**1. Current rule language, definition of major modification, 340-200-0020(71):**

(71) "Major Modification" means any physical change or change in the method of operation of a source that results in satisfying the requirements of both subsections (a) and (b) of this section, or of subsection (c) of this section for any regulated air pollutant. Major modifications for ozone precursors or PM2.5 precursors also constitute major modifications for ozone and PM2.5, respectively.

(a) Except as provided in subsection (d) of this section, a PSEL that exceeds the netting basis by an amount that is equal to or greater than the significant emission rate.

(b) The accumulation of emission increases due to physical changes and changes in the method of operation as determined in accordance with paragraphs (A) and (B) of this subsection is equal to or greater than the significant emission rate.

(A) Calculations of emission increases in subsection (b) of this section must account for all accumulated increases in actual emissions due to physical changes and changes in the method of operation occurring at the source since the applicable baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations in OAR 340 division 224 for that pollutant, whichever time is more recent. These include fugitive emissions and emissions from insignificant activities.

(B) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation.

**2. Proposed rule language in Division 224, section 0025, with corrections:**

(2)(a)(A) A PSEL or actual emissions that exceed the netting basis by an amount that is equal to or greater than the SER; and

(B) The accumulation of emission increases due to physical changes and changes in the method of operation, since the later of the dates in subsections (1)(a) through (1)(c), is equal to or greater than the SER. For purposes of this paragraph, emission increases shall be calculated as follows: For each unit with a physical change or change in the method of operation occurring at the source since the later of the dates in subsections (1)(a) through (1)(c) as applicable for each pollutant, subtract the unit’s portion of the netting basis from its post-change potential to emit taking into consideration any federally enforceable limits on potential to emit. Emissions from categorically insignificant activities, aggregate insignificant emissions, and fugitive emissions must be included in the calculations.

(b) For purposes of this section:

(A) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation.

Current and new rule language, side by side. The highlighted text is essentially the same in both columns (other than use of abbreviations and minor grammatical changes).

|  |  |
| --- | --- |
| Current | New (proposed) |
| (a) Except as provided in subsection (d) of this section, a PSEL that exceeds the netting basis by an amount that is equal to or greater than the significant emission rate.  (b) The accumulation of emission increases due to physical changes and changes in the method of operation as determined in accordance with paragraphs (A) and (B) of this subsection is equal to or greater than the significant emission rate.  (A) Calculations of emission increases in subsection (b) of this section must account for all accumulated increases in actual emissions due to physical changes and changes in the method of operation occurring at the source since the applicable baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations in OAR 340 division 224 for that pollutant, whichever time is more recent. These include fugitive emissions and emissions from insignificant activities. | (2)(a)(A) A PSEL or actual emissions that exceed the netting basis by an amount that is equal to or greater than the SER; and  (B) The accumulation of emission increases due to physical changes and changes in the method of operation, since the later of the dates in subsections (1)(a) through (1)(c), is equal to or greater than the SER.  For purposes of this paragraph, emission increases shall be calculated as follows: For each unit with a physical change or change in the method of operation occurring at the source since the later of the dates in subsections (1)(a) through (1)(c) as applicable for each pollutant, subtract the unit’s portion of the netting basis from its post-change potential to emit taking into consideration any federally enforceable limits on potential to emit. Emissions from categorically insignificant activities, aggregate insignificant emissions, and fugitive emissions must be included in the calculations. |
| (B) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation. | (b) For purposes of this section:  (A) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation. |

**3. Examples of possible rule interpretation:**

Example 1

Existing emissions Unit A’s portion of the NB is 50 tpy. Unit A is modified (i.e. physical change). Before the mod, Unit A’s capacity was 200 tpy, but PSEL is based on 50% operation, so its portion of the PSEL was 100 tpy.

After the mod, the capacity is 150 tpy. Assume the source also wants to run it at 100%, so they request a PSEL increase. The increases for the purpose of the rule is:

Section (A), PSEL increase: 150 (capacity after mod) – 100 (portion of PSEL before mod) = 50 tpy.

Section (B), accumulation of increases: 150 (capacity after mod) – 50 (portion of NB) = 100 tpy.

Example 2

Assume Unit A existed during the baseline period and has not been modified. Section (b)(A) of the rule says for units that existed during the baseline period “increases due *solely* to increased use…are not included”. Two possibilities:

**Possibility 3.1:**

The source requests an emission increase for Unit A to go to 100% usage, but there is no physical change. The PSEL increase is 100 tpy, but NSR is not triggered because this increase is not counted per section (b)(A).

Later, Unit A is modified and emissions are reduced to 75% of the former rate; i.e. emissions are *decreased* by 50 tpy. For section (a)(A), the PSEL is reduced by 50 tpy (for a net increase of 50 tpy over the PSEL that existed before the increase to 100% use of Unit A). For section (a)(B), since the physical change reduces emissions NSR is not triggered.

Any future calculation of emission increases under section (a)(B) will assign a value of zero for Unit A. The rule does not count “increases and decreases”, it only counts increases; compare this language to the definitions of *major source* and *federal major source*, where these definitions explicitly state “increases and decreases”.

**Possibility 3.2:**

Unit A is modified such that emissions are reduced to 75% of the former rate. The PSEL is not changed.

Under section (A), the PSEL increase is zero.

Under section (B), the increase is 100 tpy: 150 (capacity after the mod) – 50 (portion of NB) = 100 tpy.

NSR could be triggered if the PSEL were already over the netting basis by an SER or more.

**4. Question:**

Should both scenarios above result in the same outcome? If we want to make them have the same outcome, there are two possibilities:

**Possibility 4.1:**

Revise the section of the rule for units that existed during the baseline period (section (b)(A)), such that physical changes or changes in the method of operation that result in a decrease in the capacity of the unit are not counted. This would always exclude such units from the calculation of increases.

Comment: I don’t believe Possibility 4.1 has ever been contemplated.

**Possibility 4.2:**

Emission increases shall be calculated as follows: subtract the unit’s portion of the netting basis from its post-change potential to emit taking into consideration any federally enforceable limits on potential to emit. (*This is the proposed rule language*).

In both examples when Unit A is modified, the increase is calculated using Unit A’s PTE. Absent an enforceable limit, PTE = capacity. In example 1, the increase at the time of the mod is 150 (PTE) – 50 (NB) = 100 tpy. In example 2, the increase at the time of the mod is the same: 150 (PTE) – 50 (NB) = 100 tpy. In both cases, NSR could be triggered if the PSEL test is met. This result appears to be consistent with the current language of the rule.

**5. Conclusion:**

The proposed language for major modification is exactly what DEQ intends.

With respect to section (a)(A), the PSEL test, this is the only test where ***netting*** is allowed; i.e. both increases and decreases are counted.

With respect to section (a)(B), the accumulation of emissions increases due to physical changes and changes in the method of operation, netting is not allowed; i.e. only emissions increases are counted.

Example: A source can add a new unit and retire an existing unit, and:

* The PSEL increase from the new unit can be canceled out (netted out) by the PSEL decrease from the retired existing unit.
* For the second test (section (a)(B)), only the increase from the new unit counts towards the accumulation of emissions increases. The decrease in emissions from the retired unit does not count in this test.

Therefore, PSD is triggered?