# **SUBPART 231-9**

# PLANTWIDE APPLICABILITY LIMITATION (PAL)

Sec.	
231-9.1	General provisions.
231-9.2	Permit application requirements.
231-9.3	Permit processing.
231-9.4	Setting the initial PAL.
231-9.5	Permit contents.
231-9.6	Permit modifications and reopenings.
231-9.7	PAL renewals and expirations.

#### **Historical Note**

Subpart (§§ 231-9.1—231-9.7) filed Jan. 20, 2009 eff. 30 days after filing.

## § 231-9.1 General provisions.

- (a) Upon request of an applicant, the department shall establish a PAL at an existing major facility, provided that at a minimum, the following provisions are met:
  - (1) the PAL must impose a facility-wide annual emission limitation in tpy that is included in the Part 201 permit for the facility;
    - (i) for each month during the PAL effective period after the first 12 months following the PAL effective date, the facility must show that the sum of the monthly emissions from each emission source under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month total rolled monthly); and
    - (ii) for each month during the first 11 months following the PAL effective date, the facility must demonstrate that the sum of the preceding monthly emissions from the PAL effective date for each emission source under the PAL is less than the PAL;
  - (2) the PAL must include fugitive emissions, to the extent quantifiable, from all emission sources that emit or have the potential to emit the PAL contaminant;
    - (3) each PAL shall establish an emission limit for only one PAL contaminant;
  - (4) each PAL shall have a PAL effective period as defined in section 231-4.1 of this Part; and
  - (5) at no time (during or after the PAL effective period) are emissions reductions of a PAL contaminant that occur during the PAL effective period creditable as decreases for purposes of establishing emission offsets under this Part unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- (b) Any physical change or change in the method of operation of a major facility that maintains its total facility wide emissions below the PAL level, and is otherwise consistent with the requirements of this Subpart, will not be considered a NSR major modification for the PAL contaminant and is not subject to this Part.
- (c) A facility must continue to comply with all applicable requirements, including any terms and conditions of the facility's Part 201 permit that were in effect prior to the effective date of the PAL.

#### **Historical Note**

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

### § 231-9.2 Permit application requirements.

As part of a permit application requesting a PAL, the owner or operator of a major facility must submit the following information:

- (a) A list of all emission sources at the facility.
- (b) For each emission source:

- (1) the potential to emit of the PAL contaminant;
- (2) the applicable requirements for that emission source; and
- (3) the baseline actual emissions (with supporting documentation).
- (c) The methodology that the facility is proposing to use for conversion of the monitoring system data to monthly and annual emissions based on a 12-month rolling total for each month.
- (d) If the applicant seeks to utilize section 231-9.4(e)(2) of this Subpart as the basis for calculating the reduced PAL level, the applicant shall provide, as applicable, a BACT review in accordance with section 231-8.7 of this Part and/or a LAER analysis in accordance with section 231-6.5 of this Part.

#### **Historical Note**

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

# § 231-9.3 Permit processing.

- (a) A permit application requesting the establishment of a PAL will be treated as a major permit modification for the title V permit and be processed in accordance with the procedures in Parts 201 and 621 of this Title.
- (b) A request to renew a PAL must be included in the application to renew the title V permit and will be processed in accordance with the procedures in Parts 201 and 621 of this Title.

#### **Historical Note**

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

## § 231-9.4 Setting the initial PAL.

The PAL for a facility must be calculated as the sum of the baseline actual emissions of the PAL contaminant for each emission source at the facility plus an amount equal to the applicable significant project threshold for the PAL contaminant under Subpart 231-13 of this Part or under the act, whichever is lower.

- (a) When establishing the PAL for a particular PAL contaminant, only one 24 consecutive month period may be used to determine the baseline actual emissions for all emission sources. However, a different 24 consecutive month period may be used for each different PAL contaminant.
- (b) Emissions associated with emission sources that were permanently shut down after this 24 consecutive month period must be subtracted from the PAL calculation.
- (c) Emissions from a permitted emission source or an exempt or trivial emission source on which actual construction began after the 24 consecutive month period, but has not yet commenced operation, must be added to the PAL calculation in an amount equal to the potential to emit of the emission source.
- (d) Where the department is aware of any future applicable requirement(s), prior to issuance of the permit which establishes the PAL, the department will specify a reduced PAL in the permit to become effective on the future compliance date(s) of the applicable requirement(s). For example, if the facility will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm  $NO_x$  to a new rule limit of 30 ppm, the permit must contain a future effective PAL that is equal to the current PAL reduced by half of the original baseline emissions of such emission source(s).
- (e) Commencing with the first day of the sixth year of the PAL, the PAL shall be reduced as follows:
  - (1) The PAL level shall be reduced to 75 percent of the initial PAL level unless the owner or operator demonstrates that a lesser level of reduction is justified in accordance with paragraph (2) of this subdivision.
  - (2) The owner or operator may seek an alternative reduced PAL level by demonstrating, at the time of application for the PAL, that application of BACT and/or LAER (depending on whether attainment or nonattainment requirements apply) on all major PAL emission sources at the facility would not result in a 25 percent reduction in the initial PAL level, assuming operation of those major PAL emission sources at full capacity. In its application for a PAL,

the owner or operator shall provide, as applicable, a BACT review in accordance with section 231-8.7 of this Part and/or a LAER analysis in accordance with section 231-6.5 of this Part. Based on the information provided, the department may, in its sole discretion, authorize a reduction in the PAL to a level that would reflect the emissions from the facility if all major PAL emission sources are operated at full capacity after complying with BACT and/or LAER, as applicable. In making these determinations, emissions from minor PAL emissions sources shall be held constant at the initial baseline levels. In no event shall the reduced PAL level calculated in this paragraph exceed the initial PAL level set in subdivisions (a) through (d) of this section.

#### **Historical Note**

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

### § 231-9.5 Permit contents.

The following terms and conditions, at a minimum, must be included in a permit which establishes a PAL:

- (a) The PAL contaminant, the applicable facility-wide emission limitation in tpy, and required monitoring provisions consistent with this section.
  - (b) The effective date of the permit and the expiration date of the PAL (PAL effective period).
- (c) The emissions calculations to be used for compliance purposes. These calculations must include emissions from start-ups, shutdowns, and malfunctions.
- (d) The procedures to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by this Subpart.
  - (e) Monitoring requirements. (1) General requirements.
    - (i) A requirement that the monitoring system accurately determines facility emissions of the PAL contaminant in terms of mass per unit of time according to the criteria contained in the following paragraphs of this section as applicable.
    - (ii) The PAL monitoring system must employ one or more of the four monitoring approaches meeting the minimum requirements set forth in paragraph (2) of this subdivision. If the facility utilizes CEMS to monitor a particular contaminant for which a PAL is sought, the facility must use the CEMS data to demonstrate compliance with the PAL.
  - (2) Minimum performance requirements for approved monitoring approaches. The following are acceptable monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (3) through (9) of this subdivision:
    - (i) mass balance calculations for activities using coatings or solvents;
    - (ii) CEMS;
    - (iii) other monitoring systems as approved by the department; and
    - (iv) emission factors.
  - (3) Mass balance calculations. A facility using mass balance calculations to monitor PAL contaminant emissions from activities using coating or solvents must meet the following requirements:
    - (i) provide a demonstrated means of validating the published content of the PAL contaminant that is contained in or created by all materials used in or at the emission source;
    - (ii) assume that the emission source emits all the PAL contaminant that is contained in or created by any raw material or fuel used in or at the emission source, if it cannot otherwise be accounted for in the process;
    - (iii) where the vendor of a material or fuel, which is used in or at the emission source, publishes a range of contaminant content from such material, the facility must use the highest value of the range to calculate the PAL contaminant emissions unless the department determines there is site specific data or a site specific monitoring program to support another content within the range.
  - (4) CEMS. A facility using CEMS to monitor PAL contaminant emissions must meet the following requirements:

- (i) CEMS must comply with applicable performance specifications found in either 40 CFR part 60, appendix B, or 40 CFR part 75.
- (ii) CEMS must sample, analyze and record data at least every 15 minutes while the emission source is operating.
- (5) Other monitoring systems. A facility using other monitoring systems to monitor PAL contaminant emissions must meet the following requirements:
  - (i) the monitoring system must be based on current site specific data demonstrating a correlation between the monitored parameter(s) and the PAL contaminant emissions across the range of operation of the emission source; and
  - (ii) each monitoring system must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the department, while the emission source is operating.
- (6) Emission factors. A facility using emission factors to monitor PAL contaminant emissions must meet the following requirements:
  - (i) all emission factors must be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors development;
  - (ii) the emission source must operate within the designated range of use for the emission factor, if applicable; and
  - (iii) if technically practicable, any facility with a significant PAL emission source that relies on an emission factor to calculate PAL contaminant emissions must conduct validation testing to determine a site specific emission factor within six months of permit issuance, unless the department determines that testing is not required.
- (7) A facility owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emission source during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the permit.
- (8) Notwithstanding the requirements in paragraphs (3) through (7) of this subdivision, where an owner or operator of a facility cannot demonstrate a correlation between the monitored parameter(s) and the PAL contaminant emissions rate at all operating points of the emission source, the department must include in the permit default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s). Alternatively, the department must determine that operation of the emission source during circumstances where there is no correlation between monitored parameter(s) and the PAL contaminant emissions is a violation of the PAL.
- (9) Re-validation. All data used to establish the PAL contaminant must be re-validated through performance testing or other scientifically valid means approved by the department. Such testing must occur at least once every five years after issuance of the PAL.
- (f) Recordkeeping requirements. (1) The facility must retain a copy of all records necessary to determine compliance with any requirement of this Subpart and of the PAL, including a determination of each emission source's 12-month rolling total emissions, for five years from the date of such record.
- (2) The facility must retain a copy of the following records for the duration of the PAL effective period plus five years:
  - (i) a copy of the permit application and any applications for revisions to the PAL; and
  - (ii) each annual certification of compliance pursuant to Part 201 of this Title and the data relied on for such certification.
- (3) The records must be maintained on-site or at an alternative location approved by the department. Such records may be retained in an electronic format.
- (g) Reporting and notification requirements. Semi-annual monitoring reports and prompt deviation reports must be submitted to the department. The reports must meet the requirements in this section and Subpart 231-11 of this Part.
  - (1) Semi-annual report. The semi-annual report must be submitted to the department within 30 days of the end of each reporting period, and include the following:

- (i) total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (f)(1) of this section.
- (ii) all data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL contaminant emissions;
- (iii) a list of any emission sources modified or added to the major facility during the preceding six-month period;
- (iv) the number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken; and
- (v) a notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emission source monitored by the monitoring system continued to operate, and the calculation of the emissions of the PAL contaminant or the number determined by method included in the permit, as provided by paragraph (e)(7) of this section.
- (2) Deviation report. The major facility owner or operator must promptly submit a report of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. The deviation report must be submitted within the time limits prescribed by Part 201 of this Title and the Title V permit. A deviation report submitted in accordance with Subpart 201-6 of this Title will satisfy this reporting requirement. The report must contain, among other information required under Subpart 201-6 of this Title, identification of the owner or operator, the 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 as defined by the applicable title V permit certifying the truth, accuracy, and completeness of the information contained in the report.
- (3) Re-validation results. The owner or operator must submit to the department the results of any re-validation test or method within three months after completion of such test or method.
- (h) Provisions which implement the monitoring, recordkeeping, and reporting and notification requirements contained in this Subpart and any other requirements that the department deems necessary to implement and enforce the PAL.

#### **Historical Note**

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing. Amended (e)(1)(ii), (3)(iii), (4)(i), (5)(i), (6)(iii).

### § 231-9.6 Permit modifications and reopenings.

- (a) Permit reopening to revise a PAL. The following provisions apply to permit reopenings to revise a PAL.
  - (1) During the PAL effective period, the department must reopen the permit to:
  - (i) correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
  - (ii) reduce the PAL if the facility creates creditable emissions reductions for use as emission offsets under this Part;
  - (iii) revise the PAL to reflect an increase in the PAL as provided under subdivision (b) of this section.
  - (2) The department retains discretion to reopen the permit for the following:
  - (i) reduce the PAL to reflect new applicable requirements with compliance dates after the PAL effective date;
  - (ii) reduce the PAL consistent with any other requirement the State may impose on the major facility under the State Implementation Plan; and
  - (iii) reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on

an air quality related value that has been identified for a Federal class I area by a Federal land manager and for which information is available to the general public.

- (3) Except for permit reopenings for the correction of typographical or calculation errors that do not increase the PAL, all other reopenings must be processed in accordance with the procedures in Parts 201 and 621 of this Title for a major permit modification.
- (b) Increasing a PAL during the PAL effective period. (1) Upon request of an applicant, the department may increase a PAL during the PAL effective period provided all of the following provisions are met:
  - (i) A complete application for a significant permit modification is submitted in accordance with the provisions of Parts 201 and 621 of this Title requesting an increase in the PAL. Such application must identify the emission source(s) which will have additional emissions that will cause the emissions of the facility to equal or exceed its current PAL.
  - (ii) As part of this application, the facility must demonstrate that the sum of the following two items will exceed the existing PAL:
    - (a) for all new or modified emission sources, the sum of the potential to emit of each emission source; and
      - (b) for all other emission sources:
      - the sum of baseline actual emissions of all the minor PAL emission sources;
      - (2) the sum of baseline actual emissions of all the significant and major PAL emission sources assuming application of BACT or LAER equivalent controls as appropriate.

The level of control that would result from the application of BACT or LAER equivalent controls on each significant or major PAL emission source must be determined by conducting a new BACT or LAER analysis at the time the application is submitted, unless the emission source is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emission source must be equal to the level of BACT or LAER with which that emission source must currently comply.

- (iii) The facility must obtain a permit modification that includes all emission source(s) identified in subparagraph (i) of this paragraph, regardless of the magnitude of the emissions increase resulting from them. These emission source(s) must continue to comply with any other applicable requirements contained in the permit even though they have also become subject to the PAL or continue to be subject to the PAL.
- (2) Permit contents. The following provisions, in addition to the other requirements of this Subpart, must be included in the permit authorizing the increased PAL:
  - (i) A provision that the increased PAL will be effective on the date any emission source that is part of the PAL modification becomes operational and begins to emit the PAL contaminant.
  - (ii) The new PAL shall be calculated as the sum of the facility potential to emit for each proposed new or modified emission source, plus the sum of the baseline actual emissions of the significant and major emission sources (assuming application of BACT or LAER equivalent controls as determined in accordance with subparagraph [1][ii] of this subdivision) plus the sum of the baseline actual emissions of each minor PAL emission source.

# Historical Note

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing.

# § 231-9.7 PAL renewals and expirations.

(a) Permit renewal where PAL is not renewed. The following provisions set forth the requirements for an application to renew a title V permit where a PAL will expire at the end of the PAL effective period and the facility has not included a request to renew the PAL in such

application. The facility must continue to comply with the PAL until such time as the department issues a renewed title V permit.

- (1) Application content. In addition to any other information required pursuant to this Chapter, the title V permit application must include a proposed allowable emission limitation for each emission source. Such emission limitations must be calculated by distributing the PAL of the facility among each emission source that is subject to an emission limitation under the PAL and must be adjusted to reflect any applicable requirements that became effective during the PAL effective period if the PAL was not previously adjusted.
- (2) Permit content. In addition to any other requirements of this Chapter, a title V permit issued following the expiration of a PAL shall include the following provisions:
  - (i) emission limits for each emission source on a 12-month rolling basis. The allowable emission limits shall be established in accordance with a distribution of the PAL that the department determines is appropriate; and
  - (ii) a facility must demonstrate compliance with the allowable emission limitation(s) through the use of CEMS or other monitoring systems (source testing, emission factors, etc.) as the department may approve.
- (b) Permit renewal where a PAL is renewed. (1) Application deadline. The application deadlines for renewal of the title V permits in Part 201 of this Title shall govern the application to renew a PAL.
- (2) Application content. The application to renew a permit with a PAL must contain the following information:
  - (i) the information required in section 231-9.2(a) through (c) of this Subpart;
  - (ii) a proposed PAL;
  - (iii) the sum of the potential to emit of all emission sources subject to the PAL with supporting documentation; and
  - (iv) any other relevant information the owner or operator submits to the department for consideration in determining the appropriate level for renewing the PAL.
- (3) PAL adjustment. In determining whether and how to adjust the PAL, the department must consider the options outlined below. All adjustments must comply with subparagraph (iii) of this paragraph:
  - (i) if the emissions level calculated in accordance with section 231-9.4(a) through (d) of this Subpart is equal to or greater than 80 percent of the level of the existing PAL at the time of renewal, the department may renew the PAL at the same level, without considering the factors set forth in subparagraph (ii) of this paragraph; or
  - (ii) the department may set the PAL at a level that the department determines is more representative of the baseline actual emissions of the facility, or is more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage voluntary emissions reductions at the facility, or other factors as specifically identified by the department;
    - (iii) notwithstanding subparagraphs (i) and (ii) of this paragraph:
    - (a) if the potential to emit of the facility is less than the PAL, the department must adjust the PAL to a level no greater than the potential to emit of the facility; and
    - (b) the department cannot approve a renewed PAL higher than the current PAL, unless the facility has complied with the provisions of section 231-9.6(b) of this Subpart;
    - (iv) section 231-9.4(e) of this Subpart is inapplicable to the renewal of a PAL.
- (4) If the compliance date for an applicable requirement occurs during the PAL effective period, and the department has not already adjusted the PAL to reflect such requirement, the PAL must be adjusted at the time of permit renewal.

# **Historical Note**

Sec. filed Jan. 20, 2009 eff. 30 days after filing.