3745-31-32 **Plantwide applicability limit (PAL).**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see "Incorporation by Reference" at the end of rule 3745-31-01 of the Administrative Code.]

(A) Actuals PAL requirements.

All PALs issued under this rule shall meet all applicable provisions in paragraphs (A)(1) to (A)(13) of this rule.

(1) Applicability.

(a) The director may approve the use of an actuals PAL for any existing major stationary source (except as provided in paragraph (A)(1)(b) of this rule) if the PAL meets the requirements in paragraphs (A)(1) to (A)(13) of this rule. The term PAL shall mean actuals PAL throughout paragraph (A) of this rule.

(b) The director shall not allow an actuals PAL for VOC or NO_X for any major stationary source located in an extreme ozone nonattainment area.

(c) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (A)(1) to (A)(13) of this rule, and complies with the PAL permit:

(i) Is not a major modification for the PAL pollutant;

(ii) Does not have to be approved through the nonattainment or PSD program; and

(iii) Is not subject to the provisions in paragraph (B) of rule 3745-31-10 of the Administrative Code (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment or PSD program).

(d) Except as provided under paragraph (A)(1)(c)(iii) of this rule, a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) Permit application requirements.

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the director for approval:

(a) A list of all emissions units at the source designated as PAL small emissions unit, PAL significant emissions unit or PAL major emissions unit based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations or work practices apply to each unit.

(b) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown and malfunction.

(c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve-month rolling total for each month as required by paragraph (A)(12)(a) of this rule.

(3) General requirements for establishing PALs.

(a) The requirements in paragraphs (A)(3)(a)(i) to (A)(3)(a)(vii) of this rule, at a minimum, must be met for each PAL at a major stationary source.

(i) The PAL shall impose an annual emission limitation in tons per year, which is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first twelve months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve consecutive months is less than the PAL (a twelve-month average, rolled monthly). For each month during the first eleven months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(ii) The PAL shall be established in a PAL permit that meets the requirements in paragraph (A)(4) of this rule.

(iii) The PAL permit shall contain all the requirements of paragraph (A)(6) of this rule.

(iv) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

(v) Each PAL shall regulate emissions of only one pollutant.

(vi) Each PAL shall have a PAL effective period of ten years.

(vii) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (A)(11) to (A)(13) of this rule for each emissions unit under the PAL through the PAL effective period.

(b) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under rule 3745-31-22 of the Administrative Code 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.

(4) PAL permit issuance requirements.

(a) The director shall issue all typographical/calculation error reopenings (as described in paragraph (A)(7)(b)(i)(a) of this rule) to PAL permits as either draft actions before any final actions, or final actions, as described in Chapter 3745-47 of the Administrative Code.

(b) The director shall issue all PAL permits not otherwise described in the above paragraph as draft actions before any final actions, as described in Chapter 3745-47 of the Administrative Code.

(5) Setting the ten-year actuals PAL level.

(a) Except as provide in paragraph (A)(5)(b) of this rule, the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under rule 3745-31-01 of the Administrative Code or under the Clean Air Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive twenty-four-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive twenty-four-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shutdown after this twenty-four-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the twenty-four-month period must be

added to the PAL level in an amount equal to the potential to emit of the units. The director shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the director is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of sixty ppm NO_X to a new rule limit of thirty ppm, then the PAL permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(b) For newly constructed units (which do not include modifications to existing units) on which actual construction began after the twenty-four-month period, in lieu of adding the baseline actual emissions as specified in paragraph (A)(5)(a) of this rule, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

(6) Contents of the PAL permit.

The PAL permit shall contain, at a minimum, the information in paragraphs (A)(6)(a) to (A)(6)(j) of this rule.

(a) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(b) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(c) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (A)(9) of this rule before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the director.

(d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

(e) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (A)(8) of this rule.

(f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve-month rolling total for each month as required by paragraph (A)(12)(a) of this rule.

(g) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (A)(11) of this rule.

(h) A requirement to retain the records required under paragraph (A)(12) of this rule on site. Such records may be retained in an electronic format.

(i) A requirement to submit the reports required under paragraph (A)(13) of this rule by the required deadlines.

(j) Any other requirements that the director deems necessary to implement and enforce the PAL.

(7) PAL effective period and reopening of the PAL permit.

(a) PAL effective period.

A PAL shall have an effective period of ten years.

(b) Reopening of the PAL permit.

(i) During the PAL effective period, the director shall reopen the PAL permit to:

(a) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.

(b) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under rule 3745-31-22 of the Administrative Code.

(c) Revise the PAL to reflect an increase in the PAL as provided under paragraph (A)(10) of this rule.

(ii) The director may reopen the PAL permit for the following:

(a) Reduce the PAL to reflect newly applicable federal requirements (for example, NSPS) with compliance dates after the PAL effective date.

(b) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the director may impose on the major stationary source.

(c) Reduce the PAL if the director 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 (AQRV) 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.

(iii) Except for the permit reopening in paragraph (A)(7)(b)(i)(a) of this rule for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (A)(4) of this rule.

(8) Expiration of a PAL.

Any PAL that is not renewed in accordance with the procedures in paragraph (A)(9) of this rule shall expire at the end of the PAL effective period, and the requirements in paragraphs (A)(8)(a) to (A)(8)(e) of this rule shall apply.

(a) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (A)(8)(a)(i) to (A)(8)(a)(ii) of this rule.

(i) Within the time frame specified for PAL renewals in paragraph (A)(9)(b) of this rule, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the director) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (A)(9)(e) of this rule, such distribution shall be made as if the PAL had been adjusted.

(ii) The director shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the director determines is appropriate.

(b) Each emissions unit(s) shall comply with the allowable emission limitation on a twelve-month rolling basis. The director may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.

(c) Until the director issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (A)(8)(a)(i) of this rule, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(d) Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment or a major NSR requirements if such change meets the definition of PAL major modification.

(e) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements (BACT, RACT, NSPS, LAER etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (B) of rule 3745-31-10 of the Administrative Code, but were eliminated by the PAL in accordance with the provisions in paragraph (A)(1)(c)(iii) of this rule.

(9) Renewal of a PAL.

(a) The director shall follow the procedures specified in paragraph (A)(4) of this rule in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the director.

(b) Application deadline.

A major stationary source owner or operator shall submit a timely application to the director to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than eighteen months from, the date of PAL permit expiration. This deadline for application submittal is to ensure that the PAL permit will not expire before the PAL permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised PAL permit with the renewed PAL is issued.

(c) Application requirements.

The application to renew a PAL permit shall contain the information required in paragraphs (A)(9)(c)(i) to (A)(9)(c)(iv) of this rule.

(i) The information required in paragraphs (A)(2)(a) to (A)(2)(c) of this rule.

(ii) A proposed PAL level.

(iii) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(iv) Any other information the owner or operator wishes the director to consider in determining the appropriate level for renewing the PAL.

(d) PAL adjustment.

In determining whether and how to adjust the PAL, the director shall consider the options outlined in paragraphs (A)(9)(d)(i) and (A)(9)(d)(ii) of this rule. However, in no case may any such adjustment fail to comply with paragraph (A)(9)(d)(iii) of this rule.

(i) If the emissions level calculated in accordance with paragraph (A)(5) of this rule is equal to or greater than eighty per cent of the PAL level, the director may renew the PAL at the same level without considering the factors set forth in paragraph (A)(9)(d)(ii) of this rule; or

(ii) The director may set the PAL at a level that he/she determines to be more representative of the source's baseline actual emissions, or that he/she determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the director in a written rationale.

(iii) Notwithstanding paragraphs (A)(9)(d)(i) and (A)(9)(d)(ii) of this rule,

(a) If the potential to emit of the major stationary source is less than the PAL, the director shall adjust the PAL to a level no greater than the potential to emit of the source; and

(b) The director shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (A)(10) of this rule.

(e) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the director has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever occurs first.

(10) Increasing a PAL during the PAL effective period.

(a) The director may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (A)(10)(a)(i) to (A)(10)(a)(iv) of this rule.

(i) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(ii) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the PAL small emissions units, plus the sum of the baseline actual emissions of the PAL significant and PAL major emissions units assuming application of BACT equivalent controls, plus the sum of the PAL allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each PAL significant or PAL major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit 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 emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(iii) The owner or operator obtains a nonattainment NSR permit or PSD permit for all emissions unit(s) identified in paragraph (A)(10)(a)(i) of this rule, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR program process (for example, LAER/BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(iv) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(b) The director shall calculate the new PAL as the sum of the PAL allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the PAL significant and PAL major emissions units (assuming application of BACT equivalent controls as determined in

accordance with paragraph (A)(10)(a)(ii) of this rule, plus the sum of the baseline actual emissions of the PAL small emissions units.

(c) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (A)(4) of this rule.

(11) Monitoring requirements for PALs.

(a) General requirements.

(i) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(ii) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (A)(11)(b)(i) to (A)(11)(b)(iv) of this rule and must be approved by the director.

(iii) Notwithstanding paragraph (A)(11)(a)(ii) of this rule, you may also employ an alternative monitoring approach that meets paragraph (A)(11)(a)(i) of this rule if approved by the director.

(iv) Failure to use a monitoring system that meets the requirements of this rule renders the PAL invalid.

(b) Minimum performance requirements for approved monitoring approaches.

The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (A)(11)(c) to (A)(11)(c)(i) of this rule:

(i) Mass balance calculations for activities using coatings or solvents;

(ii) CEMS;

(iii) CPMS or PEMS; and

(iv) Emission factors.

(c) Mass balance calculations.

An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(i) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(ii) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(iii) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the director determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(d) CEMS.

An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(i) CEMS must comply with applicable performance specifications found in 40 CFR part 60, appendix B; and

(ii) CEMS must sample, analyze and record data at least every fifteen minutes while the emissions unit is operating.

(e) CPMS or PEMS.

An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(i) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(ii) Each CPMS or PEMS must sample, analyze, and record data at least every fifteen minutes, or at another less frequent interval approved by the director, while the emissions unit is operating.

(f) Emission factors.

An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(i) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(ii) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(iii) If technically practicable, the owner or operator of a PAL significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless the director determines that testing is not required.

(g) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(h) Notwithstanding the requirements in paragraphs (A)(11)(c) to (A)(11)(g) of this rule, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the director shall, at the time of PAL permit issuance:

(i) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(ii) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(i) Re-validation.

All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the director. Such testing must occur at least once every five years after issuance of the PAL.

(12) Recordkeeping requirements.

(a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (A) of this rule and of the PAL, including a determination of each emissions unit's twelve-month rolling total emissions, for five years from the date of such record.

(b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five years:

(i) A copy of the PAL permit application and any applications for revisions to the PAL; and

(ii) Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance.

(13) Reporting and notification requirements.

The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the director in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs (A)(13)(a) to (A)(13)(c) of this rule.

(a) Semi-annual report.

The semi-annual report shall be submitted to the director within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (A)(13)(a)(i) to (A)(13)(a)(vii) of this rule.

(i) The identification of owner and operator, the facility ID, and the permit to install numbers for any applicable permit to install.

(ii) Total annual emissions (tons/year) based on a twelve-month rolling total for each month in the reporting period recorded pursuant to paragraph (A)(12)(a) of this rule.

(iii) 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.

(iv) A list of any emissions units modified or added to the major stationary source during the preceding six-month period.

(v) 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.

(vi) 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 emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the PAL permit, as provided by paragraph (A)(11)(g) of this rule.

(vii) A signed statement by the responsible official (as defined by the Title V operating permit program contained in Chapter 3745-77 of the Administrative Code) certifying the truth, accuracy, and completeness of the information provided in the report.

(b) Deviation report.

The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to paragraph (A)(3)(c)(iii) of rule 3745-77-07 of the Administrative Code shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the rule 3745-77-07 of the Administrative Code. The reports shall contain the following information:

(i) The identification of owner and operator, the facility ID, and the permit to install numbers for any applicable permit to install;

(ii) The PAL requirement that experienced the deviation or that was exceeded;

(iii) Emissions resulting from the deviation or the exceedance; and

(iv) A signed statement by the responsible official (as defined by the Title V operating permit program contained in Chapter 3745-77 of the Administrative Code) certifying the truth, accuracy, and completeness of the information provided in the report.

(c) Re-validation results.

The owner or operator shall submit to the director the results of any re-validation test or method within three months after completion of such test or method.

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