**Summary of Public Comment and Agency Response**

Title of Rulemaking: New Source Review, Particulate Matter and Greenhouse Gas Permitting Requirements and Other Permitting Rule Updates

Prepared by: Jill Inahara and Mark Fisher Date: February 28, 2011

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| Comment period | The first public comment period opened October 15, 2010 and closed on November 24, 2010. Nineteen organizations submitted written comments on the proposed rules. DEQ held the following public hearings:   1. November 16, 2010, 6:00 pm   DEQ - Medford Regional Office  221 Stewart Avenue, Suite 201, Medford  7 attended and 0 testified.   1. November 17, 2010, 6:00 pm   DEQ - Bend Regional Office  475 NE Bellevue Drive, Suite 110, Bend  0 attended.   1. November 18, 2010, 6:00 pm   DEQ - Headquarters Office, Room EQC-A  811 SW Sixth Avenue, Portland  7 attended and 0 testified.   1. November 19, 2010, 1:00 pm   DEQ - Salem Regional Office  750 Front St NE, #120  7 attended and 0 testified.  Based on the comments received, DEQ decided to reopen the comment period to allow for additional comment on the different proposed options. The second comment period was from December 9,2010 through January 14, 2011. Fourteen organizations, some of which commented previously, submitted written comments on the revisions to the proposed rules. |
| Organization of comments and responses | Summaries of individual comments and DEQ’s responses are provided below. Comments are summarized in categories. The persons who provided comments are referenced by number. A list of commenters and their reference numbers follows the summary of comments and responses. DEQ responses are shown in *italics*. |
| Acronyms used in this document | ACDP = Air Contaminant Discharge Permit  BACT = Best Available Control Technology  DEQ = Oregon Department of Environmental Quality  EPA = United States Environmental Protection Agency  EQC = Oregon Environmental Quality Commission  NAA = nonattainment area  NAAQS = National Ambient Air Quality Standards  NOx = nitrogen oxides  NSR = New Source Review  PAL = Plantwide Applicability Limit  PM10 = particulate matter less than 10 microns in diameter  PM2.5 = particulate matter less than 2.5 microns in diameter  PSD = Prevention of Significant Deterioration  PSEL = Plant Site Emission Limit  PTE = potential to emit  SILs = significant impact levels  SMC = significant monitoring concentration  SO2 = sulfur dioxide  tpy = tons per year  VOC = volatile organic compounds |

| **Summary of Comments and DEQ Responses** | |
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| Actual emissions definition | Under the definition of "Actual Emissions", paragraph 0020(3)(b) should be amended to read *" ....but was permitted or approved to construct and operate ....* " to be consistent with the previous paragraph 0020(3)(a)(C). (7)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Actual emissions and PTE establishment | DEQ should ensure that its rule would allow using the most appropriate formula (as prescribed by EPA), or continuous emissions monitors to establish actual emissions and PTE. (12)  *Response:*  *The rule allows for the use of both of these methods to calculate actual emissions and potential to emit.*  *Actual emissions are the foundation for the baseline emission rate in most cases, which in turn establishes the netting basis and the Plant Site Emission Limit (PSEL or potential to emit). DEQ rules state that PSELs may be changed when errors are found or better data is available for calculating PSELs. To determine compliance with the PSELs, the rule states that one or more of the following methods may be acceptable:*   * *Continuous emissions monitors;* * *Material balance calculations;* * *Emissions calculations using approved emission factors and process information;* * *Alternative production or process limits; and* * *Other methods approved by the Department.*   *DEQ is currently updating guidance on how emissions should be calculated to ensure that the best data available is used. No change to the rule is proposed in response to this comment.* |

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| 1. a.   Actual emissions as PTE used to net out of PSD | DEQ clarifies that a source that has a PSEL set based on PTE cannot use the resulting netting basis to net out of PSD for changes that increase emissions elsewhere at the plant. This is a necessary part of DEQ’s proposal to give sources that were “permitted but not yet operating during the baseline period” an “actual emissions” amount equal to its PTE. That proposal is under protective and difficult to implement. To the extent that DEQ moves forward that program, however, this exclusion is absolutely essential to preventing sources from illegally expanding emissions from existing sources.  (12)  *Response:*  *The commenter is correct that the proposed rule would allow DEQ to reduce the netting basis - if it is based on PTE - to the highest actual emissions in the 10 years after the end of the baseline period or after permit issuance. This applies to sources that were permitted during the baseline period but did not begin operation and for sources that will go through New Source Review/Prevention of Significant Deterioration after this rule adoption. In addition, it will restrict a source’s ability to do a netting action until the baseline is reset based on actual emissions.*  *For sources that were permitted or approved to construct and operate but had not yet begun normal operation during the baseline period, existing rules use the PTE as their actual emissions. This provision has been in place since the Oregon program was initially approved by EPA and has not been difficult to implement. The provision ensures that permit applicants evaluate the air quality impacts of the maximum level of emissions that the new or modified source is capable of emitting.*  *DEQ agrees with the commenter that reducing the netting basis before it may be used in netting is more protective and is therefore proposing the reduction in netting basis from PTE to actual emission.* |
| 3b.  Actual emissions as PTE used to net out of PSD | Under DEQ’s proposal to reduce PTE to actual emissions for sources that were permitted but not operating in the baseline period, if a source makes a physical or operational change, it must ask for its “actual emissions” to be reset before it makes the change. This is essentially an up to 10-year look back period for actual emissions for a source “permitted but not yet operating.” This policy seems to insure that any facility making a physical or operational change would have at least 10 years of history to look back to in determining whether the change would significantly increase emissions. (12)  *Response:*  *The 10 year look back period is to establish actual emissions for a previously approved increase to PTE, not to determine if a previous increase triggers NSR/PSD. The reset is to reduce the netting basis already approved in an earlier modification before a source makes any future physical modifications. This reduction in netting basis will enable DEQ to initially permit a facility using a protective assumption that it could emit at its capacity, but ensure that only the emission level actually achieved during the first years of operation can be used to net a future increase out of NSR/PSD. This change aligns the netting basis closer to actual emissions. No change to the rule is proposed in response to this comment.* |
| 3c.  Actual emissions as PTE used to net out of PSD | For example, under DEQ’s formulation, a source that has a 2000 – 2010 baseline (either a reset PTE or actual emissions) that decides to make a physical or operational change in 2030 could be exempt from permitting and control requirements if they remained under that 2000 – 2010 baseline, even if they had not actually emitted that much for many years, and even if a large number of smaller sources (and cars, residential emissions, etc.) increased the burden of the pollutant in the air shed. (12)  *Response:*  *Assuming that the reduction in emissions since the baseline period was voluntary, NSR/PSD would not be triggered for that source in the commenter’s example. One of the benefits of a fixed baseline period is that it creates an incentive for sources to make early voluntary reductions. With a floating baseline period used in other states, sources have an incentive to delay voluntary reductions until just before planned increases. If the decrease in actual emissions was due to the adoption of emission standards, the netting basis would be reduced by the amount of reduction required by rule. If the reduction was due to the shutdown of an emission unit, the unassigned emission rule (OAR 340-222-0045) would reduce the netting basis if it is greater than a source’s PTE. If a large number of smaller sources increased the burden of the pollutant in the air shed and the area becomes a nonattainment area, DEQ will create an attainment plan that will require air quality controls. No change to the rule is proposed in response to this comment.* |
| 3d.  Actual emissions as PTE used to net out of PSD | We do not support the proposed language that would require resetting of actual emissions if the source did not achieve its full emissions capacity within 10 years after commencing construction. This approach is bad public policy in that it encourages sources to emit at their maximum permitted level in order to preserve baseline. This also creates serious issues for sources that take a long time to complete construction as they will not have necessarily reached normal operations in enough time to establish a reasonable baseline emission rate. (9)  *Response:*  *DEQ is aware that this change may be a disincentive for sources to voluntarily implement early reductions. Therefore, the proposed rules have been revised for sources that voluntarily implement pollution prevention practices or operational, maintenance and work practice requirements in accordance with OAR 340-226-0110 and 0120. Emissions reductions required to reduce PTE to actual emissions will not include reductions achieved through these mechanisms. This provision will continue the program’s incentive for voluntary early reductions and remove the disincentive for maintaining maximum emissions to preserve baseline. In addition, the ten-year reset period may be extended to 15 years upon demonstration that construction is still underway or normal operation has not been achieved. Further, only the netting basis will be reduced, so only future modifications will be affected. The PSEL will not be reduced, so a source will still be able to utilize the full capacity of a unit that went through PSD without triggering PSD again.* |
| Aggregate insignificant emissions | OAR 340-200-0020(7)(h): The revision to the definition of "Aggregate insignificant emissions" adding a threshold for greenhouse gases needs to include language indicating that the 1,000 short tons value is measured as CO2 equivalent (CO2e). (7)  *Response:*  *The change was made to the proposed rule as suggested. Upon further consideration, DEQ has concluded that the aggregate insignificant emissions threshold for greenhouse gases should be the same as the GHG reporting threshold of 2,500 metric tons/year or 2,756 short tons/year.* |
| PM2.5 baseline emission rate and netting basis | A source should have the option of either taking the PM2.5 proportionate share of its PM10 netting basis or the actual PM2.5 emissions from the baseline period. (1, 2, 4, 6, 9, 11, 13, 14, 15, 16, 17)  We would prefer that the baseline values for new pollutants (PM2.5 & GHG) be set in proportion to pollutants that have already gone through the PSD process. (20)  We support setting a netting basis for PM2.5 based on the PM2.5 fraction of the PM10 netting basis with two caveats: 1) DEQ will increase the PM2.5 netting basis by up to 5 tons/yr to allow for sources that made changes in reliance on their PM10 netting basis, 2) sources utilizing existing capacity present in the baseline period can use existing equipment to set the PSEL. (1, 3, 13, 23)  Sources should not be allowed to choose between existing netting basis or highest actual emissions in the last 10 years for determining a netting basis for PM2.5. We recommend adoption of a 24-month period, as required by the federal program before NSR Reform. In no event should sources be allowed to reach back to higher pollution output before the baseline concentration year. All the same problems arise with this static baseline, but an added layer of complexity arises from the 5 ton per year “true-up.” (12)  If a facility shuts down one of two production lines because of the recent economic downturn, it should not be able to restart it five or ten years later without trigging PSD. (12)  *Response:*  *The commenters above provide differing views about the flexibility that a source should have to choose a baseline period and whether a source should be allowed a one-time 5 ton true-up. DEQ is concerned that allowing each source to select the most advantageous baseline period weakens the program and could arguably make Oregon’s program less stringent than the federal program, which is strictly prohibited.*  *DEQ is proposing to provide only one option. The PM2.5 netting basis and PSEL will be set based on the PM2.5 fraction of the PM10 netting basis and PSEL. Since there is so much overlap between these two pollutants, this ensures that the introduction of the new pollutant (PM2.5) doesn’t trigger any new requirements if a source is not making any physical modifications or production increases. In addition, it takes into account whether the source has gone through NSR/PSD for PM10. These numbers could diverge in the future as changes are made to the plant, so that either or both pollutants could trigger NSR/PSD or a PSEL modeling analysis.*  *Although it does add complexity, DEQ proposes that permit writers be allowed to make a one time true-up of up to 5 tons in the PM2.5 netting basis if needed to account for the difference in the significant emission rate for PM10 and PM2.5. This will avoid retroactively making a source subject to NSR/PSD for PM2.5. This is needed because the SER for PM2.5 is 5 tons lower than the SER for PM10, so without the true-up, a modification that was approved under the PM10 rules could be retroactively in violation of the PM2.5 rules. This one time true-up is only for previously approved modifications that increased PM10 emissions before PM2.5 became a regulated pollutant. All future modifications will continue to be examined for NSR/PSD applicability.*  *The PM2.5 PSEL is proposed to be the PM2.5 fraction of the PM10 PSEL. Since PSELs are based on existing equipment, sources will be able to use existing capacity in setting their PM2.5 PSEL if the PM10 PSEL allows the use of existing capacity. For some facilities, the PSEL is set at less than capacity so it does not allow for the use of full existing capacity. In these instances, the source could request an increase to full capacity in accordance with the PSEL rule. An increase in emissions due to utilizing existing capacity would not be subject to NSR/PSD, but may require an ambient air quality analysis that includes modeling.*  *In the example cited above regarding shut down of a production line, restarting that production line would not trigger PSD through Oregon’s or EPA’s program. In both programs, the use of existing capacity without a physical modification would not trigger PSD, so in this respect, the programs are identical.* |
| GHG baseline emission rate | We suggest that the Department revise its proposed regulations to allow dual options for how a source calculates its GHG baseline emission rate: either calculating baseline GHG emissions using production parameter or through the use of the actual GHG emissions from the baseline period. (1, 2, 4, 6, 9, 10, 11, 13, 14, 15, 16, 17, 21, 23)  If DEQ continues to let sources choose the baseline year from 2000-2010, it should add the sentence “The Department may allow the use of a prior time period upon a determination that it is more representative of normal source operation” in relation to GHGs. (1, 3, 6, 13, 23)  We also recommend that the rules be revised to clarify that if a source has gone through PSD for one combustion pollutant, it can set its GHG netting basis based on the production rates used in that PSD analysis. (1, 2, 4, 9, 11, 13, 14, 15, 16, 17, 21, 23)  We agree with the baseline emission rate for GHGs as being the actual annual emission rate during any consecutive 12 month period between 2000 and 2010. We also support the clarifications that actual emissions are calculated for those sources or portions of sources that have been permitted, but did not commence normal operation, during the baseline period. (9)  Sources should not be allowed to choose between existing netting basis or highest actual emissions in the last 10 years for determining a netting basis for GHG. DEQ should adopt a baseline emission rate definition that captures the existing actual air quality of an area and travels, with the rest of us, across time. We recommend adoption of a 24-month period as required by the federal program before NSR Reform. In no event should sources be allowed to reach back to higher pollution output before the baseline concentration year. (12)  *Response:*  *The commenters above provide differing views about the flexibility that a source should have to choose a greenhouse gas baseline period.*  *In the revised proposed definition of baseline period, the period for GHGs is a consecutive 12-month period between 2000 and 2010, so the baseline emission rate for GHGs will be the actual emissions in that highest 12-month period during those years. Sources will not be given a choice of either the most recent 10 years or the original 1977-1978 baseline period. DEQ is concerned that allowing each source to select the most advantageous baseline period weakens the program and could arguably make Oregon’s program less stringent than the federal program, which is strictly prohibited.*  *DEQ is proposing the most recent ten years as the baseline period for GHG because GHG is a completely new regulated pollutant. Determining actual emissions as of 1977-1978 could be problematic, especially since GHG emissions from processes are not necessarily tied to GHG emissions from combustion sources that are already included in permits. A more current baseline period for GHG will also align GHGs more closely with the federal program in the initial years of implementation. In addition, DEQ recognizes that there have been considerable economic swings recently that could affect a source’s actual emissions so DEQ is proposing a 10 year look-back period to establish the baseline period.*  *See the response in comment “State NSR/PSD program vs. federal program.”* |
| Potential to Emit used to establish baseline emission rate or NSR/PSD PSEL | The PSEL should be used to establish a baseline emission rate. The PSEL would change when new air permits are issued and would be a more realistic emission rate for the semiconductor industry than the PTE. It could be ten to twenty years before a semiconductor facility is fully built out. (11)  We believe that the current rules should continue to be used to establish the baseline emission rate and PSELs, for new and modified sources, based on the source's PTE. (2, 10)  We request that the Department confirm in its response to comments that in light of the proposed revisions to the definition of "actual emissions," the GHG baseline emission rate attributable to equipment will equal the potential to emit of that equipment where that equipment has been approved for construction prior to December 31, 2010 but has not yet begun normal operations by January 1, 2011. (9)  The use of PTE during the baseline period, or at initial construction, to set netting basis and PSEL overstates emissions, making it less likely that a source would later trigger NSR/PSD even when making a modification that would significantly increase actual pollution. A policy which bases determinations of significant emissions increases on actual emissions preceding the physical change, would avoid this problem. (12)  As DEQ is aware, the Clean Air Act PSD program intended to grandfather existing sources and slowly phase in technology designed to reduce emissions over time as capital improvements were made to aging facilities. By pairing an evaluation of available control technology, and potential capital expenditures on control technology, with a major capital project, Congress intended to avoid a bottleneck of facilities needing to install major equipment, and reasonably phase in controls. Effective implementation of the PSD program, with its dual goals of maintaining clean air and allowing for economic expansion, requires that emissions calculations be revisited on a regular basis (e.g., before a modification causing a significant increase in actual emissions). (12)  *Response:*  *The commenters above provide differing views about setting the baseline emission rate for sources that are permitted but not yet operating during the baseline period.*  *For sources that are permitted to construct and operate during the baseline period but that do not begin normal operations until after the baseline period, DEQ proposes to initially set the baseline emission rate equal to PTE. DEQ confirms that this also applies to the GHG baseline emission rate, which will initially equal the potential to emit of equipment that has been approved for construction prior to December 31, 2010 but has not yet begun normal operations by January 1, 2011.* *The initial netting basis for existing sources is the baseline emission rate. For new sources that go through NSR/PSD, DEQ proposes to continue setting the netting basis equal to the PTE because that ensures that the maximum air quality impact of the new source or modification is evaluated during permitting. If a new source does not go through NSR/PSD, then the netting basis is zero.*  *Past experience has shown that most sources never operate and emit at their PTE. Therefore, for sources that have baseline emission rates equal to the PTE, DEQ proposes to require that the “actual” emissions be reset from the PTE to the highest actual emissions ten or more years after the end of the baseline period for GHG sources. See the response in comment “Actual emissions as PTE used to net out of PSD.”*  *DEQ proposes that the same provision will be applied to new sources that have gone through NSR/PSD. The netting basis will be reset from PTE to the highest actual emissions during the 10 years after NSR/PSD permit issuance. An additional 5 years may be granted if it is demonstrated that a source had not achieved normal operations within the 10 year period.*  *This change will remove emissions from the netting basis that will likely never be emitted. It will not prevent the source from operating at the full capacity because the PSEL will not be reduced. However, it will prevent the source from using the “extra” potential emissions for netting a future modification out of NSR/PSD.* |
| Baseline emission rate definition - corrections | The language in the old definition of baseline emission rate already establishes a list of the only reasons a baseline can be changed, so the text about freezing adds confusion.  The second concern has to do with the use of term “the Department” in the discussion of how changes are made to the baseline rate. We are concerned that specifying that “the Department determines” could be relied on by a source in an enforcement action to argue that the baseline cannot be recalculated based on, for example, a material mistake or inaccurate statements by a source, unless it was the Department that made the determination that there was a mistake or inaccurate statements. (7)  *Response:*  *DEQ has proposed changes to the definition of baseline emission rate to clarify when it can be changed. The original reason for freezing the baseline emission rate was to prevent sources from asking for changes based on the discovery of “new” production information that is difficult to verify 30 years after the fact. Therefore, changes have been proposed that only allow the production basis to be changed upon discovery of a material mistake or an inaccurate statement. The word “Department” has also been removed from the definition to allow others to discover a material mistake.* |
| GHG PSELs greater than netting basis | We request DEQ clarify that that GHG PSD does not apply for sources that seek to establish a GHG PSEL that is greater than the significant emission rate over the netting basis as a result of utilizing capacity that existed in the baseline year. (15)  *Response:*  *Section (d) of the definition of major modification in OAR 340-200-0020 clearly states that 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 are not major modifications. Once the baseline emission rate is established, the PSEL may be increased to utilize the full capacity in accordance with the PSEL rule, OAR 340-222-041(3)(b). Since there is no ambient air quality standard or PSD increment for GHG, then there would be no requirement for an air quality* *analysis to approve an increase in the GHG PSEL.* |
| GHG baseline emission rate establishment | We request that the rules be revised so that the GHG baseline is established as part of the first permitting action for which an application is submitted after March 1, 2011. (1, 2, 4, 9, 11, 13, 14, 15, 16, 17)  *Response:*  *Because this rulemaking package will be considered by the EQC in April instead of February, as previously planned, and because new or modified major sources of GHGs alone will not be required to get permits until July 1, DEQ proposes to change the date when PM2.5 and GHGs will be added to permits. Permits that are on public notice before July 1, 2011 but not issued yet will not be changed to include PM2.5 and GHGs. Any other permits that are on public notice after July 1, 2011 must include PM2.5 and GHGs. The proposed rules have been changed to reflect this change in procedure.* |
| Baseline period | We understand that the Department is considering allowing the discharger to choose a year between 2000 and 2010. We see no reason not to choose this approach so long as the source commits to the year and does not change it once the year is elected. We would favor one that provides the greatest flexibility to all permittees. (5)  *Response:*  *Sources will be able to make a one-time choice of a consecutive 12-month period between the years 2000 and 2010 for the baseline period for greenhouse gases. The baseline period for PM2.5 will be 1977 or 1978, the same as the other NSR/PSD pollutants even though a baseline emission rate will not be established for PM2.5. Instead, the netting basis for PM2.5 will be established based on the PM2.5 fraction of the PM10 netting basis (if one exists). Using this approach, there is no need to establish a baseline emission rate for PM2.5.* |
| Baseline period for PM2.5 precursors | The baseline period for PM2.5 precursors should be consistent with the baseline period for PM2.5. Otherwise, sources will be routinely forced into PSEL review, PSD or nonattainment NSR for PM2.5 precursors even though PM2.5 does not trigger the same review. (1, 2, 4, 11, 13, 14, 15, 17)  *Response:*  *PM2.5 precursors (SO2 and NOx) are already regulated criteria pollutants under the NSR/PSD program. Since the initial PM2.5 netting basis is the PM2.5 fraction of the PM10 netting basis, PM2.5, PM10, SO2, and NOx will all have the same baseline period for most sources. If a source has triggered NSR/PSD for one pollutant and not the others, the netting basis will be based on different production rates for different pollutants, which is consistent with how the program is currently implemented. Introducing different baseline years for precursors would be administratively impractical. No change to the rule is proposed in response to this comment.* |
| Baseline period tied to baseline concentration year | We are concerned that DEQ’s proposal fails to adequately match the baseline period and baseline concentrations. If individual emissions levels are not set from the same date range as the monitoring data, then DEQ’s rules will not ensure compliance with the national ambient air quality standards (NAAQS) or PSD increment. If DEQ decides to implement the PM2.5 PSD program through the PSEL program, DEQ should mandate that the baseline emission rate be set for the same period for which DEQ has monitoring data, or at the very least implement stringent guidelines that direct the limited instances when a different baseline period may be chosen. (12)  *Response:*  *DEQ believes that it is not feasible to link the baseline period and the baseline concentration year. Instead, DEQ determines the actual emissions of sources during the baseline concentration year at the time that a PSD increment analysis is conducted.*  *The baseline period for emissions is the year that DEQ starts counting emissions increases and decreases from a source toward applicability of the NSR/PSD program. It is a fixed period for each pollutant, regardless of the source’s location.*  *The baseline concentration year is the year that DEQ starts counting emissions increases and decreases in an area for assessing consumption of the PSD increment, and it varies by pollutant and area of the state. Default baseline concentration years for assessing degradation of air quality are based on when DEQ initially made the determination that areas of the state were in attainment or nonattainment with an ambient air quality standard. Baseline concentration years have also been established for specific areas that were not in attainment with a standard but subsequently were re-designated to attainment.*  *Because the baseline concentration years are different for different pollutants and the baseline periods do not correspond to the baseline concentration years, DEQ does not rely on the baseline emission rates associated with a baseline period to assess the impacts of emission increases in an area. The analysis is case-by-case depending on the source and the range of influence of its emissions. If the emission increases from a new or modified source cause an impact greater than the significant impact level for a pollutant, then the emission increases since the baseline concentration year from other nearby sources must be evaluated along with the emissions from the new or modified source to determine whether a PSD increment could potentially be exceeded. Only the emission increases (and decreases) since the baseline concentration year must be evaluated, but in many cases, the total allowable emissions of the sources is used to evaluate the impacts as a conservative analysis. The inventory of emission increases since the baseline period may be evaluated in more detail if the initial conservative analysis indicates that the PSD increment could potentially be exceeded.*  *In this rulemaking DEQ proposes 2007 as the baseline concentration year for PM2.5 because 2007 is the middle year of the 3 years (2006 through 2008) when ambient monitoring was conducted to determine whether areas of the state are in attainment or nonattainment with the standards. DEQ does not propose establishing a baseline concentration year for GHG because there is no ambient air quality standard for GHG.*  *The baseline concentration year is not used in determining whether a NAAQS could potentially be exceeded. For the NAAQS analysis, the emissions from the proposed new or modified source along with other source emissions in the nearby area are modeled and the impacts are added to the background concentration to determine whether a NAAQS could potentially be exceeded. No change to the rule is proposed in response to this comment.* |
| Federal major source definition | OAR 340-200-0020(54): The revision to the definition of "Federal Major Source" is not consistent with the EPA requirements as set forth in the "Tailoring Rule." Essentially, there is a two-part test in order to determine a Federal Major Source with respect to GHGs. First, GHGs must be a regulated air pollutant, that is the source must have the potential to emit 100,000 tpy or more on a CO2 equivalent (CO2e) basis. Then the source must also have the potential to emit 100 or 250 tpy or more of an individual GHG on a mass basis. (1, 2, 4, 7, 9, 11, 13, 14, 17, 23)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Federal major source, major source and major modification definitions regarding fugitive emissions | We request that DEQ revise the definition of “major source” to exclude fugitive emissions from consideration except in relation to sources in one of the designated source categories. EPA’s Tailoring Rule is clear that fugitive GHG emissions need only be considered in determining PSD and Title V applicability for sources within one of the designated source categories. Nonetheless, although DEQ has stated that it intends to be no more stringent than that Tailoring Rule requires, it is proposing that fugitive GHG emissions must be included for all sources when determining PSD or Title V applicability. (1, 2, 4, 9, 11, 13, 14, 16, 17, 23)  *Response:*  *Fugitive emissions have always been included in determining whether a source is a major source in Oregon in accordance with OAR 340-224-0100:*  *“Fugitive emissions are included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents.”*  *In Oregon, fugitive emissions means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening. In the federal program, fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. If DEQ were to change the way fugitive emissions are handled, then the definition would also need to be changed. The proposed revisions to the definitions of federal major source and major source ensure that they are consistent with OAR 340-224-0100. This is a clarification of the rules and is not a change in implementation or policy. Including fugitive emissions in the calculation of all emission rates is also more protective of the environment. No change to the rule is proposed in response to this comment.* |
| Greenhouse gas definition | DEQ should revise the proposed definition of “greenhouse gas” to exclude CO2 emissions from biomass effective upon the date that EPA authorizes the removal of biomass GHG emissions from PSD consideration. EPA has promised to finalize its decision in 2011 on whether biomass related CO2 emissions must be counted in determining PSD applicability. If EPA concludes that the CO2 emissions from biomass should not be counted, then, consistent with Oregon’s policy of promoting responsible utilization of biomass, the Oregon rules should automatically implement the EPA position. (1, 2, 4, 11, 13, 14, 15, 17, 23)  As [former] Governor Kulongoski has repeatedly stated, biomass is key to Oregon's economic future as well as to reducing greenhouse gas emissions. DEQ should adopt rules that ensure that as soon as possible, the regulations will reflect the preference for the burning of renewable biomass as opposed to non-renewable fossil fuel. (16)  *Response:*  *On 01/12/2011, EPA announced its plan to defer, for three years, greenhouse gas permitting requirements for carbon dioxide (CO2) emissions from biomass-fired and other biogenic sources. By July 2011, EPA plans to complete a rulemaking to implement this deferral. During the three-year period, the EPA plans to seek input on critical scientific issues from its partners within the federal government and from outside scientists who have relevant expertise. Before the end of the three-year period, the agency intends to issue a second rulemaking that determines how these emissions should be treated or counted under GHG permitting requirements.*  *EPA will also plan to issue guidance shortly that will provide a basis that state or local permitting authorities may use to conclude that the use of biomass as fuel is the best available control technology for GHG emissions until the agency can complete an action on the three-year deferral in July.*  *DEQ has proposed a change to the definitions of “greenhouse gases” to exempt CO2 derived from biomass from PSD and Title V permitting during the three-year EPA deferral period.* |
| Sequestering of carbon based emissions | Many company owners will be faced with higher fees and administrative costs, without realizing the benefit of forest ownership that sequesters CO2 and GHG emissions. Starting in 2011 many forest owners in New Zealand have the options of receiving "carbon credits" and using these credits as offsets or selling them and receiving income for the sequestering of carbon based emissions. The current ODEQ and EPA policies do not take these issues into account for parties that own CO2 sequestering assets. (8)  *Response:*  *As noted in the comment, EPA did not address CO2 sequestering in the greenhouse gas tailoring rule. Because offsets are not required under the PSD program, the PSD program does not create a market for carbon credits and it is not necessary for DEQ to address CO2 sequestering in this rulemaking. If EPA establishes a requirement for carbon credits in a future rulemaking, DEQ will assess the need for state rules at that time. No change to the rule is proposed in response to this comment.* |
| Major modification definition | In Oregon, to qualify as a major modification, a change must result in "an increase in the PSEL" over the significant emission rate over the netting basis. The focus of the determination must be on whether actual emissions increase, not whether the permit limit changes. (12)  *Response:*  *The use of the PSEL to define whether a facility’s changes qualify as a major modification is the basis of Oregon’s NSR/PSD program. EPA evaluated and initially approved the DEQ NSR program in 1982 and more recently in 2003 as being equivalent or more stringent than EPA’s regulations on a program basis.*  *When determining whether NSR/PSD is triggered, DEQ requires sources to use projected potential emissions from the modification rather than projected actual emissions, as required by EPA. DEQ’s approach is more stringent because sources would trigger NSR/PSD earlier since potential emissions are higher than actual emissions.*  *Changes to the definition of major modification are proposed to clarify that the trigger for NSR/PSD is a “PSEL that exceeds the netting basis by an amount that is equal to or greater than the significant emission rate.” The current definition of major modification says that there must be a PSEL “increase” over the netting basis. This change is proposed to clarify past practice in implementing the NSR/PSD program. In some cases the PSEL could even decrease from the permitted value and NSR/PSD would still be triggered if the resultant PSEL is more than the netting basis by a SER. See the response to comment 25 “Netting basis definition.”* |
| Major modification definition allows automatic netting | A problem with Oregon's program is that it requires a "major modification" to result in an increase in permitted (not actual) emissions that is equivalent to an increase over the SER on a plant-wide basis. Instead of focusing on the pollution increase from the new emissions unit, Oregon's program determines whether an emissions increase is significant by reference to the entire facility. In this way, Oregon's program features "automatic netting" based on a permit limit from the 1970s, or in the case of one of the proposed rules, from the more recent baseline period. Thus, so long as the source had a PSEL in excess of emissions projected from the source after a physical or operational change, and never banked those emissions, no PSD permit is required. (12)  *Response:*  *Oregon’s NSR/PSD program does look at increases over the netting basis for the whole facility rather than individual emissions units. However, sources must accumulate ALL increases and decreases from ALL emissions units in determining whether NSR/PSD is triggered. This approach eliminates the ability of sources to disaggregate changes at a facility that are involved in a project (possible under the federal program) in order to avoid NSR/PSD. If NSR/PSD is triggered, sources are required to apply retrofit Best Available Control Technology to all the emissions units that contributed to the increase, not just the current project.*  *In 2001, Oregon’s PSEL and NSR rules were changed to reduce the concern described by the commenter as “automatic netting.” When a source shuts down an emissions unit, those emissions can potentially make the netting basis higher than the source’s current PTE. Unassigned emissions are the difference between the netting basis and what a source could emit based on its current physical and operational design. The PSEL rules were changed to limit unassigned emissions, and to establish the process for reducing unassigned emissions and the netting basis. Unassigned emissions that are removed from the netting basis cannot be used in future netting actions, nor can they be sold or banked.*  *The proposal to reset actual emissions and netting basis described in response to comment 3 will further reduce the opportunity for “automatic netting.” No change to the rule is proposed in response to this comment.* |
| Major modification definition – before PSD program established | What is particularly confusing is how a source could legally qualify for the definition of “major modification” that requires that sources have “obtained all permits to construct and operate after the applicable baseline period but have not undergone New Source Review?” If a source was permitted during the baseline period and had not begun normal operation, it should only get PTE if it “commenced” construction during the baseline period. (12)  *Response:*  *DEQ and EPA anticipated the possibility that a source that was permitted to construct would not begin construction immediately as provided for in OAR 340-224-0030 (2)(a):*  *Approval to construct becomes invalid if construction is not commenced within 18 months after the Department issues such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period for good cause.*  *A PSD permit is valid if the above criteria are met. Otherwise, the PSD permit would be terminated and a new permit would be required if construction were not commenced within the allowed time period. No change to the rule is proposed in response to this comment.* |
| Major modification definition – revised language | Under the definition of “Major Modification”, we found the new language in subparagraph (d) confusing. Based on the new language in the definition of “actual emissions” we understand that Oregon wants to allow a source to either reset the netting basis or exclude a portion of the netting basis when determining whether a new proposed change would be a major modification. We recommend that this provision more clearly spell out how a major modification would be determined when the netting basis hasn’t been reset (i.e., how you exclude a portion of the netting basis). (7)  *Response:*  *Changes have been made to this portion of the proposed definition of major modification to clarify the intent. For existing greenhouse gas sources and sources that add new equipment that are permitted at their potential to emit, the netting basis and the PSEL from these equipment will need to be tracked separately from the existing netting basis and PSEL of existing equipment.* |
| Major source definition | OAR 340-200-0020(70): The revision to the definition of "Major Source" has the same problem as the revised definition of "Federal Major Source" in that it doesn't correctly reflect the two-part test for GHGs. In addition, the 100,000 tpy threshold needs to include language specifying that it is measured as CO2 equivalent (CO2e). (1, 2, 4, 7, 11, 13, 14, 15, 17)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Major source definition to include emission decreases | We request that DEQ revise the proposed revisions to the definition of “major source” to allow the inclusion of emissions decreases. Given Oregon’s unique means of applying the term “major source” including future increases and excluding future decreases in emissions would force sources that were making net reductions to be considered major sources and be subject to requirements such as nonattainment new source review. (1, 2, 4, 11, 13, 14, 15, 17, 23)  *Response:*  *DEQ agrees that emission decreases should be in the calculation of potential to emit of a source. The change will also be made to the definition of federal major source.* |
| Netting basis definition allows thirty-year "lookback" period | Another problem with Oregon's PSEL approach is that the PSEL is not based on projected or actual emissions during a time-frame that is contemporaneous with the physical or operational change in question, but during the "baseline period." The baseline emission rate is then adjusted as rules change and future permitting decisions are made. The adjusted baseline is referred to as the “netting basis.” The resultant "netting basis" in many cases may not reflect actual emissions at any time that is reasonably contemporaneous with the physical or operational change in question. In fact, the "netting basis" reflects a thirty-year "lookback" period, in clear contravention of the federal regulatory floor. Thus, the PSELs are unenforceable on a practical level. (12)  *Response:*  *DEQ does agree that the netting basis may or may not reflect actual emissions that are contemporaneous with the physical or operational change in question. However, this does not mean the federal program is more stringent than the Oregon program. While modifications at individual facilities may be evaluated differently under the federal and Oregon programs, EPA has determined that the programs are equivalent overall. PSELs and netting basis provide a simple and enforceable mechanism for evaluating whether sources are subject to NSR/PSD as a result of physical changes or changes in the method of operation.*  *At the time of a physical or operational change, actual emissions may be more or less than the netting basis. This is because the PSEL could have been increased to allow utilization of existing capacity, and the source may be operating at higher capacity than in the baseline period or the emissions may have decreased due to voluntary reductions. If the contemporaneous actual emissions are greater than the netting basis, this component of the Oregon NSR/PSD test is a more stringent test than the federal. If the contemporaneous actual emissions are less than the netting basis, this component of the Oregon NSR/PSD test may be less stringent than the federal. In both cases, however, using the PTE after the physical change in the NSR/PSD test makes the Oregon test more likely to trigger NSR/PSD than if the projected actual emissions were used as in the federal test.*  *DEQ does not agree that PSELs are unenforceable. Each permit includes compliance monitoring in accordance with OAR 340-222-0080. This monitoring meets the federal requirement to be practically enforceable because it can be determined on at least a monthly basis. If a source violates the PSEL, DEQ is able to take direct enforcement action against the source.* |
| Netting basis definition | DEQ recently released an interpretation of “netting basis” in regards to PGE’s Boardman plant. This interpretation stated that decreases required by rule would take effect on the netting basis upon adoption by the agency. PGE had announced plans to build an entirely new generating facility at the Boardman site. Without this new DEQ interpretation of netting basis, PGE could have constructed that new facility without ever subjecting it to PSD review because their actual emissions were massively below their allowable emissions. PGE would not have had to increase their PSEL to allow operation of the new facility, and therefore would not trigger PSD review.  As commenters pointed out in response to DEQ’s proposed permit for PGE Boardman, which advanced this new interpretation, the interpretation would lead to absurd results, potentially subjecting facilities to PSD review for projects that decreased emissions. (12)  *Response:*  *A combination of existing rules together require that the netting basis be reduced at the time an emission standard is adopted, whereas the PSEL is reduced at the time a source is required to comply with the new emission standard. In response to the situation noted in the comment, DEQ developed an internal management directive to clarify how these rules work together. If the netting basis is not reduced at the time the rule requiring a reduction is adopted, the source could reduce emissions prior to the compliance date (in this case, up to 7 years later) and use the emission reductions to avoid PSD for other projects. This would result in a source using a rule-required reduction in netting, which is not allowed under Oregon’s federally approved State Implementation Plan.*  *The commenter mentioned that facilities could be subject to PSD review for projects that decreased emissions, which is correct. The two part test for whether a major modification is triggered is a physical change or a change in the method of operation and a PSEL that results in an increase over the netting basis by more than the significant emission rate. A source’s projected PSEL from the major modification could actually decrease from its current PSEL and still trigger NSR/PSD. This is because a source’s PSEL can be higher than the netting basis due to the use of existing capacity as long as it has not made a physical change or a change in the method of operation at the facility. The PSEL can also be higher than the netting basis because of previously approved increases due to physical modifications that did not trigger NSR/PSD. If the source then makes a physical change or change in the method of operation, the new PSEL can be lower than the existing PSEL but over the netting basis by more than a significant emission rate. Increases in the PSEL from the use of existing capacity must be tracked separately from increases due to physical modifications.*  *Example:*   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Year* | *Netting Basis*  *(tpy)* | *PSEL increase [existing capacity]*  *(tpy)* | *PSEL increase [new equipment]*  *(tpy)* | *PSEL*  *(tpy)* | *SER*  *(tpy)* | | *2000* | *100* | *30* | *20* | *150* | *40* | | *2009* | *100* | *0* | *45* | *145* | *40* |   *In the example above, NSR/PSD was not triggered in 2000 because the increase in PSEL over the netting basis for new equipment (20 tpy) was not over the SER. The change in 2009 did trigger NSR/PSD since the increase in the PSEL over the netting basis for new equipment (45 tpy) was greater than the SER even though the PSEL decreased from 150 tpy to 145 tpy. This clarification was made in the definition of major modification (see the response in comment “major modification definition”).* |
| Ozone precursor definition | OAR 340-200-0020(84): The new definition of "Ozone Precursor" should include language regarding the measurement methods similar to the language in the definition of "PM10" when used in context of emissions especially to distinguish between ambient NO2 and NOx emissions. (7)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Conditional test method citation | OAR 340-200-0020(95)(b): We assume ODEQ removed the conditional test method (CTM) citation because CTMs are no longer being developed. We recommend that other test method (OTM) 027 for PM2.5 and PM10, that has superceded CTM 040, be cited here. As with the current definitions of "PM" and "PM10," this definition needs to reference the appropriate EPA or ODEQ emissions measurement method in order to distinguish ambient PM2.5 from PM2.5 emissions. (7)  *Response:*  *EPA reference test methods for PM10 and PM2.5 (****Methods 201A and 202 - Methods for Measurement of Filterable PM10 and PM2.5 and Measurement of Condensable PM Emissions from Stationary Sources****) were promulgated on December 1, 2010 and became effective on January 1, 2011. These revised EPA methods have replaced Other Test Method (OTM) 27 and 28 and have been added to the proposed definitions of PM10 and PM2.5.* |
| Regulated air pollutant definition | OAR 340-200-0020(103)(a)(B): It isn't clear that the provision in the definition of "Regulated air pollutant" or "Regulated Pollutant" that references the national ambient air quality standards (103)(a)(B) includes any precursors to such pollutants. This should be clarified in the text. (7)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Volatile Organic Compounds definition | OAR 340-200-0020(148)(d): Note that paragraph (d) in the definition of “Volatile Organic Compounds” appears to be missing the last line. The EPA definition of the term in 40 CFR5l.100 includes a few more words and the identification of the actual compound subject to the provision. (7)  *Response:*  *The correction was made to the proposed rule as suggested.* |
| Significant impact levels | OAR 340-200, new Table 1: The new Table 1 SIGNIFICANT AIR QUALITY IMPACT includes Class III impact levels for SO2 that are higher than the Class II impact levels established by EPA. Oregon will need to submit a demonstration that such higher levels will still ensure protection of the NAAQS in Class III areas.  Also new Table 1 specifies Significant Air Quality Impact values for PM2.5 of 0.2 ug/m3 (annual arithmetic mean) and 1.0 ug/m3 (24-hour average) respectively. These differ from the corresponding Class II and III areas PM2.5 SILs of 0.3 ug/m3 (annual arithmetic mean) and 1.2 ug/m3 (24-hour average) established by EPA. Please clarify why these values are different. (7)  We believe that DEQ should establish PM2.5 SILs consistent with the federal SILs. (1, 2, 4, 10, 11, 13, 14, 15, 17)  *Response:*  *The Class III SO2 SILs will be changed to match EPA’s Class II SO2 SILs.*  *DEQ’s Class II and Class III SILs for PM2.5 adopted in the August 2010 temporary rules are lower than EPA’s values to be consistent with the lower SIL levels adopted in the early 1990’s for PM10 due to significant air quality problems in the Medford area. Upon reconsideration, DEQ proposes to adopt EPA’s PM2.5 SILs for all areas. The change was made to the proposed rule as suggested.* |
| Error in Table 1 | OAR 340-202-0210, Table 1: There is a typo in Table 1. For Class I areas, the PM10 increments should be 4 and 8 ug/m3 respectively for the annual arithmetic mean and 24-hour maximum respectively. (1, 2, 4, 11, 13, 14, 17)  *Response:*  *The changes were made to the proposed rule as suggested.* |
| GHG in CO2e | OAR 340-216-0020, Table 1 Part C (No.5): It must be clear that the 100,000 tons of GHG here is in terms of CO2 equivalent (CO2e), not mass emissions. See comments on OAR 340-200 above regarding GHG emission thresholds. (1)  *Response:*  *The change was made to the proposed rule as suggested.* |
| PM2.5 significant emission rate in Medford | We suggest that DEQ clarify the significant emission rates applicable for PM2.5 in Medford. The rates identified are for PM10/PM2.5 without any indication as to whether that is direct PM2.5, precursors or some combination of the two. Due to the different regulation of PM2.5, we do not believe that the Medford significant emission rates should include PM2.5 at all. (1, 3, 13, 23)  *Response:*  *The change was made to the proposed rule as suggested.* |
| Reporting requirement | OAR 340-218-0040(2) requires that Title V applicants supplement their applications during the time period where the application is being evaluated and acted on. This is very different from the apparently open ended requirement being proposed for ACDP sources. Because of the potentially far reaching impacts of this regulation, and the lack of discussion about it prior to proposal, we strongly urge the Department to withdraw the provision. If DEQ retains the provision, we request that similar language from the Title V rules be added so that it is clear that this requirement applies while the permit application is under review. (1, 2, 4, 11, 13, 14, 15, 17)  *Response:*  *The added language for Air Contaminant Discharge Permit applications comes directly from the Title V permit application requirements in OAR 340-218-0040(2): Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant must provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.*  *The duty to supplement or correct information extends beyond the period in which the application is being considered and acted upon. If it were limited to the evaluation period, an applicant could conceal certain facts and upon permit issuance could argue that is was relieved of the obligation to supplement or correct. Or an applicant could make a critical mistake and omit information that would have required the source to comply with a significant requirement and yet not be obligated to later raise the issue to DEQ. Based on concerns raised by the EPA in its priority sector review, this language was added to the ACDP application requirements. No change to the rule is proposed in response to this comment.* |
| GHG PSD applicability prior to July 1, 2011 | OAR 340-224-0010(5): This new applicability provision for GHGs needs to include language indicating that the 75,000 tpy value is measured as CO2 equivalent (CO2e). (7)  We request that the Department revise its GHG PSD applicability provisions proposed for inclusion in OAR 340-224-0010(5). We believe that what was intended was to require new Federal Major Sources that also have a GHG PTE of 75,000 tons/year to have to undergo PSD for GHGs. Likewise, we believe that existing Federal Major Sources that have a significant emissions increase of a non-GHG regulated air pollutant and a GHG emissions increase of 75,000 tons/year or more over the netting basis would be subject to PSD for GHGs. As proposed, the underlined elements are missing from the rule resulting in the Oregon proposed rule being far more stringent than the federal rules. (1, 2, 4, 9, 11, 13, 14, 17)  *Response:*  *The change was made to the proposed rule as suggested.* |
| GHG PSD applicability after July 1, 2011 | OAR 340-224-0010(6): This new applicability provision for GHGs needs to include language indicating that the 100,000 tpy value is measured as CO2 equivalent (CO2e) and that a new stationary source or an existing stationary source is subject to regulation when it emits, will emit, or has the potential to emit 100,000 tpy or more. (7)  We request that the Department revise its GHG PSD applicability provisions proposed for inclusion in OAR 340-224-0010(6). We believe that what was intended was to require existing Federal Major Sources to undergo PSD for GHGs only if they request a GHG emissions increase of 75,000 tons/year or more over the GHG netting basis. As proposed, the rule requires the source to be regulated even if the ultimate GHG PSEL requested does not exceed the netting basis by an SER or more. We suggest that the rule be changed to remove this possibility. (1, 2, 4, 9, 11, 13, 14, 17)  *Response:*  *The changes were made to the proposed rule as suggested.* |
| Additional requirements for sources in nonattainment areas | OAR 340-224-0050(3): The additional requirements for sources in nonattainment areas are only required to apply to sources that are major for the nonattainment pollutant. Since GHGs are not criteria pollutants and never will be nonattainment pollutants, these provisions need not apply to GHGs. However, if ODEQ does include GHGs here, it needs to include language indicating that the 100,000 tpy value is measured as CO2 equivalent (CO2e). (7)  *Response:*  *GHGs were removed from this section as suggested.* |
| OAR 340-224-0060(1) | For consistency and accuracy, the text in 0060(1) should be amended to read *" ... must apply BACT for each maintenance pollutant or precursor(s) emitted at* or above *a SER. "*  (7)  *Response:*  *The change was made to the proposed rule as suggested.* |
| BACT for PM2.5 precursors | We request that the Department revise its regulations to clarify that sources triggering BACT for a PM2.5 precursor (e.g. NOx out of a boiler) do not necessarily trigger BACT for direct PM2.5 coming out of an unrelated emission unit (e.g., a planer). Due to Oregon’s program being so different from the federal program in this regard, it is necessary to clarify that triggering BACT for a PM2.5 precursor would not then trigger BACT for all direct PM2.5 emission units, and vice versa. (1, 3, 13, 23)  *Response:*  *The Department agrees that BACT does not apply to direct PM2.5 or PM2.5 precursors if they are not emitted at a SER over the netting basis. The change was made to the proposed rule as suggested.* |
| BACT applicability | DEQ’s rules currently state that equipment installed after the baseline period must undergo BACT. However, we believe that this regulation should be revised to recognize that equipment authorized to be installed in the baseline period should not be subject to BACT when it is constructed. That would place equipment installed without authorization during the baseline period in a better position than equipment permitted, but not yet installed, during the baseline period. (9)  *Response:*  *DEQ agrees that if the emissions unit was included in the netting basis because it was permitted during the baseline period, then retroactive BACT would only apply to the emissions unit if it is modified and there is an increase in emissions. A change was already proposed that addressed this issue but an additional change was made for further clarification.* |
| OAR 340-224-0070(2)(a) | To be consistent with paragraph 0070(2), paragraph 0070(2)(a) should be amended to read *"For increases of PM2.5 precursors equal to or greater than the precursor significant emission rate,* .... ". (7)  *Response:*  *The change was made to the proposed rule as suggested.* |
| OAR 340-224-0070(5) | It is not clear why this new provision for sources impacting PM2.5 nonattainment areas is necessary. It appears to duplicate the requirement of 340-224-0070(2)(b). Since 340-224-0050(2) refers to 340-225-0090 both 0070(2)(b) and this new 0070(5) appear to require the same thing. (7)  *Response:*  *OAR 340-224-0070(5) was deleted from the proposed rule as suggested.* |
| PM2.5 Precursor Air Quality Analysis | In OAR 340-224-0070(2)(a), DEQ proposes to require that where a federal major source or a major modification at a federal major source results in an increase of PM2.5 precursors of an SER or more, the source must provide an analysis of PM2.5 impacts. However, there is no basis for an individual source to model indirect PM2.5 emissions. Therefore, the rule should be revised to state that the source must provide an analysis of ­direct­ PM2.5 air quality impacts. (1, 2, 4, 11, 13, 14, 17)  *Response:*  *As EPA stated in the preamble to the final rule* ***Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM2.5) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC):***  *“The impacts of PM2.5 precursors on ambient concentrations of PM2.5 cannot be determined from the dispersion models that EPA has currently approved for modeling individual PSD sources. Such models are not designed to consider chemical transformations that occur in the atmosphere after the precursor emissions have been released from the source. Consideration of these transformations is necessary to be able to add precursor impacts into the total modeled ambient PM2.5 concentrations for comparison to the SILs for PM2.5.*  *The technical tools needed to complete a comprehensive analysis of all emissions that contribute to ambient concentrations of PM2.5 are only in the developmental stage; nevertheless, we believe that it would be inappropriate to restrict the regulatory language in such a way that future regulatory amendments would be required to enable the inclusion of precursor impacts in the PM2.5 analysis as the necessary technical tools become available. Estimating techniques are being developed that will be able to be applied to the PM2.5 analysis in the near future, which could not be required if the regulatory language precluded them. We acknowledge the concerns that have been expressed by some commenters about the shortcomings of not considering the impacts of PM2.5 precursors under the PM2.5 air quality analyses. Accordingly, we believe that the new provision for applying the SILs for PM2.5 to the required analyses for the NAAQS and increments should not be self-limiting by specifying the use of only direct PM2.5 emissions. Instead, the new provision contained in this final rule provides that the test will be based on whether “the emissions increase … would cause … air quality impacts less than [the PM2.5 SILs].” See new 40 CFR 51.166(k)(2) and 52.21(k)(2). We believe that it would be more effective to rely on interim policy and guidance as appropriate to help determine the best methods available to make the required assessment of source impacts on ambient PM2.5 resulting from any emissions.”*  *No change to the rule is proposed in response to this comment.* |
| Baseline concentration definition | The clarification to the definition of "baseline concentration" is consistent with EPA's definition and the definition in section 169 of the Act. When submitting this regulation as a SIP revision, *Oregon* must demonstrate that the regulation is consistent with previous interpretations so it cannot be construed to be a relaxation. The old language could be interpreted to mean that all emission increases from new sources and modifications occurring after January 6, 1975 but before January 1, 1978 consume increment, while the new language could be interpreted to mean that only emission increases from major new sources and major modifications consume increment. (7)  *Response:*  *The proposed rule language for the definition of “baseline concentration” states: “Actual emission increases or decreases occurring before January 1, 1978 must be included in the baseline calculation, except that actual emission increases from any major source or major modification on which construction commenced after January 6, 1975 must not be included in the baseline calculation;”*  *The word “major” was added to this definition in division 225 to make it consistent with the definition in division 202. Upon further consideration, DEQ has concluded that “major” should not be added to source and modification in the definition of baseline concentration. When an air quality impact analysis is required under division 225, all permitted sources, not just “major” sources, are included in the modeling analysis, not in the baseline calculation (or background concentration). DEQ will change the proposed definition of baseline concentration in division 202 to be consistent with the definition in division 225.* |
| AQRV Analysis Guidance | A key impact of the regulation of PM2.5 will be the increased need to evaluate AQRVs. Therefore, as part of this GHG/PM2.5 rulemaking, we encourage the Department to update the date reference for the definition of “FLAG” in OAR 340-225-0020(6) to reference the new version published in the October 27, 2010 Federal Register. 75 Fed. Reg. 66125 (Oct. 27, 2010). (1, 2, 4, 11, 13, 14, 17)  *Response:*  *The change was made to the proposed rule as suggested.* |
| PM2.5 precursor offsetting | We urge the Department to clarify what is required under its rules in terms of PM2.5 precursor offsetting. It very difficult to understand what is required in terms of precursor offsetting and what is allowed/required in the event of inter-pollutant trading. (1, 2, 4, 11, 13, 14, 15, 17)  *Response:*  *The proposed rule has been clarified as suggested. EPA has determined that the relative efficacy of emissions reductions varies across pollutants and that a ton of direct PM2.5 is generally more effective than a ton of precursor emissions in reducing overall PM2.5 concentrations. Therefore, the EPA preferred trading ratios for PM2.5 and its precursors (NOx and SO2) are included in the proposed rules.* |
| Small-scale local energy projects | Even with the conditions provided in this paragraph, it may be too broad an assertion to state that a small-scale local energy project and associated infrastructure provides a net air quality benefit without conducting air quality dispersion modeling to confirm this. We are not aware of similar provisions in the SIPs of other states. Therefore, before Region 10 can consider this for inclusion in the Oregon SIP, we will need to consult with EPA Headquarters and other Regions. (7)  *Response:*  *The proposed rules change how small scale local energy projects are evaluated under Oregon’s rules based on recent changes to Oregon’s statutes resulting from House Bill 2952. EPA requires states to have minor source construction approval programs, in addition to the major source program described above, but gives states flexibility in how to do this. Oregon’s existing minor source construction approval program in effect applies major source NSR/PSD requirements to any source with emissions over the Significant Emission Rate. This is above and beyond what is required by the federal rules. HB 2952 revised how minor source construction approval works for small scale local energy projects in Oregon providing DEQ with greater flexibility on how to implement the program. The changes in the proposed rule still meet EPA’s general requirement to have a construction approval program for minor sources and is still protective of the environment. No change to the rule is proposed in response to this comment.* |
| Proposed option 1 | Option 1 fails to link PSELs to the baseline concentration in the air shed and therefore will not meet the PSEL program’s goal of ensuring compliance with NAAQS and PSD increment. DEQ provides little guidance on how the “fraction” will be established. There is no indication that DEQ will require further testing of the source to ensure that the fraction remains the same, potentially allowing massive increases in PM2.5 emissions and the resulting specific health effects. (12)  *Response:*  *DEQ is proposing to implement a variation of Option 1. The netting basis and PSEL for PM2.5 will be the fraction of the PM10 netting basis and PSEL. Since there is so much overlap between these two pollutants, this ensures that the introduction of the new pollutant (PM2.5) doesn’t trigger any new requirements if a plant is not making any modifications or production increases. The GHG baseline will be set based on the highest actual emissions in a 12-consecutive month period during the years 2000-2010.*  *DEQ does not agree that the PSEL program will not ensure compliance with the NAAQS or the PSD increment. See the response in comment “*Baseline period tied to baseline concentration year*.” See the responses in comments and regarding “Compliance with the NAAQS” and “Compliance with the PSD increment.”*  *DEQ will be providing guidance to permit writers on how the PM2.5 fraction of PM10 will normally be established. Source test data at the facility is the most reliable way to determine the PM2.5 fraction of PM10 emissions. The guidance will also include information on the cases when source tests will normally be required, along with the frequency to verify the PM2.5 fraction. Smaller sources of PM2.5 (less than 5 tons/year for each piece of equipment) will not normally be required to test because of the lower amount of emissions and limited resources. In this case, industry specific data available from trade associations or EPA’s* ***AP-42,* Compilation of Air Pollutant Emission Factors***, will normally be used to estimate PM2.5 emissions. AP-42 has been published since 1972 as the primary compilation of EPA's emission factor information. It contains emission factors and process information for more than 200 air pollution source categories. A source category is a specific industry sector or group of similar emitting sources. The emission factors have been developed and compiled from source test data, material balance studies, and engineering estimates.*  *The PM2.5 fraction of PM10 depends on the type of source. For natural gas combustion, 100% of PM10 is PM2.5. If data is not available on the PM2.5 fraction of PM10 and sources do not want to incur the expense of source testing, the most conservative estimate is to assume PM10, or even PM, is all PM2.5. This approach will be easiest for sources but will also cause increases at the source to trigger NSR/PSD earlier since the significant emission rate for PM2.5 is 10 tons/year (PM10 SER = 15 tons/year and PM SER = 25 tons/year). Once the source chooses to assume PM2.5 = PM10, that choice cannot be changed in the future, even if more accurate data is available. No change to the rule is proposed in response to this comment.* |
| Proposed option 2 | Option 2 would subject facilities to PSD for any increase over current PSEL and could lead to massive increases in *actual* pollution. By setting PSELs at PTE for ALL sources constructed after 1978, Option 2 would allow massive increases in actual emissions in the air shed and allow for violation of the NAAQS or PSD increment with impunity. Even more so than Option 1, Option 2 would wholly disconnect the PSEL program from the programs it is supposed to support, making the PSEL nothing more than a bureaucratic and accounting exercise in futility. (12)  *Response:*  *The commenter is correct in stating that Option 2 would disconnect GHG emissions from actual emissions today. DEQ is not recommending Option 2 for adoption. Changes have been made to the proposed rules to incorporate a modified version of Option 1 (see the response in comment “Proposed Option 1”).* |
| Proposed option 3 | Option 3 is better because it ties the baseline period to when DEQ actually has monitoring data, ensuring that the PSEL program actually meets its goal of ensuring compliance with the NAAQS and PSD increment. If adopted, DEQ should outline very specific requirements for when DEQ will diverge from the baseline period for setting baseline emission rates. (12)  *Response:*  *DEQ is not recommending Option 3 for adoption because it would create a different baseline for PM2.5 and PM10. Since the two pollutants are so closely related, adoption of this option would create significant implementation issues. In addition, DEQ does not believe it is necessary to align the baseline year with the baseline concentration year to ensure compliance with the increment. See the responses in comment “Compliance with the NAAQS” and comment “Compliance with the PSD increment.” Changes have been made to the proposed rules to incorporate a modified version of Option 1 (see the response in comment “Proposed Option 1”).* |
| Proposed option 4 | Option 4 is best. The PSEL program has failed to live up to what Oregonians expect and DEQ should move away from it. Option 4 is a good first step down that road. (12)  *Response:*  *After consulting with EPA about the strengths and weaknesses of the federal program and considering implementation issues, DEQ is not recommending adoption of Option 4 (see the response in comment 52 to “State NSR/PSD program vs. federal program). Changes have been made to the proposed rules to incorporate a modified version of Option 1 (see the response in comment “Proposed Option 1”).* |
| State NSR/PSD program vs. federal program | In the PM2.5/GHG regulatory proposal, the Department has indicated that it is considering adopting the federal PSD rules for greenhouse gases rather than keeping GHG regulation consistent with the regulation of other regulated air pollutants. We believe that this would be bad for Oregon and therefore encourage the Department to adopt regulations that treat GHGs consistent with how other regulated air pollutants are treated for the following reasons:   * The Oregon program has always had incentives under the PSEL program to reduce emissions and to operate equipment in as low-emitting a manner as possible. This excludes changes from PSD when these changed can be accommodated under the PSEL. * The Oregon program provides flexibility to expand production operations. * The Oregon program provides simplicity in determining NSR/PSD applicability, unlike the federal program where sources must rely on consultants to assist with their applicability determinations due to the complexity of the rules. This will be especially important if the rules affect smaller businesses in the future. (1, 2, 3, 4, 9, 11, 13, 14, 15, 16, 17, 18, 19, 23)   The commenters would prefer the adoption of the Federal Netting Method for GHG emissions because it does not place the facility at a competitve disadvantage when compared to other plants in other parts of the country. Any amendments to the DEQ program should bring the DEQ program closer to EPA’s Regulations. (6, 10, 12)  *Response:*  *The commenters provide differing views on whether to use the Oregon or federal netting approach for GHG.*  *Basic DEQ and EPA NSR/PSD Program Differences*  *DEQ’s NSR/PSD rules differ from EPA’s regulations in a number of fundamental ways.*   * *The DEQ program has lower major source thresholds, so smaller new sources and changes to smaller existing sources are subject to review.* * *The DEQ program utilizes a plant-wide cap approach to defining major modification rather than a contemporaneous net emissions increase approach as does EPA’s rules. The effect of this plant-wide cap approach is that some changes which would be subject to review under EPA’s rules are not subject under DEQ’s rules and vice versa.* * *DEQ accumulates all emissions increases and decreases from physical changes or changes in the method of operation since the baseline year or last major source permit, whichever is more recent, rather than just during a “contemporaneous” time period. This aspect of DEQ’s program creates an incentive for sources to voluntarily reduce emissions in order to avoid triggering NSR/PSD.* * *The PSEL rules have provisions that require the PSEL and netting basis to be reduced if emission reductions at the sources occur and make the caps excessively high.* * *The PSEL also eliminates the possibility of a gradual increase of emissions over time by piecemeal projects not triggering NSR/PSD. Under the federal rules, an increase or decrease in actual emissions is contemporaneous.* * *Changes which would result in increased emissions, but would not be considered modifications under EPA’s rules, are reviewed for compliance with standards and increments under DEQ’s PSEL program.*   *EPA evaluated and initially approved the DEQ NSR program in 1982 as being equivalent or more stringent than EPA’s regulations on a program basis and more recently in 2003.*  *Continued Implementation of Oregon NSR/PSD Program*  *After carefully considering all comments, DEQ has decided to recommend using the Oregon NSR/PSD program for both PM2.5 and greenhouse gases. Based on conversations with EPA Region 10, there are definite advantages of the Oregon program over the federal program, including simplicity in determining applicability of the program as noted by some commenters. The following list contains elements of the federal NSR/PSD program that make it potentially less stringent and more complicated than Oregon’s program:*   * *The ability to subtract from projected future actual emissions any increase due to demand growth* * *The ability to subtract from projected future actual emissions anything a source was capable of accommodating before the change that is unrelated to the change* * *The ability to disaggregate changes at a facility that are involved in a project* * *The question of whether emissions increases from debottlenecking should be included in the modification* * *The fact that fugitive emissions are not included in emissions increase for all source categories* * *Potential exemptions for routine repair and replacement* * *The ability to pursue the netting credits approach, which involves a 5-year contemporaneous period that is plant wide* * *The ability to pick different baseline years for each pollutant involved in a change.* * *The unenforceability of the projected actual emissions in the test of whether a major modification has occurred*   *In an area where the Oregon program may seem less stringent than the federal program, setting actual emissions at a source’s potential to emit, DEQ is proposing a change to the existing rules. See the response in comment “major modification definition.”*  Oregon’s NSR/PSD program was used as one of the models to support the development of the Plantwide Applicability Limit option in the federal NSR/PSD rules. *DEQ feels that the benefits of Oregon’s NSR/PSD program far outweigh any advantages of the federal program. Changes will be made to incorporate greenhouse gases into Oregon’s NSR/PSD program.* |
| Guidance on Federal PSD Program | Oregon’s PSEL program, like other DEQ innovative programs, is unique under the Clean Air Act. While this may be a source of pride for DEQ, it makes implementing the program difficult because, when faced by difficult questions about the program and how it operates, DEQ consistently makes ad hoc or irrational decisions without fully anticipating all of the potential consequences. Comparatively, the federal program is implemented by most other states and by EPA and therefore has a wealth of interpretive guidance on the implementation of the program. Implementation of the federal program would therefore save DEQ time and money and would reduce the number of ad hoc decisions DEQ has to make and revise. (12)  *Response:*  *As stated in response to comment 52 to “State NSR/PSD program vs. federal program” above, DEQ is proposing to continue to use the Oregon approach to netting in the NSR/PSD program for PM2.5 and greenhouse gases. Even though there is guidance on implementation of many aspects of the federal program, the program has similar complexity to the Oregon program and requires similar time and resources to implement. While implementation issues in the Oregon program often arise with regard to specific permitting actions, DEQ does not make ad hoc decisions regarding permitting issues. Decisions are made based on a legal review of the rules, Department guidance and past practices. No change to the rule is proposed in response to this comment.* |
| Compliance with the NAAQS | The PSEL program is intended to ensure compliance with the NAAQS and PSD increment. Both of these programs are based on actual emissions within the air shed. The only way that the PSEL can actually ensure compliance with these programs is if the baseline emission rates are set based on actual monitoring data from the baseline period. DEQ’s proposed options 1 and 2 do not connect the baseline emissions rate to the baseline period and these proposed options would therefore not ensure compliance with the NAAQS or PSD increment. (12)  *Response:*  *The PSEL program provides the* ***basis*** *for assuring compliance with emission standards, and the NSR/PSD program ensures that major new and modified sources do not cause violations of ambient standards and PSD increments. However, the PSEL is only one element of an overall regulatory system that ensures compliance with the NAAQS.*  *The CAA requires all areas of the country to meet or strive to comply with the National Ambient Air Quality Standards set by EPA. The Clean Air Act established two types of NAAQS. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings.* *State and local governments* ***monitor*** *the ambient air to determine whether the levels of pollution comply with the NAAQS. A region that does not meet the standard is considered a nonattainment area. Once the EPA designates nonattainment areas, the state works with businesses, local governments, and the public to reduce the emissions from sources contributing to the nonattainment status of the area.*  *One of the key programs designed to help achieve compliance with the NAAQS is the New Source Review (NSR) program, a preconstruction review process for new and modified stationary sources. The NSR program has two parts: the Prevention of Significant Deterioration (PSD) program for attainment or "clean" areas typically requires new or modified sources to install state-of-the-art pollution controls to ensure that the ambient air quality will not degrade. The non-attainment area NSR program is designed to ensure that any new industrial growth in a non-attainment area will comply with stringent emission limitations (by requiring the most protective pollution controls and emission offsets), with the goal of improving air quality overall to meet the NAAQS. The NSR program requires companies to obtain permits for new construction or major modifications that substantially increase a facility's emissions.*  *However, regulating major new and modified sources is not sufficient to ensure compliance with the NAAQS. States must submit a plan to EPA detailing steps necessary to achieve and maintain the NAAQS. This plan is referred to as the State Implementation Plan or SIP. SIPs must include an inventory of emissions, enforceable emission limitations, related control measures, and schedules and time-tables for compliance that are necessary for the area to meet the Clean Air Act standards and opportunities for public input. Air monitoring is conducted to measure whether standards are being met.*  *If a state has nonattainment areas within its borders, the state must develop and submit an attainment plan to EPA detailing steps necessary to achieve the standard. Generally, the attainment plan includes modeling to demonstrate that the measures selected by the state will reduce emissions enough for the area to meet the standard. In addition, the Clean Air Act requires major sources of air pollution to meet stricter emission control requirements in nonattainment areas than are required in areas that meet federal health standards. For example, new sources of air pollution in nonattainment areas must meet stricter permitting requirements.*  *States may ask EPA to redesignate an area back into attainment if:*   * *the area has monitored attainment of the air quality standard;* * *EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions;* * *the state has submitted, and EPA has approved, a maintenance plan for the area; and,* * *the area has met all other applicable Clean Air Act requirements.*   *Nonattainment areas that later are designated to attainment are considered maintenance areas. The steps to maintain air quality are defined in a maintenance plan. Unless demonstrated to be no longer necessary, the control measures used to improve air quality will remain in place and additional measures could be needed. The maintenance plan must demonstrate continued compliance, considering projected growth, for a period of ten years. If outdoor air monitors record a violation of the standard, the maintenance plan includes a commitment to determine appropriate measures to address the cause of the violation.*  *Oregon hasn’t always met the National Ambient Air Quality Standards and initially had several communities designated by the EPA as non-attainment areas for ozone, carbon monoxide and particulate. DEQ developed attainment plans for these areas which included more stringent controls, such as limits on emissions of solvents and particulate matter limits on wood particle dryers and hardboard press vents. The more stringent controls on industrial emissions resulted in reductions to the PSEL and netting basis. In this sense, the PSELs help achieve compliance with the NAAQS even though they are not used to demonstrate compliance with the NAAQS. With these and other control strategies, all of the nonattainment areas under DEQ's jurisdiction were redesignated as maintenance areas in the 1990s and have remained in compliance ever since.*  *The PM10 control strategies in the maintenance plans were so effective that when EPA developed the first PM2.5 ambient air quality standards, there were no PM2.5 nonattainment areas in the state. Only later when EPA reduced the PM2.5 NAAQS, two areas in the state were designated as nonattainment areas. An additional area in the state is violating the standard based on recent monitoring data, but it has not officially been designated as a nonattainment area yet.*  *Based on the fact that the only NAAQS violations in the state are for a pollutant for which EPA recently lowered the NAAQS, DEQ’s air quality program has been very successful in protecting air quality in the state. No change to the rule is proposed in response to this comment.* |
| Compliance with the PSD increment | DEQ’s implementation of the PSELs fails to ensure compliance with the NAAQS and PSD increment (12)  *Response:*  *The PSEL program provides the* ***basis*** *for assuring compliance with ambient standards and PSD increments but is not the actual method used to evaluate increment consumption.*  *A PSD increment is the maximum concentration increase that is allowed to occur above a baseline concentration for a specific pollutant in permitting a new or modified source. The baseline concentration is defined for each pollutant and, in general, is equal to the ambient concentration existing during the baseline concentration year. PSD increments prevent the air quality in clean areas from deteriorating to the level set by the NAAQS. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. It is important to note, however, that the air quality cannot deteriorate beyond the applicable NAAQS level, even if not all of the PSD increment is consumed.*  ***General Approach to Increment Analyses***  *The EPA and the States have generally used an emissions inventory and modeling approach to identify the degree to which an increment has been consumed or will be consumed by major source construction. Ambient monitoring has not been used to establish baseline concentrations or to evaluate increment consumption because ambient measurements reflect emissions from all sources, including those that should be excluded from the measurements. EPA has not necessarily required the identification of a specific baseline concentration but rather has focused on measuring the change in concentration from the legally established baseline date to the time of the analysis. For example, in the preamble to the 1978 PSD regulation, EPA stated the following:*  *The regulations promulgated today no longer suggest that the baseline concentration be formally established. The Administrator feels that increment consumption can be best tracked by tallying changes in emissions levels of sources contributing to the baseline concentration and increases in emissions due to new sources. Data to establish baseline air quality in an absolute sense would be needed only if increment consumption were to be tracked using ambient measurements. Thus, to implement the air quality increment approach, the reviewing authority needs to verify that all changes from baseline emissions rates (decreases or increases as appropriate) in conjunction with the increased emissions associated with approved new source construction will not violate an applicable increment \* \* \*.*  ***Class I, II, and III Areas and Increment.***  *The PSD requirements provide for a system of area classifications which affords States an opportunity to establish air quality goals that are consistent with local land use goals. There are three area classifications. Each classification differs in terms of the amount of growth it will permit before significant air quality deterioration would be deemed to occur. Class I areas have the smallest increments and thus allow only a small degree of air quality deterioration. Class II areas can accommodate normal well-managed industrial growth. Class III areas have the largest increments and thereby provide for a larger amount of development than either Class I or Class II areas.*  ***Increment Consumption and Expansion***  *The amount of PSD increment that has been consumed in a PSD area is determined from the emissions increases and decreases which have occurred from sources since the applicable baseline date. It is useful to note, however, that in order to determine the amount of PSD increment consumed (or the amount of available increment); no determination of the baseline concentration needs to be made. Instead, increment consumption calculations must reflect only the ambient pollutant concentration change attributable to increment-affecting emissions.*  *Emissions increases that consume a portion of the applicable increment are, in general, all those not accounted for in the baseline concentration and specifically include actual emissions increases at any stationary source, area source, or mobile source occurring after the baseline concentration year. The amount of available increment may be added to, or "expanded," through the reduction of actual emissions from any source after the baseline concentration year.*  ***Oregon’s Approach to Increment Analyses***  *Sources that trigger Prevention of Significant Deterioration for PM2.5 must model air quality impacts from emissions increases due to the project that are above emissions in 2007, the baseline concentration year, regardless of the year of their baseline emission period. This is also true for NOx, since the baseline concentration year (1988) does not correspond to the baseline emission year (1977-1978). These modeled ambient concentrations will be compared to the maximum allowable increases (PSD increments) to identify the degree to which an increment has been consumed or will be consumed by major source construction. Because the baseline year for emissions different from the baseline concentration year, sources that trigger NSR/PSD must establish actual emissions in 2007 for modeling to show compliance with the PSD increment. This is also done for competing source modeling because a source's individual impact is significant. Therefore, it is not imperative that the baseline emissions year be the same as the baseline concentration year, because modeled emissions are always actual emissions in the baseline concentration year. No change to the rule is proposed in response to this comment.* |
| PSEL program fails to meet goals | The PSEL program has failed to meet DEQ’s own goals as stated below:  1) assuring reasonable further progress towards attainment of ambient standards;  2) assuring compliance with ambient standards and PSD increments;  3) administering the emissions trading program; and  4) tracking PSD increment consumption.  The PSEL program is only concerned with a specific source’s “allowable” emissions, while both the NAAQS and PSD increments are tied directly to “actual” emissions because they are concerned with “actual” concentrations of pollutants in the air shed. From the start, then, the administration of the PSEL program is disconnected with goals it is intended to achieve.  For instance, a facility that only runs two 8-hour shifts, but has the *potential* to run three 8-hour shifts, even the source never has and never intends to, could increase actual emissions from their two shifts by 50%, which would be up to their “allowable emissions,” without triggering the PSD program under Oregon’s current rules. Conversely, assuming this increase in actual emissions was over the significant emission rate, the federal program would be triggered and the source would be required to meet the requirements of the PSD program. This highlights how the Oregon PSEL program is inconsistent with the federal program. (12)  *Response:*  *The PSEL program has not failed to meet DEQ’s goals. See the responses in comment “Compliance with the NAAQS,” comment “Compliance with the PSD increment” and comment “Netting basis definition allows thirty-year "lookback" period”.*  *Regarding the example mentioned above, if a source was only operating two shifts during the baseline period, the baseline emission would be established on two shifts. Subsequently, if the source wanted to increase to three shifts, they would have to request an increase in their PSEL. If that increase was more than the SER, it would require an air quality impact analysis under the PSEL rule (OAR 340-222-0041). The source would be required to prove that the increase in emissions would not violate any air quality standards and if it did, the increase would not be allowed. The increase would not be subject to PSD because there is no physical modification; the source is merely using existing capacity. Under the federal program, this type of change in operation would also not be subject to PSD because there is no physical change. The federal program would not even require an air quality impact analysis for the actual increase in emissions. In this regard, Oregon’s PSEL program goes beyond the federal program in protecting the environment.*  *No change to the rule is proposed in response to this comment.* |
| Continued operation of high-emitting, old sources | The PSEL program encourages the continued operation of old, dirty sources when they would otherwise be replaced with new, cleaner sources. The current PSEL program places too much concern on “creep” instead of focusing on the larger problem of “slippage” with old, dirty sources in the region. Slippage is where a source has slowly deteriorated to the point where it can no longer function at what was its original design capacity. Old sources whose retrofits would trigger the federal PSD program, instead simply have their life extended and keep polluting indefinitely because the PSEL program lets these inefficient sources run forever, so long as their allowable emissions do not increase. By allowing these older, inefficient, and dirty sources to operate, in essence, indefinitely, the PSEL program undermines incentives that the facility has to replace older sources with newer, cleaner, more efficient sources.  DEQ has indicated that their main concern is not with slippage, but is instead with “creep” which is overblown. Creep is the process by which a source could systematically increase their potential emissions without triggering the federal PSD program. Under the federal program, only emission increases within ten years are considered. A source could then increase emissions, so long as the increase is below the significant emission rate, every ten years without triggering the federal PSD program.  The PSEL program also subsidizes current facilities to the detriment of facilities that may want to move into Oregon. Because the PSEL program allows current facilities to operate almost indefinitely without meeting the strictest requirements of the Clean Air Act, these facilities have a competitive advantage over any facilities that wish to be located in Oregon in the same industry that would have to meet these, sometimes costly, requirements. In this light, the PSEL program can be seen, not only as undermining the goals of the Clean Air Act, but also stifling business opportunities in Oregon. (12)  *Response:*  *DEQ believes that "slippage" is as likely or more likely to occur under the federal program than under Oregon's approach to netting. Under the federal program, sources can avoid triggering NSR/PSD by delaying emission reductions until just before an increase is needed. In the scenario described in the comment, a high-polluting older source would likely be closed at the same time that its replacement is permitted so that the reduction from closing the older source could be used to net the replacement out of NSR. For example, a high emitting boiler could be closed in a netting action to permit a lower-emitting new boiler without triggering NSR/PSD. The same outcome could be achieved under the Oregon program, but the source would be able to voluntarily reduce the emissions from the older source earlier without losing the ability to use the reduction in netting.*  *Under either the federal or Oregon approach to netting, NSR/PSD is only triggered if a physical change or change in the method of operation results in a net significant emission rate increase. If a source is modified because its capacity has slowly deteriorated over time, but the modification does not increase emissions by more than a significant emission rate above the netting basis, it would not trigger NSR/PSD. Depending on whether the source has increased or decreased emissions since the baseline period, the netting basis under the Oregon program could be higher or lower than under the federal program. No change to the rule is proposed in response to this comment.* |
| PSELs are unenforceable | We are worried about the unenforceable nature of the PSELs. As applied to PM2.5, the unenforceable nature of these regulations is highlighted by DEQ’s attempt to estimate the level of PM2.5 at sources in relation to the source’s PM10 levels. However, without adequate monitoring and reporting requirements, sources are able to avoid the permitting requirements needed to protect the health of Oregon residents from the specific harms caused by PM2.5. (12)  *Response:*  *Once established, compliance with the PM2.5 PSEL will be determined by a compliance method involving monitoring of emissions, production or other parameters. Like other PSELs, the PM2.5 PSELs will meet EPA's requirements for practical enforceability because the limits are set on a rolling 12-month period and the compliance determination is done every month. Even though the PSEL is an annual limit, the monitoring is monthly and in many cases hourly when CEMS are available. If a source violates the PSEL, DEQ is able to take direct enforcement action against the source. No change to the rule is proposed in response to this comment.* |
| Minimum requirements and program stringency | The proposed amendments go beyond what is required to “update state regulations for fine particulate pollution and greenhouse gases in order to align them with new federal regulations” and will affect the stringency of the program. Allowing this to continue increases the costs and complexity of the program, without any defined benefits. (10)  *Response:*  *The proposed regulations are necessary to update state regulations for fine particulate pollution and greenhouse gases. The area where the rules are being tightened is in resetting PTE to actual emissions for sources that were permitted but not operating in the baseline period and for sources that will go through NSR/PSD in the future. This change is proposed to better align this aspect of Oregon's program with the federal program. See the response in comment “Actual emissions as PTE used to net out of PSD.” No change to the rule is proposed in response to this comment.* |
| Regulation of greenhouse gases | The designation on Greenhouse Gases and Global Warming is based on flawed scientific research and conclusions. This legislation and/or rulemaking will do nothing but to significantly raise costs to business and thereby to the consumer, and create more bureaucracy and inefficiency with the DEQ, all because of fear and false research. I call upon the DEQ to cease all further efforts supporting and establishing Greenhouse Gas and Global Warming regulation, rulings and enforcement. (22)  In the age of problems I would say this is a real lot of government contrived silliness. (21)  *Response:*  *Based on the best peer-reviewed science, EPA found in 2009 that manmade greenhouse gas emissions threaten the health and welfare of the American people. EPA is not alone in reaching that conclusion. The National Academy of Sciences has stated that there is a strong, credible body of evidence, based on multiple lines of research, documenting that the climate is changing and that the changes are caused in large part by human activities. Eighteen of America’s leading scientific societies have written that multiple lines of evidence show humans are changing the climate, that contrary assertions are inconsistent with an objective assessment of the vast body of peer-reviewed science, and that ongoing climate change will have broad impacts on society, including the global economy and the environment.*  *Oregon cannot disregard the strong scientific evidence showing that humans are contributing to the rapid increase of global temperatures. In addition, although new reporting and permitting requirements and fees create costs to businesses, the effects of climate change have serious implications for the economy and environment. For example, Oregon snow packs are shrinking and unseasonably warm temperatures are leading to rapid spring melts depleting Oregon’s supply of summer water for agriculture.*  *However, even if greenhouse gas emissions did not contribute to global warming, DEQ would still be required by federal law to establish a GHG permitting program. Under the federal Clean Air Act, no major new or modified source of GHG may be constructed in the United States without a PSD permit. If DEQ does not establish a GHG permitting program, these sources could not be built in Oregon, which would cause a severe economic impact on the state. No change to the rule is proposed in response to this comment.* |
| GHG reporting and fees | Currently forest products company owners that own manufacturing or conversion facilities along with timberland and forestland that sequesters CO2 gases and emissions are being held to an increasing pile of fees (i.e., annual GHG reporting fees and related annual paperwork). The adoption of an ODEQ policy and regulation that places the GHG manufacturing emissions in Title V and ACDP permits as part of PSEL is headed to a place that can be summed up as "taxation and regulation without representation". (8)  The DEQ’s reporting threshold for greenhouse gases should be increased to match the EPA’s threshold. There is no reasonable explanation for the DEQ to continue to diverge from the EPA. Allowing this to continue increases the cost and complexity of the program, without any defined benefits. (10)  *Response:*  *This rulemaking does not address greenhouse gas reporting. However, in earlier rulemakings, the EQC adopted a GHG reporting requirement that is more comprehensive than the federal requirement. DEQ proposed and EQC adopted an emissions threshold of 2,500 metric tons carbon dioxide equivalent in Oregon’s greenhouse gas reporting rules, as compared to 25,000 metric tons for the federal reporting program. The lower reporting threshold will allow Oregon to develop a better scientific basis for tracking and addressing GHG emissions. Because this rulemaking does not address GHG reporting, no change to the rule is proposed in response to this comment.* |
| PM2.5 to PM10 ratio | Establishing a ratio between PM2.5 and PM10 emissions should not be done through testing only. Sources should have the option of using the ratio based upon the Particle Size Category by AP-42 section. If a modeling analysis is required for an area, having PM2.5 default to PM10 will result in compounding conservative worst case conditions. (10)  *Response:*  *DEQ prefers source test data at the facility as the most reliable way to determine the PM2.5 fraction of PM10 emissions. Where source testing is not required or possible, industry specific data available from trade associations or EPA’s* ***AP-42,* Compilation of Air Pollutant Emission Factors***, can be used to estimate PM2.5 emissions. See the response in comment “Proposed Option 1” for more information.*  *DEQ agrees that modeling PM10 as a surrogate for PM2.5 is a conservative approach in most cases. Since PM2.5 emissions must include secondary formation, PM2.5 modeled impacts could actually be greater than PM10 modeled impacts. However, some sources may choose to use this conservative approach to avoid the cost of testing to differentiate between PM2.5 and PM10. No change to the rule is proposed in response to this comment.* |
| Total PM matter instead of PM2.5 | Instead of trying to enforce new lower standards for the most difficult, expensive and inaccurate testing of PM2.5, DEQ should be looking at standards for total particulate matter based on testing with an allowance for use of existing tables of site developed ratios to establish particle size gradation. They should also recognize that geography plays a large role in air pollution problems and efforts should be made to reduce pollution at those specific times when the air shed becomes stagnant. (10)  *Response:*  *Since EPA adopted national ambient air quality standards for PM2.5, DEQ does not have a choice on whether to implement a permitting program for PM2.5. If DEQ does not adopt these rules, Oregon will lose federal approval to implement the program and could face sanctions.*  *EPA has developed tables with particle size gradation for some but not all sources. Geography is taken into account in developing air quality attainment plans for areas that violate NAAQS.*  *DEQ calls periodic air pollution advisories during the winter due to stagnant air. During these times, pollutants trapped near the surface can steadily increase in concentration toward unhealthful levels due to inadequate air mixing. These pollutants are mainly generated from wood smoke from residential heating, open burning, industry and other sources. People in affected counties are asked to curtail or limit open burning and the use of uncertified woodstoves. DEQ urges people who have alternative heating options not to burn in woodstoves or fireplaces. People are also asked to limit driving and vehicle idling and businesses are asked to allow employees to telecommute. During an air quality emergency, industries could also be required to curtail operations. No change to the rule is proposed in response to this comment.* |
| PM2.5 source test method | Another issue that I am quite concerned about is assuming that PM10 emissions are PM2.5 emissions and vice versa. With respect to the issue of PM2.5, it appears that permanent rule making is under way and definite without allowing source test methods to develop so that industry sources can quantify existing PM2.5 emissions from sources at their respective facilities. This is a potentially catastrophic mistake, and to date, no acceptable test method exists that allows a wood products source that is saturated to test and measure PM2.5 emissions from a wet scrubber or wet-ESP control device that is currently controlling emissions from their manufacturing facility. How can we regulate effectively without effective means and technology to measure PM2.5 emissions from wood products sources? (8)  *Response:*  *Sources will be required to estimate PM2.5 emissions in their permit renewal or modification applications. They will be required to use the best information available to make this estimate. For natural gas combustion, 100% of the PM10 will be PM2.5. In other cases, a fraction of the PM10 will be PM2.5 and it will be the responsibility of the source to determine this fraction, either from source test data or literature data of similar sources. See the response in comment “Proposed Option 1” for additional information.*  *On December 1, 2010, EPA revised two test methods for measuring particulate matter emissions from stationary sources. One of the revised methods, called Method 201A, will provide the capability to measure the mass of filterable PM2.5. The second revised method, called Method 202, will make a more accurate measurement of condensable particulate matter. Condensable particulate matter forms from condensing gases or vapors. It is a common component of both PM10 (particulate matter equal to or less than 10 micrometers in diameter) and PM2.5. The revised EPA methods have replaced Other Test Methods 27 and 28 and will be added to the definitions of PM10 and PM2.5.*  *DEQ recognizes that EPA Method 201A cannot be used in a saturated gas stream. DEQ will continue to work with EPA and other interested parties on finding a better method to test this type of source.* |
| Litigation Opt-Out | We recommend that the Department include within its rules a provision stating that if the federal GHG PSD rules are vacated or stayed by the courts or Congress, then the Oregon rules will cease to be in effect. (1, 2, 4, 11, 3, 14, 15, 17)  *Response:*  *At this time, the outcome of any lawsuits regarding greenhouse gases is unknown. DEQ does not know if GHG permitting rules will be vacated or modified. Until the time EPA changes the federal rules, DEQ is required to implement GHG rules in order to receive approval of the State Implementation Plan and ensure withdrawal of the Federal Implementation Plan. If federal rules change, EQC can consider revising Oregon's rules at that time either through a temporary or regular rulemaking. No change to the rule is proposed in response to this comment.* |

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| List of People Submitting Comments (by Commenter Number) | | | |
| Number | Name | Organization | Receive date |
| 1 | John Ledger | AOI | 11/24/10 |
| 2 | Lee Weber | ATI Wah Chang/ ATI Albany Operations | 11/24/10 |
| 3 | Russell Strader | Boise Cascade, LLC | 11/24/10 |
| 4 | **Russell Burns** | Boise Paper | 11/24/10 |
| 5 | Lee Fortier | Dry Creek Landfill | 11/24/10 |
| 6 | **Alicia Little** | Dyno Nobel Inc. | 11/24/10 |
| 7 | Scott Hedges | Environmental Protection Agency, Region 10 | 11/24/10 |
| 8 | James DeHoog | Environmental Technical Services | 11/24/10 |
| 9 | Scott Stewart | Intel | 11/24/10 |
| 10 | Thomas Gruszczenski | Knife River Materials | 11/24/10 |
| 11 | Mari Chesser | Microchip Technology Inc. | 11/24/10 |
| 12 | John Krallman, Kenny Key | Northwest Environmental Defense Fund | 11/24/10 |
| 13 | Kathryn VanNatta | Northwest Pulp and Paper Association | 11/24/10 |
| 14 | Holly Sears | Oregon Refuse & Recycling Association | 11/24/10 |
| 15 | Ray Hendricks | PGE | 11/24/10 |
| 16 | Lisa Becherer | Roseburg Forest Products | 11/24/10 |
| 17 | Scott Conant | SP Newsprint Co., LLC | 11/24/10 |
| 18 | Martha Moore | TW Environmental, Inc. | 11/24/10 |
| 19 | Dale Wonn | Weyerhaeuser NR Company | 11/24/10 |
| 11 | Mari Chesser | Microchip Technology Inc. | 12/13/10 |
| 20 | Thane Jennings | Hermiston Power, LLC, Calpine Corp. | 12/17/10 |
| 2 | Lee Weber | ATI Wah Chang/ ATI Albany Operations | 12/22/10 |
| 6 | **Alicia Little** | Dyno Nobel Inc. | 12/22/10 |
| 10 | Thomas Gruszczenski | Knife River Materials | 12/23/10 |
| 21 | Mitchel Karp | RSG Forest Products | 12/30/10 |
| 22 | Mitch Jorgensen | Molalla Redi-Mix & Rock Products, Inc. | 12/30/10 |
| 1 | John Ledger | AOI | 01/14/11 |
| 3 | Russell Strader | Boise Cascade, LLC | 01/14/11 |
| 7 | Scott Hedges | Environmental Protection Agency, Region 10 | 01/14/11 |
| 9 | Scott Stewart | Intel | 01/14/11 |
| 12 | Aubrey Baldwin | Northwest Environmental Defense Fund | 01/14/11 |
| 13 | Kathryn VanNatta | Northwest Pulp and Paper Association | 01/14/11 |
| 15 | Ray Hendricks | PGE | 01/14/11 |
| 23 | Lincoln Cannon | Oregon Forest Industries Council | 01/14/11 |