



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.

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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]



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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