**340-224-0025 Major Modification**

(1) "Major Modification" means any physical change(s) or change(s) in the method of operation of a source where section (2) or (3) are satisfied for any regulated pollutant subject to Major New Source Review as specified in subsection (c) of the definition of regulated pollutant in division 200 since the later of:

(a) The baseline period for all regulated pollutants except PM2.5;

(b) May 1, 2011 for PM2.5; or

(c) The most recent Major New Source Review action for that regulated pollutant.

(d) The date the netting basis is reset in accordance with OAR 340-222-0046(3)(d).

(2)(a) Except as provided in section (6), 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 (1)(a)-(d) that is equal to or greater than the SER.

(A) Emission increases in subsection (b) shall be calculated as follows: For each unit with a physical change or change in the method of operation occurring since the dates in paragraph (1)(a) through (d) 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.

(3) Any change at a source, including production increases, that would result in a PSEL increase of 1 ton or more for any regulated pollutant for which the source is a federal major source, if the source obtained permits to construct and operate after the applicable baseline period but has not undergone New Source Review.

(a) This section does not apply to PM2.5 and greenhouse gases.

(b) Changes to the PSEL solely due to the availability of more accurate and reliable emissions information are exempt from being considered an increase under this section.

(4) Major modifications for ozone precursors or PM2.5 precursors also constitute major modifications for ozone and PM2.5, respectively.

(5) If a portion of the netting basis or PSEL or both was set based on PTE because the source had not begun normal operations but was permitted or approved to construct and operate, that portion of the netting basis or PSEL or both must be excluded from the tests in section (2) until the netting basis is reset as specified in OAR 340-222-0046(3)(d) and 340-222-0051(3).

(6) The following are not considered major modifications:

(a) Except as provided in section (3), proposed increases in hours of operation or production rates that would cause emission increases above the levels allowed in a permit and would not involve a physical change or change in method of operation in the source.

(b) Routine maintenance, repair, and replacement of components.

(c) Temporary equipment installed for maintenance of the permanent equipment if the temporary equipment is in place for less than six months and operated within the permanent equipment's existing PSEL.

(d) Use of alternate fuel or raw materials, that were available and the source was capable of accommodating in the baseline period.

(7) When more accurate or reliable emissions information becomes available, a recalculation of the PSEL, netting basis, and increases/decreases in emissions must be performed to determine whether a major modification has occurred.

[ED. NOTE: This rule was moved verbatim from OAR 340-200-0020(71) and amended in redline/strikeout. See history under OAR 340-200-0020.]

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.055 & 468A.070
Stats. Implemented: ORS 468A.025 & 468A.035

**340-222-0051 Actual Emissions**

(1) The actual emissions as of the baseline period will be determined to be:

(a) Except as provided in subsections (b) and (c) and section (2), the average rate at which the source actually emitted the regulated pollutant during normal source operations over an applicable baseline period;

(b) The source-specific mass emissions limit included in a source's permit that was effective on September 8, 1981 if such emissions are within 10% of the actual emissions calculated under paragraph (a); or

(c) The potential to emit of the source or part of a source as specified in paragraphs (A) and (B). The actual emissions will be reset if required in accordance with section (3).

(A) Any source or part of a source that had not begun normal operations during the applicable baseline period but was approved to construct and operate before or during the baseline period in accordance with OAR 340 division 210 or 216, or was not required to obtain approval to construct and operate before or during the applicable baseline period; or

(B) Any source or part of a source of greenhouse gases that had not begun normal operations prior to January 1, 2010, but was approved to construct and operate prior to January 1, 2011 in accordance with OAR 340 division 210 or 216.

(2) For any source or part of a source or any modification of a source or part of a source that had not begun normal operations during the applicable baseline period, but was approved to construct and operate in accordance with OAR 340 division 210, 216 or 224, actual emissions of the source or part of the source equal the potential to emit of the source or part of the source on the date the source or part of the source was approved to construct and operate.

(3) For any source or part of a source whose actual emissions of greenhouse gases were determined pursuant to paragraph (1)(c)(B), and for all other sources of all other regulated pollutants that are permitted in accordance with the Major New Source Review rules in OAR 340 division 224 on or after May 1, 2011, the potential to emit of the source or part of the source will be reset to actual emissions as follows:

(a) Except as provided in subsection (b), ten years from the end of the applicable baseline period under paragraph (1)(c)(B) or ten years from the date the permit is issued under section (2), or an earlier time if requested by the source in a permit application involving public notice, DEQ will reset actual emissions of the source or part of the source to equal the highest actual emission rate during any consecutive 12-month period during the ten year period or any shorter period if requested by the source. Actual emissions are determined as follows:

(A) The source must select a consecutive 12-month period and the same 12-month period must be used for all regulated pollutants and all affected devices or emissions units; and

(B) The source must determine the actual emissions during that 12-month period for each device or emissions unit that was subject to Major New Source Review or for which the baseline emission rate is equal to the potential to emit.

(b) DEQ may extend the date of resetting by five additional years upon satisfactory demonstration by the source that construction is ongoing or normal operation has not yet been achieved.

c) Any emission reductions achieved due to enforceable permit conditions based on OAR 340-226-0110 and 0120 are not included in the reset calculation required in subsection (a).

(4) Regardless of the PSEL compliance requirements specified in a permit, DEQ may calculate actual emissions from a source or part of a source for any given 12 month rolling period using data that is considered valid and more representative of the source’s or part of a source’s emissions. Actual emissions must be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

[ED. NOTE: This rule was moved verbatim from OAR 340-200-0020(3) and amended in redline/strikeout.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.055 & 468A.070
Stats. Implemented: ORS 468A.025 & 468A.035

[See history under OAR 340-200-0020.]

**340-224-0070** **Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas**

Within a designated attainment or unclassified area, proposed federal major sources and major modifications at federal major sources of all regulated pollutants for which the increase in emissions exceeds the netting basis by an amount that is equal to or greater than the SER, except for any pollutant for which the area is otherwise designated,, must meet the requirements listed below.
(1) (a) Preconstruction Air Quality Monitoring:

(A) The owner or operator of a source must submit with the application an analysis of ambient air quality in the area impacted by the proposed project. This analysis, which is subject to DEQ's approval, must be conducted for each regulated pollutant potentially emitted at a SER by the proposed source or major modification.

(i) The analysis must include continuous air quality monitoring data for any regulated pollutant that may be emitted by the major source or major modification, except for volatile organic compounds except as allowed by paragraph (B).

(ii) The data must relate to the year preceding receipt of the complete application and must have been gathered over the same time period.

(iii) DEQ may allow the owner or operator to demonstrate that data gathered over some other time period would be adequate to determine that the source or major modification would not cause or contribute to a violation of an ambient air quality standard or any applicable PSD increment.

(iv) When PM10/PM2.5 preconstruction monitoring is required by this section, at least four months of data must be collected, including the season(s) DEQ judges to have the highest PM10/PM2.5 levels. PM10/PM2.5 must be measured using 40 CFR Part 50, Appendices J and L. In some cases, a full year of data will be required.

(v) Pursuant to the requirements of these rules, the owner or operator must submit for DEQ's approval, a preconstruction air quality monitoring plan. This plan must be submitted in writing at least 60 days prior to the planned beginning of monitoring and approved in writing by DEQ before monitoring begins.

(vi) Required air quality monitoring must be conducted using 40 CFR 58 Appendix A, "Quality Assurance Requirements for SLAMS, SPMs and PSD Air Monitoring" and with other methods on file with DEQ.

(vii) DEQ may allow the owner or operator to demonstrate that representative or conservative background concentration data would be adequate to determine that the source or major modification would not cause or contribute to a violation of an ambient air quality standard or any applicable PSD increment.

(B) DEQ may exempt the owner or operator of a proposed major source or major modification from preconstruction monitoring for a specific regulated pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that modeled competing source concentration plus the general background concentration of the regulated pollutant within the source impact area, as defined in OAR 430 division 225, are less than the following significant monitoring concentrations:

(i) Carbon monoxide; 575 ug/m3, 8 hour average;

(ii) Nitrogen dioxide; 14 ug/m3, annual average;

(iii) PM10; 10 ug/m3, 24 hour average;

 (iv) Sulfur dioxide; 13 ug/m3, 24 hour average;

(v) Ozone; Any net increase of 100 tons/year or more of VOCs from a major source or major modification subject to PSD requires an ambient impact analysis, including the gathering of ambient air quality data. However, requirement for ambient air monitoring may be exempted if existing representative monitoring data shows maximum ozone concentrations are less than 50 percent of the ozone NAAQS based on a full season of monitoring;

(vii) Lead; 0.1 ug/m3, 24 hour average;

(viii) Fluorides; 0.25 ug/m3, 24 hour average;

(ix) Total reduced sulfur; 10 ug/m3, 1 hour average;

(x) Hydrogen sulfide; 0.04 ug/m3, 1 hour average;

(xi) Reduced sulfur compounds; 10 ug/m3, 1 hour average.

(b) Post-Construction Air Quality Monitoring: After construction has been completed, DEQ may require ambient air quality monitoring as a permit condition to establish the effect of emissions, other than volatile organic compounds, on the air quality of any area that such emissions could affect.

(2) Best Available Control Technology (BACT). The owner or operator must apply BACT for each regulated pollutant or precursor(s) emitted at or above a SER. BACT applies separately to the regulated pollutant or precursor(s) if emitted at or above a SER over the netting basis. In the Medford-Ashland AQMA, the owner or operator of any proposed new federal major PM10 source, or proposed major modification at a federal major PM10 source must comply with the LAER emission control technology requirement in 340-224-0050(1), and is exempt from the BACT provision of this section.

(a) For a major modification, the requirement for BACT applies to the following:

(A) Each emissions unit that emits the regulated pollutant or precursor(s) and is not included in the most recent netting basis established for that regulated pollutant; and

(B) Each emissions unit that emits the regulated pollutant or precursor (s) and is included in the most recent netting basis and contributed to the emissions increase calculated in 340-224-0025 (2)(b) for the attainment pollutant or precursor(s).

(b) For phased construction projects, the BACT determination must be reviewed at the latest reasonable time before commencement of construction of each independent phase.

(c) When determining BACT for a change that was made at a source before the current Major NSR application, any additional cost of retrofitting required controls may be considered provided:

(A) The change was made in compliance with Major NSR requirements in effect at the time the change was made, and

(B) No limit is being relaxed that was previously relied on to avoid Major NSR.

(d) Modifications to individual emissions units that increase the potential to emit less than 10 percent of the SER are exempt from this section unless:

(A) They are not constructed yet;

(B) They are part of a discrete, identifiable larger project that was constructed within the previous 5 years and that is equal to or greater than 10 percent of the SER; or

(C) They were constructed without, or in violation of, DEQ's approval.

(3) Air Quality Protection:

(a) Air Quality Analysis: The owner or operator of a source must provide an analysis of the air quality impacts of each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed major source or major modification under OAR 340-225-0050, 340-225-0060, and 340-225-0070.

(b) For increases of direct PM2.5 or PM2.5 precursors equal to or greater than the SERs, the owner or operator must provide an analysis of PM2.5 air quality impacts based on all increases of direct PM2.5 and PM2.5 precursors.

(c) The owner or operator of a federal major source must not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level under OAR 340-202-0050(2). (4) Sources Impacting Other Designated Areas: The owner or operator of any federal major source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0520 for ozone areas or OAR 340-224-0550 for non-ozone areas, whichever is applicable.

[ED. NOTE: Section (1) of this rule was moved verbatim from OAR 340-225-0050(4) and amended in redline/strikeout.]

**NOTE**: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.025
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92, Section (8) Renumbered from 340-020-0241; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0245; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1940; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

**340-224-0050**

**Requirements for Sources in Nonattainment Areas**

Within a designated nonattainment area, proposed federal major sources and major modifications at federal major sources of a nonattainment pollutant, including VOC or NOx in a designated ozone nonattainment area or NOx or SO2 in a designated PM2.5 nonattainment area, must meet the requirements listed below:

(1) Lowest Achievable Emission Rate (LAER). The owner or operator must apply LAER for each nonattainment pollutant and precursor emitted at or above the SER. LAER applies separately to the nonattainment pollutant or precursor(s) if emitted at or above a SER over the netting basis.

(a) For a major modification, the requirement for LAER applies to the following:

(A) Each emissions unit that emits the nonattainment pollutant or precursor(s) and is not included in the most recent netting basis established for that pollutant; and

(B) Each emissions unit that emits the nonattainment pollutant or precursor (s) and is included in the netting basis and contributed to the emissions increase calculated in 34-0224-0025(2)(b) for the nonattainment pollutant or precursor(s).

(b) For phased construction projects, the LAER determination must be reviewed at the latest reasonable time before commencing construction of each independent phase.

(c) When determining LAER for a change that was made at a source before the current Major NSR application, DEQ will consider technical feasibility of retrofitting required controls provided:

(A) The physical change or change in the method of operation at a unit that contributed to the emissions increase calculated in 340-224-0025(2)(b) was made in compliance with Major NSR requirements in effect when the change was made, and

(B) No limit will be relaxed that was previously relied on to avoid Major NSR.

(d) Physical changes or changes in the method of operation to individual emissions units that contributed to the emissions increase calculated in 340-224-0025(2)(b) but only increased the potential to emit less than 10 percent of the SER are exempt from this section unless:

(A) They are not constructed yet;

(B) They are part of a discrete, identifiable, larger project that was constructed within the previous 5 years and is equal to or greater than 10 percent of the SER; or

(C) They were constructed without, or in violation of, DEQ's approval.