INFORMATION SHEET

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

New Source Review Reform Manual

Office of Air Quality, Air Permits Branch

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Following are overviews of major New Source Review (NSR), Actual-To-Projected Actual (APTA) Applicability Test, and Plantwide Applicability Limit (PAL) for applicants. If viewing this document online, use the following links to skip to your section of interest:

1. Overview of Major NSR

New major stationary sources and modifications to major stationary sources are required to undergo major New Source Review (NSR) prior to constructing. There are two major NSR programs, one for areas that are in attainment with the National Ambient Air Quality Standards (NAAQS) and one for areas that are designated as nonattainment.

The attainment NSR program is referred to as Prevention of Significant Deterioration (PSD) and is contained in the Indiana Administrative Code at Title 326, Article 2, Rule 2 (326 IAC 2-2) [PDF]. Part C of Title I of the Clean Air Act Amendments (CAA) requires states to include, in their state implementation plan (SIP), emission limitations and other measures that are necessary to prevent significant deterioration of the air quality in each region designated as attainment or unclassifiable. The federal regulations at Title 40, Part 51.166 of the Code of Federal Regulations (40 CFR 51.166) contain

the specific minimum requirements for a PSD program. If a state does not have a PSD program as an approved part of its SIP, a state may be delegated the authority to implement and enforce the federal PSD program contained in 40 CFR 52.21. On September 30, 1980, Indiana was delegated the authority to implement the PSD program. Indiana received final approval to implement 326 IAC 2-2 on March 3, 2003.

The nonattainment NSR program is referred to as Emission Offset and is contained in 326 IAC 2-3 [PDF]. Part D of Title I of the CAA requires states to include, in the SIP, enforceable emission limitations and related control measures to assure reasonable progress toward the national air quality standard. The federal regulations, 40 CFR 51.165, contain the specific minimum requirements for a nonattainment NSR program. If a state does not have a nonattainment NSR program as an approved part of its SIP, U.S. EPA requires states to follow the Offset Interpretative Rule codified in 40 CFR 51, Appendix S. Indiana received final approval to implement 326 IAC 2-3 on October 27, 1994.

1.1 NSR Reform

The major NSR programs include the most complex environmental permitting requirements. For 30 years U.S. EPA, state regulatory agencies and courts have issued policies and decisions to interpret the program. After an extensive stakeholder process, U.S. EPA proposed to overhaul the NSR program on July 23, 1996. U.S. EPA solicited further comment on two provisions on July 24, 1998.

On December 31, 2002, U.S. EPA took final action on four changes to the NSR program that stemmed from the July 1996 proposal:

- Baseline Actual-to-Projected-Actual (ATPA) Applicability Test
- Clean Unit designation - Vacated
- Pollution Control Project (PCP) exclusion - Vacated
- Plantwide Applicability Limits (PAL)

U.S. EPA stated that these revisions "are intended to provide greater regulatory certainty, administrative flexibility, and permit streamlining, while ensuring the current level of environmental protection and benefit derived from the program and, in certain respects, resulting in greater environmental protection" (67 FR 80186, December 31, 2002 [PDF]).

The December 31, 2002, federal rule required states with approved SIPs to adopt the federal NSR reform amendments or equivalent provisions no later than January 2, 2006. Indiana held its first public information session for stakeholders in March 2003 and began the rulemaking process shortly thereafter. It was not possible to adopt the federal rules by reference or verbatim, because the federal program relies heavily on state minor source permitting. Therefore, Indiana chose to integrate the federal program into existing Indiana permitting rules. After several public meetings and comment periods the Air Pollution Control Board final adopted the NSR reform changes at the June 2, 2004, hearing. The state NSR Reform rulemaking became effective on September 9, 2004.

Note: On June 2, 2005, the U.S. Court of Appeals for the District of Columbia, in New York v. EPA No 02-1387, vacated the Clean Unit Designation, vacated the Pollution Control Projects (PCP) exclusion, and remanded the "reasonable possibility" provision of the recordkeeping requirement.

1.2 Common Terms

- BACT:
  - "Best available control technology" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major stationary source or major modification, that the commissioner, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for the source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant.
- CAA:
  - "Clean Air Act" means the federal Clean Air Act, found at 42 U.S.C. 7401 et seq., as amended (including the Clean Air Act Amendments of 1990, P.L.101-549).
- EUSGU:
  - "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third (1/3) of its potential electric output capacity and more than twenty-five (25) megawatts electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- Existing emission unit:
  - In the major NSR program an existing emission unit is one that has operated for more than two years or is a replacement unit for an existing emission unit.
- LAER:
  - "Lowest achievable emission rate" or "LAER" means, for any source, the more stringent rate of emissions based on the more stringent emissions limitation of the following:
    1. Contained in the state implementation plan for the class or category of stationary source unless the owner or operator of the proposed stationary source demonstrates that the limitations are not achievable.
    2. Achieved in practice by the class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions unit within the stationary source. In no event shall the application of the lowest achievable emission rate allow a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.
- Major NSR:
  - "Major new source review" refers to the permitting program for major stationary sources of air pollution. Major stationary sources and major modifications to stationary source are required to obtain a NSR permit before they start construction.
- Minor NSR:
  - "Minor new source review" refers to the state-permitting program for construction of new sources that are not subject to PSD or emission offset. New minor sources or modifications to minor or major sources are required to obtain a NSR permit before the start of construction. Since the state operating permit programs are merged with the minor NSR programs, minor NSR means a permit revision for MSOP and FESOP sources, and a source modification for Title V sources.

- National Ambient Air Quality Standards (NAAQS):
  - "National ambient air quality standards" means the standard required by the CAA, and established by U.S. EPA, for pollutants that are considered harmful to public health and the environment. The Clean Air Act established two types of NAAQS: Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly; Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings.
  - U.S. EPA has set NAAQS for six principal pollutants, which are called "criteria" pollutants: ozone, particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO2), nitrogen oxides (NOx), and lead (Pb).
- Nonattainment NSR (NA NSR) or Emission Offset (EO):
  - "Nonattainment new source review" means the major source preconstruction permitting program for areas that are designated nonattainment with the NAAQS. The program meets the requirements of 40 CFR Part 51.165, the federal nonattainment NSR program in 40 CFR Part 52.24, or the offset interpretive ruling in 40 CFR 51, Appendix S. Any permit issued under the NA NSR program is a major NSR permit.
- New emission unit:
  - In the major NSR programs a new emission unit is one that is proposed for construction, is under construction, or has been operating for less than two years.
- Prevention of Significant Deterioration (PSD):
  - "Prevention of Significant Deterioration program" means the major source preconstruction permitting program for areas that attain the NAAQS. The program meets the requirements of 40 CFR Part 51.166 or the federal PSD program in 40 CFR Part 52.21. Any permit issued under the PSD program is a major NSR permit.
- Potential to Emit (PTE):
  - "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source.

1.3 Attainment Designations

The difference in applicability of the two major NSR programs is based on the attainment status for the area in which construction is being proposed. The attainment status is pollutant specific, so some units may be reviewed under PSD while others are reviewed under Emission Offset. The federal government designates nonattainment areas for Indiana in 40 CFR 81.315. The applicability of the Emission Offset program (326 IAC 2-3) depends on the attainment status in the state rules under 326 IAC 1-4. Due to lengthy state rulemaking process, there is generally a 6-18 month period between the federal designation and the incorporation into state rules. Occasionally U.S. EPA allows nonattainment NSR to be deferred for an amount of time in order for states to update their rules. At other times U.S. EPA requires nonattainment NSR immediately upon the 40 CFR 81.315 designation effective date. In those situations, the nonattainment is based on the U.S. EPA interpretive ruling found in 40 CFR 51, Appendix S.

For purposes of this NSR reform training, we are discussing the state PSD and Emission Offset programs found in 326 IAC 2-2 and 326 IAC 2-3, not the federal programs found in 40 CFR 51.165, 40 CFR 51.166, 40 CFR 51 Appendix S, 40 CFR 52.21or 40 CFR 52.24.

IDEM's Nonattainment Status for Indiana's Counties page has additional information on nonattainment areas.

2. Actual-to-Projected-Actual (ATPA) Applicability Test

The Actual-to-Projected-Actual (ATPA) Applicability Test is a comparison of the projected actual emissions from all affected emission units with the baseline actual emissions from the affected emission units. The ATPA Applicability Test is used to determine if a physical or operational change at an existing emissions unit will result in a significant emissions increase. The ATPA Applicability Test is only used for changes made at existing emission units. The key components of the ATPA Applicability Test are determining the pre-change emissions (baseline actual emissions) and the post change emissions (projected actual emissions). These determinations and the required recordkeeping and reporting can be slightly different if you are a non-electric utility steam generating unit (non-EUSGU) or if you are an electric utility steam generating unit (EUSGU).

2.1 Baseline Actual Emissions

NSR reform adds a new definition to the major NSR rules, "Baseline actual emissions" (326 IAC 2-2-1(e) [PDF]). Baseline actual emissions are used to determine the pre-change emissions. Baseline actual emissions are the starting point to determine whether a change will be subject to major NSR.

- Baseline actual emissions for non-EUSGUs is the average annual emissions rate based on the unit's operation during any consecutive 24-month period in the past ten (10) years. The ten (10) year period cannot include any period earlier than November 15, 1990. (326 IAC 2-2-1(e)(2)).
- Baseline actual emissions for EUSGUs is the average annual emissions rate based on the unit's operation during any consecutive 24-month period in the past five (5) years (326 IAC 2-2-1(e)(1)).

Only an EUSGU may use a different time period upon determination that it is more representative of normal source operation.

- For the selected 24-month period, the owner or operator must possess adequate documentation to allow the calculation of actual emissions throughout the selected period. The documentation must allow the calculation of any required adjustments to actual emissions (see Adjustments to Baseline Actual Emissions). If documentation is missing or incomplete for any part of the selected 24-month period, a different 24-month period must be selected for which adequate documentation exists.
- Only one 24-month period can be selected for the combination of all affected emission units.
- When a proposed project involves more than one regulated NSR pollutant, a different 24-month period may be selected for each pollutant.

Emission units installed after the selected 24-month period will have baseline actual emissions of zero, unless the emissions unit is new as defined in 326 IAC 2-2-1(u)(1).

Any emissions during the selected 24-month period that resulted from operation in excess of any applicable emission limit must not be included in the baseline actual emissions determination.

Baseline actual emissions are used for modifications, netting and determining Plantwide Applicability Limits (PALs).

- Baseline actual emissions are calculated on a unit-specific basis.
- All emissions units affected by the project must be identified.

2.2 Adjustments to Baseline Actual Emissions

- All adjustments to baseline actual emissions are downward.

Baseline actual emissions are adjusted for the following:

- Adjust average annual rate for any portion of the 24-month period that the unit did not operate
- Adjust average annual rate to reflect current emissions control requirements, including but not limited to, any legally enforceable emissions limitation, operating restriction or state or federal requirement such as RACT, BACT, LAER, NSPS, NESHAP that currently applies to the unit being changed.

All major NSR sources report actual emissions to the department. Your baseline actual emissions should never exceed average actual emissions reported to the department for the 24-month period chosen.

2.3 Netting

If a project shows that a significant emissions increase will result, the owner or operator has the option of taking into consideration any contemporaneous emissions changes that may allow a "net out" of major NSR applicability. A "net out" is a showing that the net emissions increase at the major stationary source will not be significant.

- If a proposed project does not result in a significant emissions increase, then netting is not required.

NSR reform does not change the contemporaneous period. The contemporaneous period still includes all creditable increases and decreases in actual emissions that have occurred between the date five (5) years before construction of the particular change commences and the date the increase from the change occurs.

- Each unit included in the contemporaneous period may have its own consecutive 24-month period.
- All requirements for calculating baseline actual emissions still apply, therefore, you must have data to support the unit's operation during the 24-month period chosen and adjustments must be made to reflect the most current emissions limitations that apply to the unit.

Existing emissions units may calculate baseline actual emissions for each contemporaneous event using the ten (10) year look back period.

2.4 Projected Actual Emissions

- Projected actual emissions generated solely for the purpose of the applicability test are not acceptable.
- Adequate documentation must exist to support the level of business activity used for the projections.

Projected actual emissions are the maximum level of emissions associated with the level and type of business activity projected to occur in any one (1) of the next five (5) or ten (10) years following a specific project. Projected actual emissions involve future business activity and require documentation available from public documents or confidential business information.

Projected actual emissions are defined in the rules at 326 IAC 2-2-1(rr). The projection period begins on the date that the affected emissions unit resumes regular operation after completion of the proposed project and includes the 12 months after this date.

- The actual annual emissions associated with the projected level of business activity in each year of the projection period (not necessarily a calendar year) must be determined.

A unit's projected actual emissions rate is calculated as the product of the hourly emissions rate based on the unit's post-change operational capabilities taking into account the legally enforceable restrictions that could affect the hourly rate and the projected level of utilization based on the unit's historical annual utilization rate and available information about the unit's most likely post-change capacity utilization. Projections are for any one (1) of five (5) years or one (1) of ten (10) years if the change involves an increase in the emissions unit's potential to emit (PTE) or capacity.

- The actual annual emissions associated with the projected level of business activity in each year of the projection period (not necessarily a calendar year) must be determined.

The owner or operator may choose to use the emissions unit's PTE, in tons per year, as the projected actual emissions.

- Choosing to use a unit’s PTE as the projected actual emissions will negate the recordkeeping and reporting requirements associated with the ATPA Applicability Test.

2.5 Adjustments to Projected Actual Emissions

Fugitive emissions, if they can be quantified, must be included in the projected actual emissions. Additionally, emissions associated with startups, shutdowns and malfunctions must be included in the projected actual emissions.

Emission increases that are not related to the specific proposed project may be excluded from the projected actual emissions. These are emissions that could have been accommodated during the selected 24-month baseline period by the pre-change emission units. Determining whether certain emissions are related to the proposed project will be a case-by-case determination.

2.6 Actual-to-Projected-Actual Applicability Test

Each of the projected actual emissions must be compared to the baseline actual emissions to determine the magnitude of the resulting emissions increase. Major NSR applicability will be based on the highest emissions increase calculated in this way.

- The responsibility for the correctness and accuracy of the baseline actual emissions and projected actual emissions calculations is upon the owner or operator of the source. The department will use the calculations for any required minor source permitting but is not obligated to verify that the calculations were done correctly.
- Any erroneous calculations that result in significant net emission increase will be referred to the Office of Enforcement for further action.

2.7 Permit Content

The NSR reform is about major NSR applicability. In most cases the changes or modifications made at the source will still trigger minor source permitting.

Since all major NSR sources are also Part 70 sources, source modifications will be done pursuant to Part 70 source and permit modification requirements.

2.8 Determining Emission Changes

Whether the proposed project involves new emissions units, modifications to existing emissions units or a combination of both, there are several different applicability tests that the owner or operator can use to determine if the project will trigger major NSR applicability:

2.8.1 Actual to Potential Applicability Test

This applicability test is generally used for projects involving new emissions units, however it can be used for changes to existing emissions units. This test involves comparing the post change emissions of the unit (in this case the potential to emit) with the baseline actual emissions. If the emissions unit is an existing emissions unit and potential to emit is used to determine the post change emissions, then the owner or operator is not required to maintain a record of annual emissions for a period of five (5) or ten (10) years following resumption of regular operations nor is the owner or operator required to report post change emissions. If the difference between the post change emissions (potential to emit) and baseline actual emissions is greater than the appropriate major NSR applicability limit, then the project will be subject to major NSR unless the net emissions increase is below the appropriate major NSR applicability limit.

2.8.2 Actual-to-Projected-Actual (ATPA) Applicability Test

This applicability test is only used for projects involving changes at existing emissions units. The ATPA Applicability Test involves comparing the post change emissions (in this case the projected actual emissions) with the baseline actual emissions. If the difference between the post change emissions (projected actual emissions) and baseline actual emissions is greater than the appropriate major NSR applicability limit, the project will be subject to major NSR unless the net emissions increase is below the appropriate major NSR applicability limit. (As

mentioned above, the owner or operator may choose to use the ATPA Applicability Test for existing units instead.)

2.8.3 Hybrid Applicability Test

For projects involving combinations of new emissions units, existing emissions units and clean units, the Hybrid Applicability Test is used. The Hybrid Applicability Test involves using the appropriate applicability test as described above for each type of emissions unit and then adding the emissions increases together. If the sum of the emissions increases is greater than the appropriate major NSR applicability limit, then the project will be subject to major NSR unless the net emissions increase is below the appropriate major NSR applicability limit.

Definitions to Consider:

- A new emissions unit is any emissions unit that is, or will be, newly constructed or that has existed for less than two (2) years from the date the emissions unit first operated. 326 IAC 2-2-1 (u)(1)
- An existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit is an existing emissions unit. 326 IAC 2-2-1 (u)(2)

2.9 Recordkeeping and Reporting Requirements

2.9.1 326 IAC 2-2-8 "Source Obligation"

Other than projects at a clean unit or at a source with a PAL, when there is a reasonable possibility that a project that is not part of a major modification may result in a significant emissions increase and projected actual emissions are not calculated using the emissions unit's PTE, before beginning actual construction the owner or operator shall document and maintain the following information:

1. a description of the project;
2. identification of any emissions unit for which emissions of a regulated NSR pollutant could be affected by the project;
3. a description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    a. the baseline actual emissions;
    b. the projected actual emissions;
    c. the amount of emissions excluded that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are unrelated to the project (including increased utilization due to demand growth); and
    d. an explanation for why the amount was excluded, and any netting calculations, if applicable.

- If the emissions unit is an EUSGU, then before beginning actual construction the owner or operator shall provide a copy of this information to the department.
- Only a copy of this information is required, no determination from the department is required before beginning actual construction.
- Indiana minor NSR rules require approval prior to beginning construction unless the project is exempt from permitting requirements.

The owner or operator is required to monitor emissions of any regulated pollutant that could increase as a result of the project and that is emitted by any emissions unit included in the project.

The owner or operator is required to maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations or for a period of ten (10) years following resumption of regular operations if the project increases the design capacity or the potential to emit of the emissions unit.

If the unit is an existing EUSGU, the owner or operator is required to submit a report within sixty (60) days after the end of the year to the department during the period of time that the post change emissions are calculated and maintained.

- The owner or operator must make the information required to be documented and maintained available for review upon a request for inspection by the department.
- The general public may request this information from the department under 326 IAC 17.1 "Public Records; Confidential Information; Confidentiality Agreements".

If the existing unit is a non-EUSGU the owner or operator is required to report within sixty (60) days after the end of the year to the department the annual emissions, in tons per year, exceeding the baseline actual emissions by a significant amount and if the emissions differ from the preconstruction projection.

3. Plantwide Applicability Limit (PAL)

- A PAL is based on actual emissions.

A Plantwide Applicability Limit (PAL) is an optional approach that will provide owners or operators of major NSR stationary sources with the ability to manage source-wide emissions without triggering major NSR applicability. The basis for a PAL is baseline actual emissions. A PAL is an annual (source-wide) emission limitation (12-month total rolled monthly) under which the source can make any changes without triggering major NSR applicability for that pollutant. A PAL is pollutant-specific, and a PAL is approved for a ten (10) year term.

A source with a PAL permit may modify the emissions unit or add new emissions units, without triggering major NSR applicability, as long as the PAL limit is not exceeded.

3.1 Obtaining a PAL

The PAL emissions limit is based on the source's baseline actual emissions for the PAL pollutant. Baseline actual emissions are calculated on a unit specific basis using the same 24-month period for each emissions unit. The PAL emissions limit is determined as follows:

1. add the calculated baseline actual emissions for each unit
2. add the potential to emit for any emissions units that began actual construction after the 24-month baseline period
3. subtract the actual (or PTE) emissions for any units shutdown after the 24-month baseline period chosen
4. add the major NSR significant level for the PAL pollutant

The owner or operator must then submit a permit application for a PAL.

The department will reduce the PAL level, in tons per year, in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the department is aware of prior to issuance of the PAL permit.

3.2 PAL Permit Application (326 IAC 2-2.4-3)

As part of a permit application requesting a PAL (326 IAC 2-2.4-3 [PDF]) the owner or operator of a major stationary source must submit the following information:

1. a list of all emissions units at the source designated as small, significant or major based on their potential to emit.
2. all federal or state applicable requirements, emission limitations or work practices that apply to each unit.
3. calculations of the baseline actual emissions with supporting documentation including emissions associated with startup, shutdown and malfunctions.
4. the calculation procedures that the owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month for five (5) years.
    - A small emissions unit is a unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for the PAL pollutant.
    - A significant emissions unit is a unit that has the potential to emit the PAL pollutant in an amount that is equal to or greater than the significant level for the PAL pollutant but less than the amount that would qualify the unit as major.
    - A major emissions unit is a unit that emits or has the potential to emit one hundred (100) tons per year or more of the PAL pollutant in an attainment area.

As part of a PAL application the owner or operator must use current emissions or other current direct measurement data to demonstrate that the monitoring system accurately determines emissions from each unit subject to the PAL. Data will need to be collected from all units subject to the PAL, including those that may be unregulated at the present time. If the owner or operator does not have current emissions data, or if the emissions unit's operation has changed since collection of that data, current accurate data will need to be obtained. This can be done by conducting performance tests or other direct measurements before submission of a complete permit application to obtain a PAL.

3.3 PAL Monitoring Requirements

A PAL permit must contain enforceable requirements for a monitoring system that accurately determines plantwide emissions for the PAL pollutant in terms of mass per unit time. All units operating under a PAL must have sufficient monitoring to accurately determine plantwide emissions for a 12-month rolling total. The PAL monitoring system must employ one (1) or more of the four (4) general monitoring approaches and must be approved by the department. The generally acceptable monitoring approaches for a PAL permit are the following:

1. Mass balance calculations for activities using coatings or solvents: If not otherwise accounted for the owner or operator must assume that the emissions units emit all of the PAL pollutant contained in or created by any raw material or fuel used in or at the emissions units. This approach can only be used for processes using coatings or solvents.

2. Continuous Emission Monitoring Systems (CEMS): CEMs must sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating and must comply with the applicable performance specifications found in 40 CFR Part 60, Appendix B.
3. Continuous Parameter Monitoring Systems (CPMS) or Predictive Emissions Monitoring Systems (PEMS): CPMS or PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit. While the emissions unit is operating, each CPMS or PEMS must sample, analyze, and record data at least every fifteen minutes, or at another less frequent interval approved by the department. Users of parameter monitoring must show a correlation between predicted and actual emissions across the anticipated operating range of the unit.
    - Establishing parameter monitoring is a resource-intensive effort, requiring extensive up-front testing, analysis, and development.
4. Emission factors: Emission factors may be used for demonstrating compliance with a PAL as long as the factors are adjusted for the degree of uncertainty of limitations in the factors development. If using emission factors the emissions unit must operate within the designated range of use for the emission factor. The owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing using other monitoring approaches (if technically practicable) to determine a site-specific emission factor within six (6) months of PAL permit issuance unless the department determines that testing is not required.
    - Use of monitoring systems that do not meet the minimum requirements approved by the department will render the PAL invalid.
    - A source owner or operator with five (5) units must be able, at any time, to quantify the baseline actual emissions for the past 12 months for each of the five (5) units.
    - The monitoring system data used to demonstrate the emissions unit operation must be re-validated to show that it accurately determines the emissions unit operation at least once every five (5) years for the life of the PAL. Data must be revalidated through a performance test or other scientifically valid means that is approved by the department.

3.4 PAL Recordkeeping Requirements

The owner or operator shall retain a copy of all records necessary to determine compliance with the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions, for five (5) years.

The owner or operator shall retain a copy of the PAL permit application, any applications for revisions to the PAL, each Part 70 annual certification of compliance, and all data relied on in certifying the compliance for a period of fifteen (15) years.

3.5 PAL Reporting Requirements

The owner or operator shall submit semiannual monitoring reports within thirty (30) days of each reporting period. The reports shall include reports of any deviations or exceedance of the PAL requirements, the results of any revalidation test or method within three (3) months after completion of the test method.

PAL monitoring, recordkeeping and reporting requirements can be more stringent than monitoring, recordkeeping and reporting requirements contained in current Part 70 permits.

3.6 PAL Effective Period and Renewal

A PAL is effective for a period of ten (10) years. A timely application must be submitted to the department by the source owner or operator to request renewal of a PAL. A timely application is one that is submitted at least six (6) months prior to, but not earlier than eighteen (18) months from, the date of PAL expiration. If the owner or operator submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued. The PAL may be renewed at the same level or the department may set the PAL at a level it determines to be more representative of the source's baseline actual emissions.

3.7 Increasing a PAL

The department may increase a PAL emission limitation during the PAL effective period only if the source complies with the following:

1. The owner or operator must submit a complete application to request an increase in the PAL limit identifying the emissions units contributing to the increase.
2. Demonstrate that the sum of the baseline actual emissions of the small emissions units plus the baseline actual emissions of the significant and major emissions units, assuming application of BACT or LAER equivalent controls, plus the sum of the new or modified emissions units exceeds the PAL.
3. Obtain a major NSR permit for all emissions units contributing to the increase regardless of the magnitude of the emissions increase resulting from the unit.
4. 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.
    - The PAL limit already includes the significant level for the pollutant. By causing an increase above the PAL the new or modified emissions units are causing an increase greater than the significant emissions threshold.

3.8 Termination or Revocation of a PAL

The owner or operator may at any time submit a written request to the department to terminate or revoke a PAL prior to the expiration or renewal of the PAL. The owner or operator may submit a proposed allowable emission limitation for each group of emissions units by distributing the PAL allowable emissions for the source among each of the emissions units that existed under the PAL.

The department 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 department determines is appropriate.

- Distribution of the PAL allowable emissions may be based on the emissions limitations that were eliminated by the PAL.

The source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation until the department issues a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units.

- During public review, any person may propose a PAL distribution of allowable emissions for the source for consideration by the department.

3.9 Applying for a Plantwide Applicability Limit

Sources that want to apply for a Plantwide Applicability Limit (PAL), revise a PAL, renew a PAL, or terminate a PAL must submit a complete application, including applicable basic and special application forms and the appropriate PAL form (PAL-01, -02, -03, or -04) (available on the IDEM Agency Forms page).

4.0 More Information

- IDEM Application Process page
- IDEM Applicant Assistance and Resources page