



Minnesota
Pollution
Control
Agency

Majors and
Remediation
Division
Air Quality
Program

Facts about the Plantwide Applicability Limit

Air Quality/Federal and State Regulations/#4.27/November 2003

In its amendments to the federal New Source Review (NSR) rules promulgated December 31, 2002, the U.S. Environmental Protection Agency (EPA) provided an alternative applicability for existing major sources under NSR that receive a Plantwide Applicability Limit (PAL) based on actual emissions, or "actuals PAL." Facilities covered by an actuals PAL can be changed and, for NSR purposes, there is no modification for that pollutant. Traditional permitting applicability applies to all other pollutants that are not limited by a PAL.

Only existing major sources under NSR can receive an actuals PAL.

What is an Actuals PAL?

A PAL is a 12-month rolling sum pollutant-specific limit on the emissions from the entire facility. All equipment emitting the pollutant at the stationary source must be covered by the PAL. This includes activities that would otherwise be considered insignificant under Minnesota's permitting rules in Minn. R. 7007.1300, subps. 3 and 4. As long as the facility emissions remain under this limit, the facility can make changes without triggering a major NSR modification for that pollutant. However, a permit amendment may still be needed to make the proposed change, as discussed below.

Generally, all other permit limits and applicable requirements will remain. For example, New Source Performance

Standards still apply, and limits resulting from NSR review still apply. The only exception is that limits that were previously taken to avoid NSR may be able to be removed under a PAL.

How is the Actuals PAL Established?

The PAL is set based on the baseline actual emissions for all emissions units emitting the PAL pollutant, using the same 24-month period (baseline period) for all units. A different baseline period can be used for different pollutants, if an actuals PAL is being set for more than one pollutant. The PAL is then established as follows:

Baseline actual emissions of units that were existing or constructed during the selected baseline period

- actual emissions that were in excess of what was allowed by permit or rule during the baseline period
- actual emissions that would not have occurred if current limitations or applicable requirements would have been applicable during the baseline period (this does not apply to electric utility steam generating units)

= Adjusted Baseline Actuals





Adjusted Baseline Actuals

- + Potential to Emit (PTE) of equipment added after the baseline period
- Actual emissions of any equipment removed after the baseline period
- + the pollutant specific significant emissions rate (e.g. 40 tons for Volatile Organic Compounds [VOCs], 15 tons for PM₁₀; see MOD-04a for details)

= The Proposed PAL

How Do I Obtain a PAL?

Obtaining a PAL always requires a permit action with a public notice and EPA review period. You must submit a permit application, and the Minnesota Pollution Control Agency (MPCA) will issue a permit containing the PAL as well as monitoring, recordkeeping, and reporting requirements. The MPCA can establish a PAL in a major amendment to your Part 70 permit or at the time of reissuance of your Part 70 permit.

What Should be Included in a Permit Application for a PAL?

The MPCA has developed permit application forms to include when applying for a new PAL through a major amendment or renewal of your Part 70 permit (Form PAL-02). The PAL rule also contains a list of what a PAL permit application must contain (see 40 CFR § 52.21(aa)(3)). Generally, you will need to submit an entire renewal application including the PAL information, or a major amendment application which includes complete IA-01, GI-05B, GI-05C, GI-05D, CD-01, and CD-02 forms for the entire facility.

Air quality analysis: You must demonstrate that the PAL will not cause or contribute to a violation of any National or Minnesota Ambient Air Quality Standard. Where applicable, you must also demonstrate that the PAL will not cause or contribute to an exceedance of a Prevent of Significant Deterioration (PSD) increment or adversely impact visibility or an Air Quality Related Value in a Class I area. For further information, see the MPCA guidance on Modeling for PALs (currently under development, but will be available on the MPCA's Web site at <http://www.pca.state.mn.us/air/>), and/or the application form for modeling under NSR (currently under development).

Effective and Expiration Dates

Your PAL will become effective (i.e., you can utilize the PAL for applicability analyses under NSR) on the date of permit issuance. The PAL will expire ten years after the effective date, unless you extend it under the provisions of 40 CFR § 52.21(aa)(10)(ii) (PAL Renewal).

If you do not wish to renew your PAL, you must submit a proposal for re-allocating the PAL as required by 40 CFR § 52.21(aa)(9)(i)(a). The MPCA will be developing a form to use for reallocation. Until the MPCA issues the revised permit, you must continue to comply with the PAL specified in your permit, but once the PAL expiration date passes, you can no longer utilize the PAL Applicability Analysis for proposed changes. Traditional NSR would then apply to any proposed changes.

Can the PAL be Renewed?

If you wish to renew your PAL, you will need to submit a complete renewal application meeting the requirements of 40 CFR § 52.21(aa)(10)(iii). The MPCA will be developing a form to use for renewal of the PAL. If you submit a complete application to renew the PAL within the time period specified in the rule, then the PAL will continue to be effective until the revised permit with the renewed PAL is issued. While you wait for the revised permit to be issued, you can continue to utilize the PAL Applicability Analysis for proposed changes.

What Additional Monitoring, Recordkeeping, and Reporting Requirements Apply under a PAL?

The PAL rule contains very specific requirements for monitoring (see 40 CFR § 52.21(aa)(12)), recordkeeping (see 40 CFR § 52.21(aa)(13)) and reporting (see 40 CFR § 52.21(aa)(14)).

Monitoring

The rule allows four basic monitoring approaches under a PAL:

- Mass balance calculations for activities using coatings or solvents;
- Continuous Emissions Monitoring Systems;
- Continuous Parameter Monitoring Systems or Predictive Emissions Monitoring Systems; and
- Emission factors.



The rule gives minimum performance requirements for each of these monitoring approaches. For time periods when monitoring data is not available, your permit will specify default emission rates that must be used in the permit calculations (e.g., maximum uncontrolled potential emissions).

Record Retention

You will need to keep a copy of the following, on site, for the entire PAL effective period plus an additional five years:

- A copy of the PAL permit application and any applications for revisions to the PAL; and
- Each annual certification of compliance pursuant to the PAL and the data relied on in certifying compliance.

Even though your Part 70 permit may allow you to keep records at a different, off-site location, the NSR rules require the above PAL-related records to be kept on site.

Reporting

Deviations – The PAL deviations report has to include the following information:

- PAL requirement that experienced the deviation or that was exceeded;
- Emissions resulting from the deviation or exceedance; and
- A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information in the report.

The PAL deviations report must be submitted with the semi-annual deviations report already required in a Part 70 permit, and with the notification of deviations endangering human health or the environment, if applicable. Both of those submittals are described in the Part 70 permit.

Semi-Annual Report – The PAL semi-annual report is to be submitted with the semi-annual report already required by the Part 70 permit. In addition to the requirements of the standard semi-annual report, the PAL semi-annual report includes the following:

- Total annual emissions (tons/year) of the PAL-pollutant based on a 12-month rolling sum, for each month in reporting period

- All data relied upon, including but not limited to any quality assurance or quality control data, in calculating the monthly and annual PAL-pollutant emissions
- A list of any PAL-pollutant-emitting units modified or added to the facility during the reporting period
- The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks) associated with any PAL-pollutant-emitting unit or associated control or monitoring equipment, and any corrective action taken.
- Notification of shutdown of any monitoring system associated with the PAL-pollutant emitting unit, whether the shutdown was permanent or temporary, the anticipated date the monitoring system will be fully functional or replaced, whether the emissions unit continued to operate, and the calculation of the emission of the PAL-pollutant as required by the permit.

Can the PAL ever be Changed?

After your PAL permit is issued, the permit may be reopened to adjust the PAL under certain circumstances. The PAL may be increased, but only after undergoing major NSR as allowed under 40 CFR § 52.21(aa)(11). This is considered a “PAL major modification” and requires a major permit amendment.

The PAL may be adjusted down if newly applicable standards come into effect after permit issuance or if the MPCA determines that the PAL will cause or contribute to a violation of an ambient standard or PSD increment. The MPCA will also reopen the permit and adjust the PAL if needed to fix calculation errors made in setting the PAL.

Do I Still Need Permit Amendments with a PAL?

While changes made under a PAL are not considered major modifications for NSR, they must still be evaluated to determine if a permit amendment is needed under Minnesota Rules. For example, it is possible that the change could still be a Title I Modification due to a National Emissions Standard for Hazardous Air Pollutant



or a New Source Performance Standard (see Minn. R. 7007.0100 for the definition of Title I Modification). In addition, if the proposed change would trigger a new applicable requirement or require revisions to existing permit conditions (e.g., monitored parameter values, monitoring methods need to be revised/added for the new unit, etc.), you must apply for and obtain the appropriate permit amendment, as required.

Once you've determined that the change is not a Title I Modification and does not require a major amendment for any other reasons, you must calculate the emissions increase from the change as required by Minn. R. 7007.1200, subp. 3. This involves looking at emissions on a pound per hour basis to determine if an amendment is needed. For example, you may wish to add a new unit that emits VOC under a VOC PAL. The annual emissions are accounted for under the PAL and the existing monitoring in the PAL permit is sufficient to account for the new unit including all applicable requirements. If you determine that the hourly emissions increase for the new unit is 11 pounds per hour, a moderate permit amendment would be needed for this proposed change.

What Other Requirements Must Be Met?

Title V Permit Requirements

Since sources with a PAL will also be Title V sources, their permits will contain Title V Periodic Monitoring (40 CFR pt. 70) and possibly additional Compliance Assurance Monitoring (CAM, 40 CFR pt. 64) for all units, including those not covered by the PAL. The source must comply with these monitoring requirements and all other Title V permit requirements.

Permit Requirements

You must comply with any provisions in a permit related to use and approval of the PAL.

What If I Still Need More Help?

The MPCA strongly encourages you to review the published information on NSR regulations. The PSD regulations are codified at 40 CFR § 52.21. You can access the federal regulations on the internet at <http://www.epa.gov/docs/epacfr40/chapt-I.info>. Other NSR material is available from EPA at <http://www.epa.gov/ttn/nsr/> and <http://www.epa.gov/air/nsr-review/>. Additional references that may be useful to you are listed below.

The MPCA also has an NSR web site, located at <http://www.pca.state.mn.us/air/permits/nsr/index.html>.

If you would like additional assistance or have questions, contact the MPCA Customer Assistance Center at (651)297-2274 or (800)646-6247 (within Minnesota only).

MPCA's Web site: <http://www.pca.state.mn.us>