

NSR Reform Meeting 2 Comments

Commentors

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B	<p>John A. Paul, Supervisor of RAPCA</p>
C	<p>Michael E. Born, Shumaker Loop & Kendrick LLP, on behalf of the Environmental Committee of the Ohio Electric Utilities and the following member companies:</p> <p>American Electric Power Buckeye Power, Inc. Columbus Southern Power Company, dba AEP Cinergy Corp. Dayton Power & Light Company Ohio Power company, dba AEP Ohio Valley Electric Corporation</p>
D	<p>The Ohio Environmental Council</p>
E	<p>Industry Members of the Industry B Ohio EPA PPEC (Permit Processing Efficiency Committee)</p> <p>Chris Korleski, Honda of America Mfg., Inc. Maxine Dewbury, Procter & Gamble Bill R. Miller III, Ph.D., General Motors Corporation</p>
F	<p>Squires, Sanders & Dempsey L. L. P., Douglas A. McWilliams</p>
G	<p>Dominion, Pamela F. Faggert</p>

Baseline Actual Emissions Comments

Comment - Commentor D:

As an initial matter, the Ohio Environmental Council states that the final New Source Review rules promulgated by the U.S. EPA on December 31, 2002 violate the Clean Air Act and are less protective of the public health and the environment than the NSR regulations which they replaced. Also, the OEC reiterates its position that applicable law provides that in order to receive delegated authority to enforce the Clean Air Act in Ohio, Ohio's air pollution control program needs to be at least as stringent as, yet can be more stringent than, the federal air pollution control program. In this instance, the attempt by U.S. EPA through administrative fiat to relax and weaken the requirements of the Clean Air Act should be rejected by Ohio EPA. A decision by Ohio not to adopt the federal rule on "baseline actual emissions" would make Ohio's program more stringent than the federal program and would avoid the legal defects associated with the new federal rules. Accordingly, the OEC recommends that Ohio EPA reject this federal rule in its entirety.

Comment - Commentor E:

Ohio EPA should adopt the federal rules as written and should not make changes to those rules.

There has been broad consensus since the early 1990's that reform of the US EPA's approach to determining baseline emissions was needed to eliminate unfairness, particularly for cyclical industries. The baseline actual emissions definition provided in the federal rule recognizes the effects of short term economic fluctuations and ensures that baseline actual emissions will truly be reflective of normal operation. The baseline actual emissions definition also includes extensive safeguards to ensure that baselines are not artificially inflated, thus making these rules actually more protective of the environment in many instances than the pre-2003 rules. Moreover, significant variations between state and Federal NSR regulations, and among various state programs are problematic for efficient business planning, particularly for companies with operations in many states. In addition, state rules that differ from the federal rules may put a state at an economic disadvantage to other states when investment and employment decisions are made. Departing from the federal regulations will also complicate the SIP approval process, potentially delaying implementation of the reforms in Ohio. EPA has determined that the incentives for pollution control, efficiency improvements and the like as well as the safeguards in the NSR Improvement rules make the federal rules *more stringent, protective and more environmentally beneficial* than the pre-2003 program. Therefore, departures from the federal rules will need to include an equivalency demonstration and will need to separate as state only enforceable elements those aspects that are not demonstrated to be necessary to attain or maintain an ambient air quality standard. Such demonstrations are likely to be difficult. For all of these reasons, Ohio EPA should adopt the baseline actual emissions definition from the federal rule.

Comment - Commentor E:

Ohio EPA Should Adopt the Baseline Actual Emissions Definition Because it Provides Needed Certainty and Flexibility After Years of Uneven Implementation of the Rules.

The new baseline actual emissions definition is clear and concise and is a substantial improvement over the prior approach. For example, the new rules specify the date from which the look-back period begins as either the date of a complete permit application or the date of construction, whichever is earlier. Under the pre-2003 rules, sources that applied for minor and major NSR permits faced a constantly changing window for the baseline. As a practical matter, some states adopted the date that the application was submitted or a calendar year approach to determining baseline emissions but this was inconsistent within and among states. In addition, the ability to look at a full business cycle when a source requested an alternate baseline period was not implemented evenly by the states because there were no clear criteria for making a determination. The new rules put all sources on a level playing field and state clearly exactly what is required, including providing for safeguards (such as the subsequent legally enforceable limits requirement) and minimum data quality requirements. The new rules will thus ensure consistency among sources and actually improve compliance with the regulations by providing clear guidelines of source obligations.

Comment - Commentor E:

Ohio EPA Should Rely on the Solid Foundation in the Federal Rulemaking Record Upon Which US EPA Relied in Adopting the New Baseline Actual Emissions Definition.

US EPA recognized, as Ohio EPA should, that it is not reasonable to require a source to establish its representative baseline emissions rate based simply on the most recent production level, when that level is considerably lower than the levels historically achieved under more favorable market conditions. US EPA has long recognized that Congress could never have intended to require a permit that “would severely and unduly hamper the ability of any company to take advantage of favorable market conditions.” 45 *Fed. Reg.* 52676, 52704 (Aug. 7, 1980). Therefore, US EPA found that a source should be able to determine its representative emissions from levels that have actually occurred to establish a baseline emissions rate. To select the appropriate look back period, US EPA conducted a study of several industries in 1997 which found that, for the industries analyzed, business cycles differ markedly by industry, and may vary greatly both in duration and intensity. US EPA concluded based on this study that 10 years of data is reasonable to capture an industry cycle, and this conclusion was supported by information submitted in comments on the proposal.

Comment - Commentor E:

Ohio EPA Should Recognize the Protectiveness Afforded by the Safeguards US EPA Has Included in the NSR Improvement Rules and Adopt Those into the SIP.

As noted earlier, the pre-2003 rules allowed a source to use a representative period earlier than the 2 years preceding a change. The new rules simply streamline that process. In addition, the new rules actually make the baseline determination more stringent in several respects by imposing documentation requirements, requiring that subsequently enforceable legal restrictions be used to reduce the baseline, and excluding non-compliant emissions. None of these requirements was listed in the prior regulations. Thus, under the pre-2003 rules, baseline emissions could actually be higher than under the NSR Improvement rules. Consider an emission unit with most recent two-year emissions of 200 tpy VOC that has just become subject to a RACT rule that requires emissions to be reduced by 80%. The highest 24-consecutive month emissions during the last 10 years is documented as 300 tpy. A baseline determination using the prior two years of operation would be 200 tpy. Under the NSR Improvement rules, the baseline would be 60 tpy (300 tpy reduced by 80%). It is also worth noting that baseline emissions must also be *compliant emissions* and thus cannot exceed permit limits. This fact should address any concerns raised during the October 16th discussion that the new baseline actual emissions definition would inflate the baseline. This is particularly true for sources that have already obtained a PSD permit because baseline actual emissions would be below the amount modeled for determining increment consumption.

Comment - Commentor D:

For the sake of consistency, clarity and certainty, the OEC recommends that “baseline actual emissions” should have the same definition as “actual emissions” that is currently defined in 52.21(b)(21). Adding another definition to an already confusing, cumbersome and rather unwieldy regulatory program would result in the expenditure of more time and resources than Ohio EPA currently has, thereby lengthening the permitting process to the detriment of human health and the environment.

However, if Ohio EPA insists on being in lock-step with U.S. EPA on this issue, the OEC, without waiving its legal right to contest the current federal rules or to contest any rules proposed by or promulgated by Ohio EPA, incorporates each of the above general comments into each of the following specific comments to the proposed rules.

Comment - Commentor C:

While the NSR Reform rules change the practice for establishing baseline actual emissions for industry at large, the practice for establishing baseline actual emissions for steam electric generating units is unchanged. As it has been since 1992, baseline actual emissions for steam electric generating units is based on any consecutive 24-month period within the last five years, unless the permitting authority approves the use of another period that is more representative of normal operations. While the December 2002 rule allows other industries to select any consecutive 24-month period from the past ten years, the federal rule only allows for a 5-year look-back period upon which to set baseline actual emissions for electric utility sources. Given the varying

frequencies, length, and number of planned outages, the recent and anticipated rulemakings requiring the installation of new pollution control equipment, and other factors, it may be very difficult for any utility to develop a baseline in a given 5-year period that is truly representative of normal operation of these critical energy resources. The Agency should retain all the flexibility afforded by the current rules for electric utilities in order to develop truly representative baseline actual emissions.

Comment - Commentor E:

The Pre-2003 Rule Imposed Unreasonable Burdens on Cyclical Industries.

US EPA's approach under the prior rules imposed unreasonable burdens on sources in cyclical industries when the "most recent two years" interpretation for baseline emissions was frequently applied. If the most recent two years represented a down cycle for the business, the baseline was artificially depressed. US EPA stated in the NSR Improvement Rules that it is known that a source's production activity and associated emissions generally will fluctuate as a result of normal fluctuations in market conditions during a business cycle. Thus, "normal operation" within the context of a typical business cycle recognizes that variability will occur. We have seen this most recently with the last two years of economic downturn and the effects of the war in Iraq. Ohio EPA should address the effects of economic fluctuations in its baseline actual emissions definition consistent with the federal rule. Adopting the federal rules as recommended in Comment No. 1 would address this concern.

Comment - Commentor E:

Codification of the NSR Improvement Rules Is Consistent with Practice in Ohio Which Already Allowed Sources to Establish Baselines Earlier than the 2 Years Immediately Preceding a Change.

Under the pre-2003 rules, a source could use a different period for establishing baseline emissions if a different period was more representative of normal operation. Many sources requested and were granted alternative, more representative, baseline periods. The new provisions streamline the process by recognizing what has been implemented on a case-by-case basis in Ohio for years. Thus, adopting the 10-year look-back period simply codifies what had already been allowed under the existing rules, thus easing the administration of this program. We note also that the ability to select a more representative baseline more than ten years in the past has actually been *eliminated* under the NSR Improvement rules, which is another way that they provide greater certainty and ease of application has been provided by the new rule (even though this change makes the rule more stringent than the pre-2003 approach).

Comment - Commentor A:

Has the USEPA been consistent from state to state on disallowing the Director discretion on determining more representative time period for calculating baseline actual emissions

under the old rule?

Comment - Commentor A

40 CFR 51.165 (a)(1)(xxxv)(C): For new emissions units, why is the potential to emit (rather than actual emissions) equal to baseline actual emissions “thereafter”?

Comment - Commentor B:

Different baselines for different units and different pollutants and limited record keeping and reporting: If this is intended to represent simplification, then it misses the mark considerably. We strongly object to different baselines for different pollutants involved in the same project. Add to the confusion the fact that the company does not have to discuss with the agency its baseline calculation or keep records of future emissions, unless it determines there is a reasonable probability it will exceed its projected actual emissions. RAPCA personnel feel this is an impossible scenario to track and enforce. Therefore, we suggest that baseline actual emissions be set as the immediately preceding two years of source operation, with the same baseline for all pollutants and all sources involved in a project. An alternate baseline can be proposed by the source if they demonstrate a 24-month time period in the past five years which is more representative of source operations. We also feel Ohio EPA could consider a baseline based on allowable emissions if those allowable emissions are contained in an approved state implementation plan which provides for attainment of the subject pollutants. For instance, if a source is included in the ozone maintenance inventory with baseline allowable emissions, we feel the emissions identified in the attainment inventory could serve as a baseline. Likewise, if an area has a modeled attainment demonstration, then the emissions levels identified in the attainment demonstration could serve as baselines

Comment - Commentor A

40 CFR 51.165 (a)(1)(xxxv) (B)(4): HzW suggests that the Ohio EPA more clearly define what is meant by “inadequate information” regarding the 24-month baseline actual emissions determination, especially in light of record retention requirements under Ohio rules.

Comment - Commentor B:

Ten-year Look back and inclusion of emissions from startups, shutdowns, and malfunctions: If the source has the option of choosing a 24-month emissions baseline from the past ten years of operation, we see great potential for uncertainty. The likelihood of accurate records is low; but the source will want to choose years of highest emissions (that is, of course, if the agency is even consulted in the process). Therefore, pressure will be on the agency to accept high emissions baselines without good records. If the source chooses to include emissions from startups, shutdowns, and malfunctions; it is highly unlikely we will have accurate emissions information. What source has ever tested emissions during startups, shutdowns, or malfunctions? If the source had a high number of startups, shutdowns, and malfunctions in past years,

is this good reason for establishing a high baseline? All this will simply complicate the process greatly. Add to this uncertainty the fact that the source does not have to report any of these calculations to the agency, so tracking the basis for decisions will be extremely difficult. These are very strong reasons for not adopting the federal rule, simply on the basis of added uncertainty

Comment - Commentor G:

As indicated at the October 16 meeting, OEPA should proceed to adopt the Federal rules as written as they will help significantly to avoid confusion over netting analyses and improve permit processing.

Dominion cautions OEPA to carefully consider how “average rate” for baseline emissions is calculated. Estimates of fugitive emissions and emissions during periods of startup, shutdown, and malfunction are very difficult to quantify and OEPA should adopt reasonable guidance for acceptable quantification methods.

We are also concerned how a baseline would be determined for sources that have not operated for the required 24 months. OEPA should develop a method by which a source could pro-rate emissions based on the actual operating history up to the point of application.

Comment - Commentor A

40 CFR 51.165 (a)(1)(xxxv) (B)(1): What was the USEPA’s reasoning for including emissions from malfunctions in baseline actual emissions?

Comment - Commentor B:

Use of the baseline actual emissions: While the setting of baseline emissions in the manner provided by the federal rule is disturbing, the use of this baseline increases our concerns. Starting with a high baseline, the federal rule then allows a source to perform an applicability determination with projected actual emissions that are discounted for demand growth that the source was able to accommodate before the source modification. It also allows Plantwide Applicability Limits (PALs) to be established at this high baseline. Such a process will allow new units to be installed without controls or modified sources to increase emissions without review and accountability. The opportunities for environmental protection are diminished greatly. In fact, we project a future under the federal rule which virtually eliminates New Source Review for existing source modifications and allows for new units to be installed without controls under the PAL provisions. There will be few opportunities for true prevention of significant deterioration of air quality. RAPCA personnel strongly recommend that Ohio EPA not adopt the federal definition of baseline actual emission.

Comment - Commentor A:

40 CFR 51.165 (a)(1)(xxxv)(B)(1): HzW suggests that the Ohio EPA more clearly define the concept of “to the extent quantifiable” regarding the inclusion of fugitive emissions in

baseline actual emissions.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic. We submit these for your consideration. STAPPA/ALAPCO New Source Review Menu of Options: Baseline for Measuring Emissions Increases.

To select an emissions baseline against which emissions increases are measured, EPA's revised rule allows a source to look back over the last 10 years. State and local agencies are concerned that this extended look-back period will be used to inflate the baseline well above current actual emissions, thereby falsely presenting the project as a minor increase (or even an emissions reduction) that would not be subject to NSR (i.e., modern pollution control requirements and air quality review). State and local agencies are also concerned that 10-year-old data are not of sufficient quality to support reliable permitting decisions.

The Menu of Options offers two alternatives to the federal baseline provisions, one based on actual emissions rates and one that considers utilization rates. Both options set the two years immediately prior to the proposed project as the presumptive baseline that is most representative of the current source operation and design, but would allow a source to select a different two-year period within the last five years if the permitting authority concurs. By making the baseline more contemporaneous with the project, both options eliminate concerns that the baseline will be unreasonably inflated above current levels and that old data of poor quality will be relied upon in applicability determinations.

EPA has adopted a new definition of "baseline actual emissions" and revised the procedures for the calculation of the source's emissions before the change. Under the new base federal program, a source may use any consecutive 24 months during the 10-year period immediately preceding the change to represent the annual average actual emissions preceding the change. Furthermore, the source may use a different consecutive 24-month period for each regulated NSR pollutant in evaluating the proposed project. EUSGUs are limited to using any consecutive 24-month period in the last five years, or a more representative period with permission. Also, the new rule provides for including fugitive emissions as well as emissions associated with startups, shutdowns, and malfunctions in the baseline emissions. Sources must, however, adjust their baseline downward to exclude any noncompliant emissions that occurred during the selected baseline period. Also, the minimum federal program requires that existing emissions units other than EUSGUs adjust the baseline downward to reflect current applicable emissions limitations imposed after the baseline period.

In addition to revising the baseline emissions determination, EPA provides for use of an actual-to-projected-actual test at existing emissions units where the actual-to-potential test was required under the old rule (See 52.21(a)(2)(iv)(c).) As mentioned above, EPA has already made a similar test available to EUSGUs. EPA also similarly expands use

of the demand growth exclusion for existing emissions units.

Along with the use of the actual-to-projected-actual test, EPA imposes some monitoring and record keeping requirements for non-utility sources. The monitoring and record keeping requirements apply to changes where there is a "reasonable possibility" that a significant emissions increase would occur. However, the base federal program does not require these sources to submit any preconstruction analysis or to submit regular reports to the permitting authority documenting their actual, post-change emissions if those emissions fall below their pre-change projections. Instead, non-utility sources are only required to submit a report to the permitting authority if post-change emissions increase by a significant amount and are in excess of the source's pre-change projection.

With regard to the baseline for determining the emissions before the project, the Menu of Options offers two alternatives. The first baseline option is essentially the same as the old federal rule. This option presumptively sets the baseline as the average emissions during the two calendar years immediately before the project. With approval of the permitting authority, the source may select a different two-year period within the last five years that is more representative of normal operations. The second baseline option is similar to an approach considered during many stakeholder discussions and included in the EPA proposal. This option also presumptively sets the baseline as the average emissions during the two calendar years immediately prior to the project. Alternatively, the permitting authority may approve a baseline that is based on the source's utilization rate during the highest two years of production in the last five years, using current emission factors to estimate emissions.

For both of these options, the baseline emissions include authorized emissions from startups and shutdowns. Neither option allows the baseline to include excess emissions, emissions from upsets or malfunctions, or emissions that were in violation of any enforceable emissions limit. Also, both options require the baseline to be adjusted downward to exclude any emissions that would not be allowed by requirements that apply at the time of the project.

The STAPPA and ALAPCO options do not provide a special baseline definition for EUSGUs. Another important difference between the STAPPA and ALAPCO options and the revised federal rule with regard to baseline emissions is that both options presented in STAPPA and ALAPCO New Source Review Menu of Options the Menu require the use of a single baseline period for each project when calculating the baseline emissions for all affected emissions units and all regulated NSR pollutants.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic.
52.21(b)(48): Baseline Actual Emissions: The 10-Year Look Back.

The base federal program includes a look-back period of 10 years from which a source may select any consecutive 24-months to serve as the time period for estimating pre-change actual emissions from existing emissions units. Many state and local air agencies have raised concerns with this provision. First, state and local officials are concerned that the program cannot effectively identify changes that will result in significant emissions increases if the baseline period against which the change is measured is uncharacteristic of the source's current normal operation. State and local agencies believe that in many cases a full decade is too long a time period to extend the presumption that historic source operations are reasonably representative of current operating conditions. Yet, EPA's rule does not specifically require that the selected baseline period be representative of normal or current facility operations.

State and local agencies have also expressed concerns regarding data quality when an older baseline period is selected. Although EPA's rule disallows the use of any time period for which there is inadequate information, the rule provides no mechanism for the permitting authority to review the selected baseline period and the data upon which the applicability determination is based. Concerns regarding adequate oversight of data quality are heightened where the existing minor NSR permitting program does not provide such a mechanism for preconstruction review of applicability determinations. This concern is also exacerbated in cases where a netting analysis is performed, because the 10-year look back for selecting the baseline period can be applied to each contemporaneous change, resulting in calculations of baseline actual emissions for source operations 15 years in the past. (See the discussion on baseline issues for the definition of "net emissions increase" at 52.21(b)(3).)

EPA indicates that the agency selected the 10-year look-back period to allow a source to consider a full normal business cycle in determining whether there will be an emissions increase resulting from a proposed project. By providing a look-back period that encompasses a complete business cycle, EPA intended to allow the source to select a time period that reflected peaks in the market fluctuations that normally occur in many industries. In that sense, EPA was responding to industry comments that use of the two years immediately preceding the project may not be representative of normal operations for the current facility during times of peak market conditions. In considering the business cycle approach, EPA commissioned a study entitled "Business Cycles in Major Emitting Source Industries" to review the length of the normal business cycle for industries subject to major NSR (ERG, September 25, 1997). For the nine industries studied, the report identified business cycles that varied from three to eight years. The report concluded that the length of business cycles differs markedly by industry and even from cycle to cycle within the same industry. Based on this study, EPA selected the 10-year time period as "reasonable to capture an entire industry cycle."

In determining whether the 10-year look-back period is reasonable and appropriate for a particular state or local jurisdiction, the permitting authority should consider several factors, including normal business cycle fluctuations, and whether 10-year old data are

of good quality and represent current conditions. The permitting authority may conclude that for the state or local program, potential adverse impacts on the program's effectiveness resulting from reliance on questionable data or from failure to account for changes at a source or within an industry over a 15-year period outweigh any advantages that may result from granting a presumption of representativeness and data quality over a 10- to 15-year timeframe. Factors affecting the decision of a permitting authority in selecting an appropriate time period may include the predominant industry types in the area, the quality of historical emissions and operational data known or believed to be available for determining baseline emissions, or changes in emissions control levels and applicable requirements over time.

For example, if a state is predominantly influenced by a particular industry sector or mix of sectors with business cycles of four to five years, the permitting authority may decide that a five-year look-back period is reasonable to minimize the potential for reliance on older data that may be incomplete or of poorer quality, while still providing ample opportunity for the area to consider business cycle peaks. In addition, the permitting authority may find that the longest business cycle among area industries is eight years, but may also be aware that emissions data for regulated sources in the state is generally of poor quality prior to 1998, the emissions inventory baseline modeling year for which the latest attainment demonstration was performed. In that case, the air agency may choose to adopt a shorter presumptive look-back period to provide some assurance against use of poor data quality, but may allow selection of an older baseline period with agency review and approval of the data. Alternatively, the permitting authority may generally provide for a 10-year look-back period, but specify that years earlier than 1998 could not be selected for the baseline period for determining project emissions increases or in computing contemporaneous emissions changes. Or, the SIP may require that the permitting authority review and approve the data used in the baseline emissions calculations for any case in which pre-1998 data were selected.

Approaches other than the business cycle concept to provide for consideration of market fluctuations may also be appropriate. According to the 1997 ERG study, business cycles vary greatly in both duration and intensity and are highly irregular, making it difficult to establish a representative time period designed to reflect a normal business cycle either for the national economy or for individual industries. Furthermore, major shifts or events at the national level may have significant impacts on business cycles. Such events noted in the report include extended periods of peacetime, double-digit inflation during the 1970s, oil price shocks of 1973 and 1976, and the recession of the early 1980s. Events and influences on the national economy, such as these, can make it unreasonable to draw conclusions about the present or future market conditions simply based on a review of the prior business cycle or cycles. Thus, reliance on the business cycle concept carries certain recognized inherent uncertainties. In weighing these uncertainties, the permitting authority may conclude that another approach is equally or more effective. For example, selection of the time period that represents the

highest utilization of the source within a reasonable allowable look-back period could serve more effectively than the business cycle approach.

To address concerns regarding the 10-year look back provisions, the Menu provides rule language for two specific options.

Baseline Look-Back Option 1: Two Years Prior or More Representative TimePeriod.

The first option essentially retains the old rule, establishing the presumption that the two years preceding the change will serve as the baseline period, but allowing for use of an alternative period with the permitting authority's review and approval. The option rule language specifies that any approved alternative period will be a consecutive 24-month period. By focusing the baseline on or closer to the time at which the project will occur, this alternative provides better assurance that the baseline period will be representative of current source design and operations. In addition, keeping the baseline period closer to the current time minimizes concerns regarding reliance on older data of poor quality.

This option retains the base program requirement to adjust the baseline emissions for any new applicable emissions limitations that were not in effect during the baseline period. By shortening the look back period, however, this approach will minimize the likelihood that such adjustments will be necessary. Accordingly, the program will be simplified by minimizing the need to make retrospective applicability determinations. This option also alleviates concerns regarding adequate preconstruction oversight, by providing for permitting authority approval if an older baseline period is selected. Finally, this option imposes a limit of five years for bounding the look-back period from which the permitting authority may approve a more representative time period.

Baseline Look-Back Option 2: Two Years Prior or Highest Utilization.

The second option for which rule language is provided presents an alternative to addressing market fluctuations. In this option, the owner or operator must examine either a source's actual emissions for the two years immediately preceding the change, adjusted for any new requirements that would restrict emissions, or the permitting authority may determine the baseline emissions by applying current emission factors to the highest two years of utilization within the past five years.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic Startup, Shutdown, and Malfunction Emissions.

The federal base rule provides that the baseline actual emissions shall include emissions associated with startups, shutdowns, and malfunctions. With regard to startups and shutdowns, permitting authorities recognize that these activities and their

associated emissions are authorized to varying extents, depending on the particular activity, source, and state or local program. In particular, some startups and shutdowns are planned events during which emissions are controlled pursuant to specified operating procedures or work practice standards. Other shutdowns and startups are the result of unplanned or emergency conditions, and may constitute noncompliant events resulting in excess emissions. With respect to emissions from malfunctions, permitting authorities are concerned that these unplanned and unpreventable events may result in emissions in excess of applicable standards. In addition, permitting authorities believe that emissions from malfunctions should not be allowed to inflate the baseline such that PSD review is avoided for projects that would result in a significant increase based on a comparison of normal operations before and after the project. To address these concerns, the Menu of Option presents alternative language at 52.21(b)(48)(i)(a), specifying that only "authorized" emissions from startups and shutdowns shall be included in the baseline, and providing that excess emissions and emissions associated with upsets or malfunctions shall not be included.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic
EUSGUs Special Provision.

The federal rule provides a special definition for baseline actual emissions for EUSGUs. The first difference, as compared to the baseline for other existing emissions units, is that the look-back period is only five years, unless the EPA Administrator approves a different time period. Second, the EUSGU definition of baseline actual emissions does not require the source to adjust the baseline downward to exclude noncompliant emissions. In addition, under the base federal rule EUSGUs would be required to adjust the baseline downward to account for any Maximum Achievable Control Technology (MACT) standards that apply at the time the applicability determination is made, whereas other existing emissions units must do so only to the extent the state has taken credit for MACT reductions in the attainment demonstration or maintenance plan.

The Menu of Options treats EUSGUs the same as any other existing emissions unit with regard to baseline. Specifically, the same look-back period would apply and the same adjustments would be required.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic
Use of Multiple Baseline Periods.

Many air agencies are concerned with the use of multiple baseline periods in reviewing a single project when determining baseline actual emissions. Under the revised federal rule, a source may select a different 24-month period for each regulated pollutant in determining baseline actual emissions from the proposed project. In addition, with regard to netting, the base federal rule provides that a separate baseline period may be

selected for each emissions unit that was part of a project, such that multiple baseline periods are allowed for a single project for the same pollutant. (See the discussion regarding "net emissions increase" at 52.21(b)(3).)

State and local air officials are concerned that the use of multiple baseline periods unduly complicates the program, potentially leading to the need to review data quality, estimate emissions, and make required adjustments for dozens of time periods for a single applicability determination. Furthermore, allowing a source to select a different baseline period for each pollutant affected by a project runs contrary to the notion of selecting the baseline period that represents the peak in a normal business cycle. Accordingly, the Menu of Options provides rule language to specify that a single baseline period must be used for all pollutants and for all emissions units affected by the project.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic
New Emissions Units.

The federal rule specifies that the baseline actual emissions for a new emissions unit shall be set at zero for purposes of conducting the preconstruction applicability test, and "thereafter, for all other purposes, shall equal the unit's potential to emit." This provision is not clear, because the other purposes for which the baseline actual shall equal potential to emit are not specified. In addition, because a unit is only a new unit until it has existed for two years since initial operation, it is unclear what is meant by "thereafter." With regard to a new emissions unit, the Menu of Options provides that the baseline actual emissions shall equal zero for determining the emissions increase resulting from initial construction and operation.

Under the base federal rule, one other instance in which baseline actual emissions might be needed for a new emissions unit is in establishing a PAL. For this purpose, the Menu of Options has created a separate definition of "PAL baseline emissions," and the definition of "baseline actual emissions" is not used.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic
Data Hierarchy.

Permitting authorities expressed significant concern about the type and quality of data that would be used to determine baseline actual emissions. To provide a tool that could be adopted into the state or local rule for purposes of providing guidance on acceptable data and the hierarchy of preference or presumed quality, a list of methods for determining emissions was compiled in order of highest to lowest quality. That list is incorporated into the Menu of Options at 52.21(b)(48).

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic PAL Baseline.

The Menu of Options presents new definitions for the PAL baseline period and PAL baseline emissions in the PAL section at 52.21(aa), therefore the paragraph pertaining to PAL baseline actual emissions is omitted in the Menu here at 52.21(b)(48).

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic 52.21(b)(52): Project

Because applicability reviews are performed with respect to a project, as opposed to an individual affected emissions unit or an individual physical activity, the definition of "project" is critical to the implementation of the rule. The new definition of "project" adopted in the December 31, 2002 rulemaking states that project means "a physical change, or change in the method of operation, of an existing major stationary source." This definition is problematic and ineffective, because it does not express the meaning of the term project as it is used and applied throughout the rule. To address this concern, the Menu of Options includes an alternative definition of project, which reads in part, "the set of related physical changes, or changes in the method of operation, that comprise a program of construction at a stationary source, to be completed within a reasonable time." This definition accomplishes the intent of considering collectively the effect of all changes that comprise a single project at a facility for purposes of determining whether the project is a major modification.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic 52.21(r): Source Obligation

For clarity, to assure that owners or operators do not construe the "source obligation" heading of this paragraph to imply that the source's only obligations are contained in 52.21(r), an introductory sentence is provided in the Menu of Options. The added provision specified that the owner or operator shall comply with 52.21(r) in addition to all other applicable requirements of 52.21.

Comment - Commentor B:

Copied below are the STAPPA/ALAPCO relevant sections on this topic 52.21(r)(6): Monitoring, Record keeping, and Reporting

Among the most critical sections of the revised base federal program are the provisions of 52.21(r)(6), related to monitoring, record keeping, and reporting (MRR) requirements for projects that are determined not to be major modifications and that

utilized the actual-to-projected-actual test in the applicability determination. Permitting authorities have raised several concerns related to these requirements and have developed an alternative set of (r)(6) provisions to enhance the practical enforceability of the PSD program requirements.

In addition to concerns about adequate compliance assurance provisions for projects that utilize the actual-to-projected-actual test, permitting authorities have also expressed concerns regarding projects that net out of PSD review. Accordingly, the Menu of Options provides rule language to provide for reporting and record keeping for these projects.

Reasonable Possibility Test and Applicability of the MRR Requirements. In the base federal rule, EPA establishes that these compliance measures apply in circumstances where there is a "reasonable possibility" that the project may result in a significant emissions increase. It is implied that the requirements would apply to projects that netted out of review using the actual-to-projected-actual test, since those projects have been projected to result in a significant emissions increase. Beyond these net-outs, no indication is provided as to what projects would carry a "reasonable possibility" of causing a significant increase.

The reasonable possibility test is one of the narrow aspects of the rule for which EPA issued a Notice of Reconsideration in July 2003. STAPPA and ALAPCO commented on this aspect of the rule, requesting that the rule be amended to clearly establish the types of changes subject to the record keeping and reporting requirements, and recommending that the requirements apply to any project for which the emissions increase would be significant based on the actual-to-potential test.

MRR Under the Menu of Options. As mentioned above, the Menu addresses MRR requirements in two basic circumstances. The first is when a facility is subject to PSD under the actual-to-potential applicability test, but not under the actual-to-projected-actual test. The second is when a facility nets out of review. These circumstances can also work in combination with one another. Accordingly, the Menu provides a series of four options for MRR requirements to address the interplay of these two basic concepts. First, for programs that adopt only the actual-to-potential test and prohibit netting, the Menu eliminates the (r)(6) requirements.

Second, for programs that require only the actual-to-potential test and allow netting, the Menu includes an option that requires "netouts" (i.e., projects with a significant emissions increase but not a significant net emissions increase) to submit a preconstruction report of the applicability determination. In the options described in paragraph (a)(2)(iv), the Menu provides that a facility can be subject to review if it has a significant net emissions increase even if it does not have a significant emissions increase. If a program elects this option, however, the Menu would not require an (r)(6) report unless the source would have a significant emissions increase.

Third, for programs that provide an actual-to-projected-actual applicability test and allow netting, (r)(6) requires the following. Even though an actual-to-projected actual test is offered, some projects (e.g., projects adding new units to existing sources) still only use the actual-to-potential test. If these projects net out, the Menu requires a preconstruction applicability report. If the actual-to-projected-actual test is utilized, the Menu also requires a preconstruction report of the applicability determination for any project that would be a major modification based on application of the actual-to-potential test. In addition, the rule imposes post-project MRR requirements.

Fourth, for programs that provide the actual-to-projected-actual applicability test, but disallow netting, the Menu includes similar (r)(6) provisions to the previous option, except the netting provisions are eliminated.

Clarification of MRR Content Requirements. The Menu provides alternative language to set forth the specific information that must be tracked, recorded, and submitted in the annual report. In particular, the rule language is written in a step-by-step manner to clearly require that the owner or operator conduct annually, and submit to the permitting authority, a reevaluation of the applicability test to determine if the project is a major modification based on the actual calendar year emissions.

MRR for Demand Growth Exclusion. In addition to the MRR requirements specified above for projects that would be a major modification but for netting or the actual-to-projected-actual test, the Menu of Options specifies record keeping and reporting pertaining to the use of the demand growth exclusion for any such projects. These provisions require the owner or operator to document and maintain a record of any emissions excluded and the justification for the exclusion, and to include this information in the annual reports.

Comment - Commentor E:

Ohio EPA Should Not Adopt the STAPPA/ALAPCO Menu of Options Approach to the Baseline Actual Emissions Definition (or for Any Other Aspect of the Rule).

During the October 16, 2003 meeting, mention was made of the NSR Menu of Options being developed by STAPPA/ALAPCO (S/A) and further that a final review draft was available (<http://www.cleanairworld.org/newsourcemenue.html>). While it appears that S/A has devoted considerable resources to developing these options, we believe the S/A options do not address the fundamental deficiencies of the pre-2003 rules and the way in which they were implemented. Consequently, they should not be adopted by Ohio EPA. The agency should focus its evaluation on the rules issued by US EPA on December 31, 2002 (67 *Fed. Reg.* 80186-80289) and 2003 (as yet unpublished Final Rules regarding Routine Maintenance, Repair and Replacement) Final Rules. The Final Rules evolved out of an extensive public participation process that followed a multi-year notice and comment period, stakeholder meetings, conferences with EPA and the like.

Moreover, the S/A menu of options approach is not broadly supported but has been developed by S/A's working group, which includes only a small subset of state and local regulators. Indeed, despite S/A press statements claiming Indiana's support for S/A's model rule, Indiana is actually proceeding to adopt the federal rules as written in almost all respects. (Indiana has issued a proposal to adopt the 10-year baseline actual emissions definition and IDEM intends to issue its rulemaking package in February 2004 and submit it to US EPA for approval shortly thereafter) The menu of options has not been subject to notice and comment and to the extent it contains elements on which US EPA solicited comment during its 10- year rulemaking process, those options were rejected by US EPA. Specifically, with respect to the baseline actual emissions options presented by the S/A draft, S/A's language would create a presumption that the two years immediately preceding a project are representative of normal operation. US EPA's final rule and the studies conducted to support that rule clearly establish that there is no basis for such a presumption. As an alternative, with permitting authority approval, the S/A draft would allow a source to use current emission factors with highest utilization rates in the past 5 years. This alternative makes no sense and was rejected by US EPA in its process. First, the 5-year look-back period is not supported by US EPA's study, which found that capturing a business cycle requires a 10-year period. Second, using the highest production rate with current emission factors does not take into account that equipment may be designed to operate in a variety of modes such that a higher emitting raw material might be used in a lower production mode while a lower emitting material might be used in high production mode. That is one reason why US EPA mandated that baseline actual emissions be derived from actual data during a consecutive 24-month period. These changes to the rule simply fly in the face of the well-reasoned policies adopted by US EPA. The S/A draft also creates the problem of requiring the state agency to review baseline determination requests, which US EPA had found were cumbersome and timeconsuming for state regulators. Scarce state resources should not be spent on case-by-case determinations where US EPA has already determined a reasonable period over which to conduct the baseline actual emissions analysis. In short, the S/A draft is problematic and provides no support for departing from the federal rule. Therefore, the federal rule should be adopted in Ohio.

Comment - Commentor D:

However, if Ohio EPA insists on being in lock-step with U.S. EPA on this issue, the OEC, without waiving its legal right to contest the current federal rules or to contest any rules proposed by or promulgated by Ohio EPA, incorporates each of the above general comments into each of the following specific comments to the proposed rules.

51.165(a)(1) . . .(xxxv)

a. the prefatory phrase that reads "of a regulated NSR pollutant" is too narrow and should be deleted because it excludes many types of emissions from regulation. For example, many types of toxic emissions would escape regulation under the proposed rule. Moreover, it is not consistent with the statutory definitions of "air

contaminant” and “air pollution” that are contained in Revised Code Chapter 3704.

b. the phrase in (A) that reads “any consecutive 24-month period selected by the owner or operator within the 5-year period” should be changed to read “the consecutive 24-month period.” A five year “look back” is not representative of actual emissions and would only serve to remove more emissions from any netting equation that could be used to determine that a “major modification” has occurred. Moreover, a consecutive 24-month look back provides just as much “certainty” as does a 5-year look back.

c. the phrase in (A)(1) that reads “and emissions associated with startups, shutdowns and malfunctions” should be deleted. As the prefatory language of “baseline actual emissions” expressly states, an average rate of emissions should be the focus of this determination and there is no way to determine the “average rate” of emissions associated with startups, shutdowns and malfunctions. Moreover, implicit in the definition of “baseline actual emissions” is that such emissions should be “representative” of the source’s “normal” operation, and emissions associated with startups, shutdowns and malfunctions are not at all representative of normal operations. In addition, including emissions from startups, shutdowns and malfunctions in a baseline determination results in an artificial baseline. Finally, emissions from startups and shutdowns are not included in a source’s “actual” emissions for purposes of determining compliance with the source’s allowable emission limit, so they should not be included in determining any baseline emission level for the source.

d. subsection (A)(2) fails to address the situation where an entity has not yet received the requisite permits at the time construction of the project commences. A situation could thus develop whereby an unpermitted source could exclude from its “baseline actual emissions” all of its non-complying emissions, thus making the netting and the major modification determination meaningless. This section should be rewritten to address this scenario.

e. the phrase in (A)(3) that reads “For a regulated NSR pollutant” should be deleted.

f. the sentence in (A)(3) that reads “A different consecutive 24-month period can be used for each regulated NSR pollutant” should be deleted in its entirety.

g. subsection (A)(4) should be deleted in its entirety.

h. the phrase in (B) that reads “any consecutive 24-month period selected by the owner or operator within the 10-year period” should be changed to read “the consecutive 24-month period.” A ten year “look back” is not representative of actual emissions and would only serve to remove more emissions from any netting equation that could be used to determine that a “major modification” has occurred. Moreover, a

consecutive 24-month look back provides just as much “certainty” as does a 10-year look back.

i. the end of the sentence in (B) that begins with “either the date the owner or operator begins actual construction” should be deleted in its entirety and replaced with “on which the owner or operator begins actual construction of the project. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.” As a result of this change and the change suggested in paragraph h. above, section (B) should read: “For an existing emission unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during the consecutive 24-month period immediately preceding the date on which the owner or operator begins actual construction of the project. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.”

j. the phrase in (B)(1) that reads “and emissions associated with startups, shutdowns and malfunctions” should be deleted. As the prefatory language of “baseline actual emissions” expressly states, an average rate of emissions should be the focus of this determination and there is no way to determine the “average rate” of emissions associated with startups, shutdowns and malfunctions. Moreover, implicit in the definition of “baseline actual emissions” is that such emissions should be “representative” of the source’s “normal” operation, and emissions associated with startups, shutdowns and malfunctions are not at all representative of normal operations. In addition, including emissions from startups, shutdowns and malfunctions in a baseline determination results in an artificial baseline. Finally, emissions from startups and shutdowns are not included in a source’s “actual” emissions for purposes of determining compliance with the source’s allowable emission limit, so they should not be included in determining any baseline emission level for the source.

k. subsection (B)(2) also fails to address the situation where an entity has not yet received the requisite permits at the time construction of the project commences. A situation could thus develop whereby an unpermitted source could exclude from its “baseline actual emissions” all of its non-complying emissions, thus making the netting and the major modification determination meaningless. This section should be rewritten to address this scenario.

l. the phrase in (B)(3) that reads “or maintenance plan” should be deleted.

m. the phrase in (B)(4) that reads “For a regulated NSR pollutant” should be deleted.

n. the sentence in (B)(4) that reads “A different consecutive 24-month period can be used for each regulated NSR pollutant” should be deleted in its entirety.

- o. subsection (B)(5) should be deleted in its entirety.

Comment - Commentor E:

In sum, Ohio EPA Should Adopt All Elements of US EPA's "Baseline Actual Emissions" Definition by:

1. Allowing operators to select any 24-month consecutive period during the 10 years preceding a project for existing units.
2. Requiring that the baseline for initial construction of a "new unit" be zero and thereafter, until the unit has operated for two years, be the potential to emit of the unit. After it has operated for two years, it would become an existing unit and be subject to the test above.
3. Clarifying in the regulation that replacement units are treated as existing units and therefore receive the baseline of the unit they replace.
4. Including SSM emissions and fugitive emissions to the extent quantifiable, but recognizing that where a project will not impact SSM or fugitive emissions, they can be excluded from the calculation as unrelated to the change.
5. Excluding emissions that were not in compliance with emissions limits that applied during the selected 24-month base period.
6. Excluding emissions that would have exceeded an emission limit for NSR-regulated pollutants with which the source must currently comply.
7. Applying the new baseline actual emissions definition to:
 - The actual-to-projected-actual emissions analysis for a project;
 - Netting calculations; and
 - Plantwide applicability limits (while also making the adjustments to the PAL allowed in the rules to include the potential emissions from new units since the baseline period).

Comment - Commentor F:

Ohio EPA should adopt interpretive guidance to expedite implementation of the NSR Reform provisions that are consistent with existing rule language.

Ohio's steel industry and other manufacturers are expected to benefit from the additional certainty and flexibility in the NSR Reform rules. The comments of the industry members of the Permit Process Efficiency Committee, adopted herein, provide strong

support for expediting Ohio's adoption of the federal NSR Reform rules. This comment encourages Ohio EPA to announce that it will implement immediately those provisions in the NSR Reform rules that are consistent with existing Ohio law by treating the NSR Reform package as guidance for interpreting existing rules.

Regulatory uncertainty is a significant disadvantage as Ohio competes with other states for major capital investments, and the job-growth that accompanies such investment. Many states can offer the certainty and flexibility of NSR Reform today because they have been delegated authority to enforce and implement the federal NSR/PSD rules. These "delegated states" include Michigan, Illinois, New York and New Jersey among others. The majority of states, including Ohio, have adopted state rules to implement the NSR/PSD program with federal approval. Ohio and other "SIP-Approved" states are required to revise their SIP rules within three years to implement the NSR reforms. Thus, for up to three years, investments in new and modified major sources in Ohio and other SIP Approved states will be evaluated under the old NSR rules, while Michigan and other delegated states can offer the greater certainty and flexibility of the new NSR rules.

Ohio manufacturers may also lose ground to their competitors in delegated states if they must put off significant investments to improve production and energy efficiency until they can be certain that these changes will not trigger NSR. One of the primary motivations for reforming NSR has been the removal of obstacles that frustrate incremental improvements in efficiency. Under some interpretations of the existing NSR rules, a physical change that reduces the amount of pollution per unit produced may trigger NSR. As a practical business reality, the improvement will not be implemented unless the benefits of the project exceed the cost of the state-of-the-art control technology required by the NSR rules and the project can wait 12-18 months for the state to process an NSR permit. NSR reforms designed to remove such obstacles will benefit Michigan manufacturers years before Ohio companies will see rules adopted to implement the new NSR program in Ohio. Ohio's economy cannot afford a regulatory system that imposes such a competitive disadvantage.

Implementing immediately those changes in the NSR Reform rules that are consistent with existing Ohio law can mitigate this competitive disadvantage. Some of the NSR Reform provisions reflect a change in federal interpretation of existing rule language that can be accomplished without a change to the rule language. Ohio EPA should view the promulgation of the NSR Reform rule with its preamble and supporting background documents as new federal guidance regarding how existing rules should be interpreted and applied in the future. This approach is entirely consistent with U.S. EPA's expressed interest in assisting states to implement the NSR Reforms as quickly as possible.

The NSR Reforms regarding baseline actual emissions are well suited for immediate implementation through guidance. The NSR Reform rule definition of "baseline actual emissions" (see 40 CFR 51.165 (xxxv)) is longer and more detailed than the existing rule

definition of “actual emissions” but nothing in the existing rule is inconsistent with the NSR Reform definition. The existing rule, OAC 3745-31-01(B), establishes actual emissions based on three criteria: (1) an annual average, (2) based on a two-year period that (3) is representative of normal emissions unit operations:

“Actual emissions” means the actual rate of emissions of an air pollutant from an emissions unit, as determined in accordance with paragraphs (B)(1) through (B)(4) of this rule. [B](1) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the air pollutant during a two-year period that precedes the particular date and is representative of normal emissions unit operation. The director may allow the use of a different time period upon a determination that it is more representative of normal emissions unit operation. Actual emissions shall be calculated using the emissions unit’s actual operating hours, production rates and types of materials processed, stored or combusted during the selected time period. ...

The existing rule expressly allows Ohio EPA the discretion to vary from the two-year period immediately preceding the change. The NSR Reform rule defines “baseline actual emissions” using the same three criteria, except that the two-year period for existing emissions units other than electric utilities is the average annual rate for any 24-month period within the 10-year period immediately preceding the date of a complete permit application (or the date of actual construction, if earlier). See 40 CFR 51.165 (xxxv)(B). Under the existing rule, the Director clearly has the discretion to approve any 24-month period within 10 years “upon a determination that it is more representative of normal operation.”

The Director also has the discretion to rely on the applicant’s designation for the determination of a 24-month period that is more representative of normal operation. First, the company is in the best position to know which period is more representative of normal operation. Further, “normal operation” in most businesses equates to maximizing production output. The factors that interfere with maximizing production (raw material shortages, labor unrest, unfair competition) also interfere with normal operation. Over a ten-year business cycle, the 24-month period most representative of “normal operation” is typically the period that also reflects the highest utilization of the assets and the highest level of emissions. The NSR Reform rule approach to calculating baseline actual emissions using the 24-months within 10 years designated by the applicant is well within the Director’s discretion to adopt for calculating actual emissions under the existing rule.

Ohio EPA may also adopt as guidance the remaining portions of the “baseline actual emissions” definition in the NSR Reform rule that add specificity and detail to the more general definition of “actual emissions” used in the existing rule. Nothing in the existing rule precludes the following adjustments to the baseline actual emissions rate:

- Include fugitive emissions to the extent quantifiable;
- Include emissions associated with startup, shutdown and malfunctions;
- Exclude non-compliant actual emissions; and
- Exclude actual emissions in excess of current allowable emissions.

Finally, the NSR Reform definition clarifies that a different 24-month period may be used for each pollutant. All of these clarifications can be accommodated without changing the existing rule language in OAC 3745-31-01(B).

Ohio is best served by expediting the adoption of final NSR Reform rules that implement the federal program. When the NSR Reform provisions are consistent with existing state rules, as they are for baseline actual emissions, Ohio should immediately apply the NSR Reform provisions as guidance for interpreting existing rules. This will help mitigate any competitive disadvantage that Ohio companies may experience by allowing them to benefit promptly from the certainty and flexibility of NSR Reform to the full extent allowed under existing rules.