities being changed. A different consecutive 24-month period can be used for each pollutant. This is also required when the project is shown in any subsequent contemporaneous period netting.
3. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions.
4. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the source must currently comply (such as SIP and permit requirements), had the source been required to comply with such limitations during the consecutive 24-month period chosen.
5. The site does not have the option of requesting the use of a baseline period outside the 10 year window.
6. This methodology only applies to the FNSR applicability analysis and does not apply to the determination for actual emissions for the purpose of the FNSR review (such as modeling or offsets). This guidance is only applicable to permit actions completed or modifications started after March 10, 2003.



Texas Commission on Environmental Quality

Clean Plant-Wide Applicability Limit

Reference Document

Overview

Permit applicants and holders are allowed the option of establishing a plant wide applicability limit (PAL) for all facilities at a site or a stand-alone process. The PAL would initially be based on a actual emissions with a best available control technology (BACT) based limit phased in over an implementation period.

Basis for Initial Emission Rate Caps

The initial emission rates for unmodified facilities would be based on the actual emissions from those facilities to be covered by the PAL. The applicant may choose the 24 month period with the greatest actual emissions over the last 10 years¹ subject to the following constraints;

- the same 24 month period must be chosen for all facilities;
- all facilities must be upgraded to BACT (on average for existing facilities) and must be capable of operating at the previous activity level²; and
- emission rates must be reduced by any control requirements in the state implementation plan (SIP) in nonattainment areas.

If there are modifications proposed and the modifications could result in a significant increase in emissions, the applicant will need to undergo federal permit review for that pollutant³. This pre-construction review would be done in the same manner as current reviews. The PAL would be based on the resulting reviewed emission rate levels.

Integration with Flexible Permit

The PAL is very similar to the Texas Commission on Environmental Quality (TCEQ) flexible permit and the following analysis uses the flexible permit as a basis for discussion. If a PAL is chosen, all facilities in the flexible permit must be in the PAL. Integration with a state flexible permit would provide for three benefits:

1. The PAL will ultimately be based on BACT emission rates. On average, all emission points will have BACT.
2. The flexible permit already provides for detailed recordkeeping and monitoring to ensure compliance with the allowable emission rate caps and will also provide the same for the PAL.
3. Incorporating the PAL and flexible permit simplifies documentation and recordkeeping because one document would provide all the requirements for the site.

If a federal NSR permit review is not performed, the PAL will start at the baseline actual emission rates and be reduced to the BACT level as it is phased in over time. If a federal review was completed, the allowable emission rates for those facilities would provide the PAL cap contribution for those facilities. The PAL may include the 9% flexible permit insignificant factor not to exceed the federal significant levels.⁴

The PAL will be reduced by the applicable amount if a facility is shutdown for more than two years unless the shutdown facility is maintained in accordance with the requirements found in the memo, "PSD and Non-Attainment Applicability to the Restart of Sources that Are Shut Down for More Than Two Years," dated August 4, 1998. The PAL will also be reduced for any new SIP requirements.

The applicant may choose which facilities may be added to the flexible permit and PAL. Because of the possible future complications in NSR applicability determinations resulting from possible debottlenecking of upstream and downstream facilities, all facilities associated with a process line should be included in the PAL. Other stand-alone processes and support facilities such as wastewater and utilities may not need to be part of the PAL (reviewed on a case-by-case basis). Normal federal netting requirements would apply to the rest of the site and any deminimis emission increases used in setting the PAL must be shown in that netting.⁵

Any physical modifications to the facilities covered by the PAL will be subject to state review per Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106) or Chapter 116, as applicable. Any new facilities at the site must be added to the PAL unless they can be demonstrated to operate independently of the facilities in the PAL. All facilities that a company wishes to add to a PAL must undergo BACT review as required by the flexible permit rule. New facilities authorized through Permit by Rule (PBR) must be added to the PAL with an alteration to the permit (to identify recordkeeping) submitted concurrent with the change.

(Rev. 03-03-03)

Clean Plant-wide Applicability Limit - These forms are for use by sources subject to the Federal Operating Permit Program and are subject to revision. [ANSRG 7622:v1]



Texas Commission on Environmental Quality Clean Plant-Wide Applicability Limit Reference Document

Any modifications resulting in emissions exceeding the PAL caps will undergo the appropriate full federal review and the PAL caps may be increased to reflect the increased authorized emission rates.

PAL Renewal

A PAL may be renewed, if desired, at the end of 10 years. The renewal will result in the PAL being based on BACT at that time.⁶ In essence, the permit holder would re-apply for the flexible permit, ensuring current BACT on average after a phase-in period.

Current Flexible Permit Holders

Current flexible permit holders may apply retroactively for a PAL⁷ with a permit amendment and public notice. In general, the netting performed when establishing and amending the flexible permit would be verified and the PAL would be established at the current and future allowable emission rate caps for the permit. The PAL renewal date would be 10 years from the issuance of the original flexible permit. A draft permit public notice is required for all PAL applications.

NO_x Cap and Trade

Until an alternate method is developed for federal permit review for NO_x as a precursor to ozone in Houston-Galveston area, the NO_x PAL contribution for those facilities under cap and trade will be set to the value of the allowances held from that equipment (not traded from other facilities).

PAL Outside of a Flexible Permit

A PAL may be established outside of a flexible permit if desired. This may be appropriate for situations where a site has BACT controls for a particular pollutant, but does not wish to commit to BACT on all air contaminants. The above requirements remain the same and the PAL requirements would be incorporated into a construction permit in that case.

Example

Volatile organic compound VOC emissions are examined for an existing flexible permit. It was issued in 1998, with VOC BACT still being phased in. The 2002 emission cap is 200 tpy and the 2003 VOC emission cap is 180 tpy (final cap). The PAL is obtained through a permit amendment with public notice for the PAL. The netting associated with the issuance of the flexible permit is verified and the PAL is set equal to the flexible emission caps.

The permit and the PAL are due for renewal in 2008. If the PAL is to be renewed at that time, a new BACT review will be performed for all facilities covered by the permit. For the purposes of this example, assume that now the BACT emission rate is 150 tpy. In that case, the PAL cap and controls will be implemented over a phase in period (such as a limit of 170 tpy in 2009, 160 tpy in 2010, and 150 tpy in 2011).

Endnotes

- ¹ - considered a reasonable period to consider for establishing baseline emission rate. Federal Register, Vol. 63, No. 142, p. 39860, 39863-4. Supplemented by US Environmental Protection Agency (EPA) comments on Lower Colorado River Authority PAL.
- ² - previous TCEQ PAL guidance
- ³ - Federal review combined with PAL in Saturn Spring Hill air permit, Tennessee 60-0132.
- ⁴ - current TCEQ PAL and flexible permit guidance
- ⁵ - This allows for flexibility at the site while preventing circumvention of federal requirements. It is our experience that applicants usually do not include all facilities in a flexible permit. Those not included are not likely to be modified but if they are, they would be subject to the normal applicability tests.
- ⁶ - this is a more restrictive version of the EPA clean unit concept with controls revisited every 10 years
- ⁷ - consistent with current TCEQ PAL guidance