



FAQ: Rule 802 – New Source Review
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[BACT Threshold](#)

[AQIA Threshold](#)

[Emission Reductions](#)

[Netting Out of BACT](#)

[Netting Out of AQIA](#)

[Netting Out of Offsets](#)

[Netting Out for Replacements](#)

[Calculating Offset Obligations](#)

[Modifying Annual PTE](#)

[Modifying Daily PTE](#)

[Offset Exemptions – Equipment Replacements](#)

[Offset Exemptions – Emergency Engines & Rule 361 Boilers](#)

[Miscellaneous](#)

BACT Threshold

Q: *Do the BACT thresholds in Table 1 and Table 2 allow for decreases during the application? During subsequent applications that are considered the same project for modified sources?*

A: The intent for using PTE as the basis was to eliminate the possibility of “netting out” of BACT. As such, only the increases are evaluated against the applicable BACT threshold. This also applies to the APCD’s definition of project from Rule 801. In both cases, if an application proposed emission decreases they may not be used to reduce the PTE for determining BACT applicability. BACT is a project PTE basis determination. See the Rule 801 FAQ for more discussion on the term “project”.

AQIA Threshold

Q: *Do the AQIA thresholds in Table 4 allow for decreases during the application? During subsequent applications that are considered the same project for modified sources?*

A: The intent for using PTE as the basis was to eliminate the possibility of “netting out” of an AQIA. As such, only the increases are evaluated against the applicable AQIA threshold. This also applies to the APCD’s definition of project. In both cases, if an application proposed emission decreases they may not be used to reduce the PTE for determining AQIA applicability. AQIA is a project PTE basis determination. See the Rule 801 FAQ for more discussion on the term “project”.

Emission Reductions

Q: *Do all emission reductions have to clear through the Rule 806 Source Register in order to be classified as an ERC and used as offsets mitigation under this regulation?*

A: Yes. Rule 806 is the only route available to qualify an emission reduction as an ERC. Internally offsetting your project is not allowed under Rule 802.

Netting Out of BACT

Q: *Can a source net out of Best Available Control Technology?*

A: No. If the project PTE exceeds the applicable BACT thresholds in either Table 1 or Table 2, then BACT is required. Netting is not allowed. See the BACT Threshold FAQ above.

Netting Out of AQIA

Q: *Can a source net out of an Air Quality Impact Analysis?*

A: No. If the project PTE exceeds the applicable AQIA thresholds in Table 4, then an AQIA is required. Netting is not allowed. See the AQIA Threshold FAQ above.

Netting Out of Offsets

Q: *Can a source net out of offsets?*

A: Offsets are triggered based on the source's total daily or annual PTE per the thresholds in Table 3 (not the project PTE). If a source can reduce its post-project total PTE to levels below the Table 3 thresholds, then the offset requirement is simply not triggered for the project. However, if the source triggers the Table 3 offsets requirement, then all offset mitigation must come through ERCs that were qualified and granted under Rule 806. Internally offsetting your project (netting) is not allowed.

Netting Out for Replacements

Q: *Do the proposed rules allow a source to subtract the actual emissions of the equipment being replaced when calculating the project's PTE?*

A: No. Only increases are used for the PTE calculation. Actual emission reductions may be turned into an emission reduction credit by following the Rule 806 Source Register process.

Calculating Offset Obligations

Q1: *My PTE is currently over 25 tpy. Do I have to do something upon adoption of the proposed amended rules?*

A1: You will not have to automatically do anything upon rule adoption.

Q2: *My existing PTE is over 25 tpy. If I submit an ATC application to increase my permitted emissions by 3 tpy, what is my offset obligation?*

A2: You will only need to offset the emissions increase, which is 3 tpy in this example. This is your offset obligation. If the source of your ERCs is within the County, but outside your stationary source, then you need to provide 3.9 tpy of ERCs (3 x 1.3). You are not required to offset down to zero.

Q3: *If my PTE is currently 20 tpy and I submit an ATC application for an emission increase of 10 tpy, what is my offset obligation?*

A3: The post-project PTE will be 30 tpy. This makes the offset obligation 5 tpy, the amount over the offsets threshold. If the source of your ERCs is from the same stationary source, then you need to provide 5.5 tpy of ERCs (5 x 1.1).

Q4: *My PTE is currently 21 tpy. My new project will result in a PTE increase of 8 tpy and I am also removing from permit unrelated equipment that has a PTE of 10 tpy. What is my offset obligation?*

A4: None. The post-project PTE is 19 tpy, so there is no offset obligation as the PTE threshold of 25 tpy has not been exceeded.

Q5: *My PTE is currently 35 tpy. If I submit an ATC application to install new equipment with an increase of 5 tpy and remove existing equipment, and that has a PTE of 20 tpy, do I need to provide offsets?*

A5: No. This is because the post-project PTE will be less than 25 tpy.

Q6: *My PTE is 150 tpy. My new project will increase emissions by 5 tpy. Concurrently with my application, I will remove from permit unrelated equipment with a PTE of 20 tpy that has actual baseline emissions (as defined by District rules) of 8 tpy. Do I need to offset my emission increase?*

A6: Yes, your offset obligation is 5 tpy. The source's PTE is reduced, but not enough to get below the offset threshold of 25 tpy. The actual emission reductions of 8 tpy can be qualified as ERCs under Rule 806 and then be used to meet the offset obligation under the ATC. The same source offset ratio of 1.1:1 would apply (5.50 tpy) and the remainder can be issued an ERC certificate (2.50 tpy) for future use or sale.

Q7: *How do the daily offset threshold requirements work?*

A7: In addition to the 25 tpy PTE offset threshold we also have a 240 lb/day PTE offset threshold. This is based on the PTE for the entire stationary source. If you are over the daily offsets threshold, and then increase your daily emissions, the annual PTE associated with this daily increase (i.e., the Project PTE) must be offset. If your project puts you over the 240 lb/day offset threshold for the first time, then you are required to mitigate the annual PTE of the project that is equivalent to mitigating the daily emissions for the source down to 240 lb/day.

- Example 1: A source is already over the daily offset threshold but not over the annual offset threshold. They propose a project to increase their daily emissions by 25 lb/day and 1.63 tpy. Their post project source-wide PTE will be above the daily offsets threshold and below the annual offsets threshold. In this case, the source is already over the daily offsets threshold and therefore the annual PTE associated with the project (1.63 tpy) must be offset.
- Example 2: A source is already over the daily offset threshold but not over the annual offset threshold. They propose a project to increase the daily emissions from a steam boiler by 10 lb/day and 1.83 tpy. They also propose to remove an older unused compressor engine that has a permitted PTE of 20 lb/day and 3.65 tpy. The post project source-wide daily PTE remains above the Rule 802 offset thresholds and the post project source-wide annual PTE remains below the offsets threshold. In this case, the project increase (10 lb/day, 1.83 tpy)

must be offset regardless of the PTE reduction from the older compressor engine. The District does not allow sources to net out of offset requirements. The offset obligation is 1.83 tpy.

- Example 3: A source is already over the daily offset threshold but not over the annual offset threshold. They propose a project to increase the daily emissions from a new device by 20 lb/day. They also propose to remove from permit an older unused process line that will decrease their PTE by 80 lb/day. With these changes, the post project daily PTE for the stationary source goes below the Rule 802 daily offsets thresholds and the annual post project PTE remains below the offsets thresholds. In this case, offsets are not required since the post project source-wide PTE for both the daily and annual emissions is below the Rule 802 offset thresholds.
- Example 4: A source is currently under both the daily and annual offset thresholds of Rule 802. They propose a project to increase the emissions from a device by 50 lb/day and 9.12 tpy. The post project PTE results in the daily offset threshold being exceeded (by 30 lb/day), but not the annual offset threshold. In this case, the daily offset threshold is exceeded and mitigation is required to offset the source wide daily PTE down to 240 lb/day (i.e., part of the project PTE is mitigated). As such, the offset obligation is 30 lb/day of the 50 lb/day project PTE increase, which equates to 5.47 tpy (assuming operations of 365 days/year). The offset obligation is 5.47 tpy

Modifying Annual PTE

Q1: My current PTE is over 25 tpy. Can I modify my permit(s) to reduce my PTE below 25 tpy so that I am below offset thresholds for future permitting actions?

A1: Yes. You can modify your permit(s) to include enforceable operational restrictions to reduce your permitted PTE below offset thresholds. This must be done through a formal permit modification.

Q2: How will emission reductions from add-on control equipment be handled?

A2: You can generate ERCs from actual emission reductions achieved through the installation of control equipment. In addition, you can also reduce your permitted PTE by installing add-on control equipment.

Modifying Daily PTE

Q1: My solvent-using facility currently has a permit limit of 54 lbs/day of ROC to keep the facility from triggering the daily offset threshold. However, under the new rule set, the daily offset threshold will be 240 lbs/day. Can I submit a permit application to raise my daily permit limit to 239 lbs/day of ROC?

A1: Yes, you may submit an application to increase your permit limit to 239 lbs/day as long as you apply BACT to the process and perform an AQIA. Please note that trying to evade the BACT or AQIA requirements by submitting multiple smaller permit applications will not be allowed as this is considered circumvention and would be considered a rule relaxation under SB 288.

Q2: My solvent-using facility currently has a permit limit of 24 lbs/day of ROC to keep the facility from triggering BACT requirements. After the revised rules are adopted, can I submit a permit application to raise my daily permit limit by an additional 24 lbs/day without triggering BACT requirements?

A2: Yes, an existing facility can increase their permitted emissions by up to 24 lbs/day one time after the rules are adopted without triggering BACT requirements. The first permitted emissions increase will be considered a new project. Per the definition of “project” in proposed Rule 801, any subsequent applications for emissions increases due primarily to an increase in throughput or usage not associated with any new or modified equipment will be considered part of that project, regardless of time between permit applications. Therefore, any subsequent application to increase permitted emission limits due primarily to an increase in throughput or usage will be added to the first permitted emissions increase for purposes of determining BACT requirements.

Q3: *My PTE is currently over 25 tpy. For a single emission unit, if the daily PTE will increase (e.g. as a result of a failed source test), but the annual PTE will remain at or below the previous permitted limits (e.g. through an enforceable throughput limit), are offsets required?*

A3: No, if the annual PTE will not increase for that single emission unit, offsets are not required for the project, regardless of the daily PTE. This guidance also applies to sources that are over the 240 lb/day daily offset threshold. If the scenario was different in that there was an increase in the annual emissions from this single unit and the source requested a decrease in PTE from a different unit, then offsets would be required for the increase in the annual PTE from the single unit (this would be viewed as netting and the District does not allow sources to net out of offsets).

Offset Exemptions – Equipment Replacements

Q1: *What does functionally equivalent mean?*

A1: In the context of Rule 802’s offsets exemption, we chose the term “functionally equivalent” to separate it from the term “functionally identical.” The later term is used by air districts to exempt “routine” identical replacements from permit all together. The District is not proposing a permit exemption, rather we are proposing a qualified exemption from offset requirements. The functional equivalent replacement exemption is intended to help modernize older dirtier equipment and is only to be used on like-for-like replacement projects (e.g., a boiler for a boiler, an engine for an engine, etc.). The exemption was not intended to allow substantive changes in how the process works, and the definition of “functional equivalent” is only intended for like-for-like replacements. Examples of replacements that do not include: replacing a boiler with a turbine, or replacing a compressor engine with a CHP cogeneration engine.

As used in this context, we are using the term equivalent since it has a broader definition than “identical.” We recognize that equipment replacements and process modernizations would be hampered by limiting the replacement equipment to the exact manufacturer and model number of the original equipment. The overarching basis for the District’s approval for use of this offsets exemption is whether or not the actual emissions after installation of the replacement equipment can reasonably be expected to be the same or less than before.

Q2: *Which pollutants must I apply BACT to in order to qualify for the Rule 802 equipment replacement offsets exemption?*

A2: To use the exemption, you must apply BACT for the specified pollutant that exceeded the offset threshold. If multiple offset thresholds are exceeded, you may choose to use the offset exemption for one pollutant (which would require BACT), and provide ERCs for the other pollutant (which would not require BACT).

Q3: What if the type of equipment I am replacing does not have a current BACT standard for the pollutant in question?

A3: This question addresses the situation where there is no achieved-in-practice BACT standard for the pollutant in question. You have two options. One is to create a new BACT standard using the District's case-by-case technically feasible/cost-effective process. If this process does not result in the creation of a new BACT standard, then the second option would be not to use the exemption and provide offsets for the pollutant question. Of course, the applicant may simply provide offsets for the pollutant in question and not go through the case-by-case BACT process described above.

Q4: If I use the equivalent replacement offsets exemption, can I still generate ERCs from the equipment that is being removed?

A4: No, you cannot generate ERCs from the removal of equipment if you are using the equipment replacement offsets exemption. You can choose to either generate ERCs or be exempt from offset requirements, but not both.

Q5: Can a functionally equivalent replacement be rated at a higher capacity than the unit it is replacing and still qualify for the Rule 802 offsets exemption? For example, can I replace a 500 bhp engine with a 550 bhp engine and still qualify for this exemption?

A5: Yes. In general, as long as the District determines that the replacement equipment meets the offsets exemption requirements (i.e. functionally equivalent, no increase in PTE, applies BACT, does not debottleneck the process), it can qualify for the exemption, even if it has a slightly higher rated capacity. This determination will be made by the District on a case-by-case basis using the overarching basis for the District's creation of this exemption; whether or not the actual emissions after installation of the replacement equipment can reasonably be expected to be the same or less than before.

Q6: If I replace an existing unit with a functionally equivalent unit meeting BACT requirements, can I increase my permitted hours of operation or throughput limits as long as the PTE from the replacement unit is equal to or lower than the previous unit and still be exempt from offset requirements?

A6: No. This would be considered debottlenecking, and therefore does not meet requirements of the equipment replacement exemption.

Q7: Can the replacement of a burner in an external combustion unit qualify for the equipment replacement offsets exemption?

A7: Yes. A burner replacement is considered a major modification, and therefore can qualify for the equipment replacement offsets exemption.

Offset Exemptions – Emergency Engines & Rule 361 Boilers

Q1: Can a turbine used to power an emergency standby generator qualify for the Rule 802 emergency engine exemption?

A1: No, turbines used to power emergency generator sets cannot use the Rule 802 emergency engine offset exemption. The District's previous permit exemption language that existed in 2005, prior to the implementation of the State's Airborne Toxic Control Measure, was for all emergency *piston-type* internal combustion engines. It did not include gas turbine engines. The District has clarified

this discrepancy by adding language to Rule 802.B.4, which states that it must specifically be a *piston-type* engine.

Q2: *Under the previous NSR rules, the replacement of an existing boiler subject to Rule 361 was not assessed an NEI "I" term, and therefore not subject to offset requirements, if the unit was being replaced in order to comply with the rule requirements. Is this type of replacement still exempt from offset requirements under the revised NSR rules?*

A2: Yes. Section B.3 of revised Rule 802 exempts projects that meet the requirements of California Health and Safety Code Section 42301.2 from offset requirements. The first time replacement of an existing Rule 361 boiler with a new boiler or burner, rated equal to or less than the existing boiler, to comply with Rule 361 emission requirements would meet the requirements of California Health and Safety Code Section 42301.2, and therefore be exempt from offsets.

Miscellaneous

Q1: *Which NSR rules will apply to a permit that is in process when the new rules are adopted? For example, what happens to a permit that was deemed complete under the previous NSR rules, but is not issued until after the revised NSR rules are adopted?*

A1: The revised NSR rules took effect the day they were adopted, and your permit will be processed under the NSR rules in effect on the day your permit is issued.

Q2: *Since E/S diesel generator engines are exempt from offsets, do I still include their emissions in the daily and annual PTE calculations for my stationary source?*

A2: Yes, the PTE for the source includes all permitted emission units, including ES diesel generator engine. By default, the District uses the M&T hours for the engine (typically 2 hr/day and 50 hrs/yr for new engines).

Q3: *Can I "bubble" my PTE emissions or otherwise create a plant-wide PTE limit and therefore avoid NSR requirements such as BACT and offsets?*

A3: No. This District does not use the plant-wide PTE limit (or bubbling) concept for our permit program. Our NSR program is predicated on the concept of a project, PTE and the stationary source.

Q4: *What are the requirements if a company replaces the burner on their external combustion unit (e.g., boiler, steam generator, process heater, kiln, furnace, dryer)? Would this require a permit or be subject to NSR?*

A4: Replacing the burner on an existing external combustion unit triggers NSR and permitting requirements because it is a modification that goes beyond routine maintenance or repair. We must first determine if BACT is required. We calculate the potential to emit for this project based on the lower of the two following factors: (1) applicable rule emission standard (e.g., Rule 360, 361 or 342, depending on the rating of the new burner), or (2) the uncontrolled AP-42 emission factor if the unit is not subject to a regulatory standard. The company may not propose an emission factor lower than the existing applicable rule standard as a way of lowering the PTE for this BACT applicability test, even if the unit is already permitted below the rule standard. BACT is triggered if the sum of the potential to emit of all units associated with the project is greater than the BACT thresholds in Rule 802. Some examples help clarify this:

- Example 1: A source has an existing Rule 342 unit that is permitted at 30 ppmv NOx. They have proposed to replace the burners in this unit with new burners that meet 20 ppmv NOx. The first step in the analysis is to calculate the PTE based on the Rule 342 NOx standard of 30 ppmv. If the unit's PTE exceeds the Rule 802 BACT threshold, then the new burners must meet current BACT standards (e.g., 9, 7 or 5 ppmv NOx, depending on the rating of the unit). If the BACT threshold is not exceeded, then the proposed 20 ppmv burners are acceptable.
- Example 2: A source has an asphaltic concrete drum dryer with a conventional burner (not low NOx). They propose to replace the burner with a unit that meets 60 ppmv NOx. The first step in the analysis is to calculate the PTE based on the AP-42 uncontrolled NOx emission factors since our District does not have a control measure for this source type. If the unit's PTE exceeds the Rule 802 BACT threshold, then current BACT standards apply. If the PTE, based on the uncontrolled AP-42 emission factors, is less than the BACT thresholds, then the proposed 60 ppmv NOx burners are acceptable.
- Example 3: A source has an existing Rule 342 unit that is permitted at 20 ppmv NOx. This was a prior BACT determination made 15 years ago. They have proposed to replace the burners in the unit with new burners also rated at 20 ppmv. The first step in the analysis is to calculate the PTE for the new burners based on the applicable Rule 342 limit of 30 ppmv NOx. If this calculated PTE exceeds the BACT threshold in Rule 802, then the new burners must meet current BACT standards (e.g., 9, 7 or 5 ppmv NOx, depending on the size of the unit). If the BACT threshold is not exceeded, then the new burners must continue to meet the existing BACT standard for the existing unit.

An AQIA would be performed if the project PTE exceeds the Rule 802 AQIA thresholds or if the District determined that an AQIA was needed. Offsets would be required if the source's post project PTE exceeded the offset thresholds of Rule 802. The replacement project could potentially qualify for the Rule 802.B.2 replacement exemption or the company could apply for ERCs for the removal of the older burners.

Q5: *A source that currently triggers offsets buys a facility that will become part of the same stationary source based on shared property boundaries. Will the source that is buying the property be required to provide emission reduction credits for the PTE increase from the purchase of the new property?*

A5: No, this is simply treated as a transfer pursuant to Rule 203. There are no NSR implications until the combined source submits an ATC permit application for a new project.

Q6: *Is there a de minimis level below which offsets are not required?*

A6: Yes. If the annual emissions increase is 0.00 tpy (after rounding), then ERCs will not be required. So, any increase that is less than 0.005 tpy is not required to provide ERCs. Any increase at or above 0.005 tpy does require ERCs.

Q7: *Are PM offsets required under Rule 802?*

A7: Yes, see Table 3. PM is considered an attainment pollutant per the Rule 102 definitions of attainment pollutant and affected pollutant (particulate matter is the same as total suspended particulates).

Q8: *Can a source that triggers offsets permit a spray booth at a low PTE and then every 18 months increase the PTE for the spray booth for a short period, provide ERCs for the increase and then re-permit the spray booth back to the lower PTE levels and return the ERCs to the Source Register?*

A8: No. The new spray booth must be permitted at the project's reasonable worst-case PTE scenario. This would be an invalid and inconsistent use of the short-term ERC process that was initiated under the August 2016 NSR updates.

Q9: *If a company has a project that is offset by ERCs, can they later reduce their source PTE from "other" equipment at the facility and get some (or all) of the ERCs returned since the source-wide PTE has been reduced?*

A9: No. The project that triggered the offsets needs to have the ERCs dedicated to the increase for the life of that equipment/emissions increase. If the source's reduction in PTE also results in an "actual emissions reduction", then the company would be able to create new ERCs via the Rule 806 process. See also [P&P 6100.057](#) (Re-Use of Existing Emission Reduction Credits).