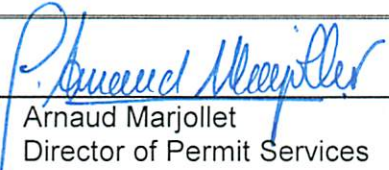


San Joaquin Valley
Air Pollution Control District

APR 1130

Increases in Maximum Daily Permitted Emissions
of Less than or Equal to 0.5 lb/day

Approved By:


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Director of Permit Services

Date: Jan. 14, 2015

Purpose

The purpose of this policy is to detail how Increases in Permitted Emissions of less than or equal to 0.5 lb/day are handled during the application review process. This policy supersedes Policy APR 1115, *Calculating and Defining Zero IPE*.

Background

In the past, increases in daily emissions of less than 0.5 lb/day have been set to zero in all of the calculations in the Engineering Evaluation (EE) and in the PAS emissions profile. This has led to confusion and inaccuracy in quantifying the emissions for the permit units. This new policy will rectify that confusion associated with these "rounding errors" by allowing all of the emission calculations to be carried throughout the EE and posted in the emissions profile.

The October 2003 version of this policy allowed IPEs less than 0.5 lb/day to set to zero for purposes of providing emission offsets. This version of the policy required that the IPE round to less than 0.5 lb/day, e.g. less than 0.44 lb/day, to be set equal to zero. In April 2009 the policy was revised to allow IPEs less than or equal to 0.5 lb/day to be set to zero for purposes of providing emission offsets. This change allows an IPE that rounds to 0.5 lb/day, e.g. less than or equal to 0.54 lb/day, to be set to zero for purposes of providing emission offsets. In January 2015, this policy was revised to allow total project annual emission increases which round to 0.5 lb/day on an average basis, e.g. less than or equal to 0.54 lb/day, to be set equal to zero only for the purposes of providing emissions offsets or for determining whether the project is a Major Modification. The January 2015 revision was made to promote efficient use of limited District resources by establishing a de minimis value for annual project emission increases, below which the Major Modification and offsetting requirements of the District's NSR rule would not provide any measurable benefits in ambient air quality.

Policy

A daily increase in permitted emissions of any criteria pollutant of less than or equal to 0.5 lb/day per permit unit is rounded to zero (0) lb/day, only for the purposes of determining whether New and Modified Source Review (NSR) rule requirements are triggered. However, to minimize rounding errors, DELs, SSPE, PE and all other associated figures will be reflected in the EE and in the permits without setting a daily increase in emissions of less than or equal to 0.5 lb/day to zero.

In addition, a total project annual emission increase (Σ [PE2 – PE1] for all units in the project) that averages less than or equal to 0.5 lb/day is rounded to zero (0) lb/day, only for the purposes of determining whether New and Modified Source Review (NSR) rule requirements are triggered.

Note that the rounding of emission increases to zero when the average emission increase is less than or equal to 0.5 lb/day is only applicable to the total project emissions. On a permit unit basis, daily emission increases that average less than or equal to 0.5 lb/day, where the maximum daily increase is not limited to less than or equal to 0.5 lb/day every day, are not roundable to zero for the purposes detailed in this policy.

Finally note that this policy applies to criteria pollutants only, and does not apply to Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs)

Procedures

Perform all calculations for the project in the EE, rounding all figures according to the District Policy APR 1105, *Guidelines for the Use of Significant Figures in Engineering Calculations*. Calculated emissions of less than or equal to 0.5 lb/day should not be identified as equal to, or “set to”, zero in calculations or tables. A permit unit’s Daily PE, Annual PE and Quarterly Net Emissions Change all appear in the emissions profile of the PAS database as presented in the EE, rounded in accordance to Policy APR 1105, and not set to zero.

However, if NSR requirements are triggered solely due to increases in permitted emissions of less than or equal to 0.5 lb/day, the EE should state that, “*District policy is to consider an IPE of less than or equal to 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements and therefore the requirements are not triggered.*” See the specific examples below.

Examples

1. Non-major source with new permit unit, not exceeding the offset and major source thresholds

An applicant at a non-major source which will remain a non-major source applies for a new permit unit with a PE of 0.4 lb·NO_x/day.

- The daily emissions in the EE and emissions profile for the permit unit will reflect 0.4 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 146 lb·NO_x/year.

- The quarterly net emissions change in the EE and emissions profile for the permit unit will reflect 37 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 146 lb·NO_x/year greater than the SSPE1.

Note that no special handling of this project was necessary under this policy, because no NSR requirements were triggered by this increase.

2. Non-major source with modified permit unit, not exceeding the offset threshold and major source thresholds

An applicant at a non-major source which will remain a non-major source applies for a modified permit unit with a PE of 2.0 lb·NO_x/day and an IPE of 0.4 lb·NO_x/day.

- The daily emissions in the EE and emissions profile for the permit unit will reflect 2.4 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 876 lb·NO_x/year.
- The quarterly net emissions change in the EE and emissions profile for the permit unit will reflect 37 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 146 lb·NO_x/year greater than the SSPE1.

Note that no special handling of this project was necessary under this policy, because no NSR requirements were triggered by this increase.

3. Non-major source with new permit unit, with two or more emissions units, not exceeding the offset and major source thresholds

An applicant applies for a new permit unit with two emissions units each with a PE of 0.4 lb·NO_x/day.

- The daily emissions in the EE for each emissions unit will reflect 0.4 lb/day; however the emissions profile for the permit unit will reflect 0.8 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 292 lb·NO_x/year.
- The quarterly net emissions change in the EE and emissions profile for the permit unit will reflect 73 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 292 lb·NO_x/year greater than the SSPE1.
- Since 0.8 lb/day (for the permit unit) is not less than or equal to 0.5 lb/day, the increase is not subject to this policy and no rounding to zero for the purposes of triggering NSR requirements will be performed.

Note that no special handling of this project would need to be considered under this policy, because no NSR requirements were triggered by this increase. However, if NSR requirements had been triggered, no relaxation in the requirements would be allowed under this policy since the emission increase for the permit unit exceeds 0.5 lb/day.

4. Non-major source with modified permit unit, with two or more emissions units, surpassing the offset and major source thresholds

An applicant applies for a modified permit unit with two emissions units each with a PE of 2.0 lb·NO_x/day and an IPE of 0.2 lb·NO_x/day, and the SSPE1 for NO_x is 19,990 lb/year.

- The daily emissions in the EE for each emissions unit will reflect 2.2 lb/day; however the emissions profile for the permit unit will reflect 4.4 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 1,606 lb·NO_x/year.
- The quarterly net emissions change in the EE and emissions profile for the permit unit will reflect 37 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 20,136 lb·NO_x/year (an increase of 146 lb·NO_x/year).
- Since 0.4 lb/day (for the permit unit) is less than or equal to 0.5 lb/day, the increase is subject to this policy and rounding to zero will be performed as applicable.

The following language is used in the EE:

- Pursuant to Policy APR 1130, offsets will not be required for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Pursuant to Policy APR 1130, public notice will not be triggered for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Since this facility's emissions exceed the major source thresholds of Rule 2201, this facility is a major source. The facility will have up to 12 months from the date of implementation of this project to either submit a Title V Application, or to comply with the recordkeeping provisions of District Rule 2530, *Federally Enforceable Potential to Emit*.

5. Non-major source with new permit unit, surpassing the offset and major source thresholds

An applicant at a non-major source applies for a new permit unit with a PE of 0.4 lb·NO_x/day, and the SSPE1 for NO_x is 19,990 lb/year.

- The same daily, annual and quarterly figures will appear in the EE and in the emissions profile for the new permit unit as indicated in example 1 above.
- SSPE2 in the EE will reflect 20,136 lb·NO_x/year.

The following language is used in the EE:

- Pursuant to Policy APR 1130, offsets will not be required for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.

- Pursuant to Policy APR 1130, public notice will not be triggered for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Since this facility's emissions exceed the major source thresholds of Rule 2201, this facility is a major source. The facility will have up to 12 months from the date of implementation of this project to either submit a Title V Application, or to comply with the recordkeeping provisions of District Rule 2530, *Federally Enforceable Potential to Emit*.

6. Non-major source with modified permit unit, surpassing the offset and major source thresholds

An applicant at a non-major source applies for a modified permit unit with a PE of 2.0 lb·NO_x/day, an IPE of 0.6 lb·NO_x/day, and the SSPE1 for NO_x is 19,990 lb/year.

- The daily emissions in the EE and emissions profile for the permit unit will reflect 2.6 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 949 lb·NO_x/year.
- The quarterly net emissions change in the EE and emissions profile for the permit unit will reflect 55 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 20,209 lb·NO_x/year.
- Since 0.6 lb/day is not less than 0.5 lb/day, the proposed increase is not subject to this policy and both offsets and public notice are triggered.

7. Non-major source with new permit unit with a PE of 0.54 lb/day, surpassing the offset and major source thresholds

An applicant at a non-major source which will remain a non-major source for NO_x has applied to install a new permit unit with daily emissions of 0.54 lb·NO_x/day, and the SSPE1 for NO_x is 19,990 lb/yr

- Pursuant to Policy APR 1105 *Guidelines for the Use Of Significant Figures in Engineering Calculations*, 0.54 is rounded to 0.5 lb/day
- The daily emissions in the EE and in the emissions profile for the permit unit will reflect 0.5 lb·NO_x/day.
- The annual emissions in the EE and emissions profile for the permit unit will reflect 197 lb·NO_x/year (based on 0.54 x 365)
- The quarterly net emissions change in the EE and in PAS for the permit unit will reflect 49 lb·NO_x/quarter.
- SSPE2 in the EE will reflect 20,187 lb·NO_x/year.
- Since 0.5 lb/day is less than or equal to 0.5 lb/day, the proposed increase is subject to this policy and neither offsets nor public notice are triggered.

The following language is used in the EE:

- Pursuant to Policy APR 1130, offsets will not be required for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Pursuant to Policy APR 1130, public notice will not be triggered for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Since this facility's emissions exceed the major source thresholds of Rule 2201, this facility is a major source. The facility will have up to 12 months from the date of implementation of this project to either submit a Title V Application, or to comply with the recordkeeping provisions of District Rule 2530, *Federally Enforceable Potential to Emit*.

8. Major VOC source proposing a new project with average SSIPE of less than or equal to 0.5 lb/day and max daily PE > 0.5 lb/day

An applicant has proposed a project to install two new distilled spirits storage tanks. The proposed annual emission limit for one tank is 100 lb-VOC per year and for the second tank, 93 lb-VOC/year, resulting in a proposed total project emission increase of 193 lb-VOC per year. Each tank will have a maximum daily emissions limit of 17.0 lb-VOC/day .

- The daily emissions in the EE and in the emissions profile for each permit unit will reflect 17.0 lb-VOC/day.
- The annual emissions in the EE and emissions profile for each permit unit will reflect 100 and 93 lb-VOC/year respectively.
- The quarterly delta PE in the EE and emissions profile for each permit unit will reflect 25 and 23 lb-VOC/quarter respectively.
- The SSIPE in the EE will reflect 193 lb-VOC/year.
- Since the average annual emission increase for the project is $193/365 = 0.53$ lb/day ~ 0.5 lb/day, the proposed increase is subject to this policy and neither a major modification (SB288 or federal) nor offsets are triggered.
- Since the maximum daily emissions for each emission unit exceed 2 lb/day, BACT would be triggered for each unit.

The following language is used in the EE:

- Pursuant to District Policy APR 1130, offsets will not be required for this project since the total project annual emission increase ($\sum [PE2 - PE1]$ for all units in the project) averages less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.

- Pursuant to District Policy APR 1130, this project does not trigger an SB288 Major Modification since the total project annual emission increase ($\Sigma [PE2 - PE1]$ for all units in the project) averages less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.
- Pursuant to District Policy APR 1130, this project does not trigger a Federal Major Modification since the total project annual emission increase ($\Sigma [PE2 - PE1]$ for all units in the project) averages less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.