**Summary of Public Comment and Agency Response**

Title of Rulemaking: Air quality permitting, Heat Smart, and gasoline dispensing facility updates

Prepared by: George Davis and Jill Inahara Date: January 15, 2015

PM10 = particulate matter less than 10 microns in diameter

PM2.5 = particulate matter less than 2.5 microns in diameter

| **Summary of Comments and DEQ Responses** | |
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| 1. Clarify and update air quality rules | DEQ should clarify that the following divisions and/or rules apply in Lane County upon adoption by EQC since they represent a level of greater stringency and/or are necessary for LRAPA to maintain rules that are consistent with state and federal regulations.   1. Division 224 – New Source Review 2. Division 225 – Air Quality Analysis Requirements 3. OAR 340-208-0110 - Visible Air Contaminant Limitations: LRAPA requests this rule be effective in Lane County since the opacity limitation is numerically more stringent than the existing LRAPA rule (40% vs. 20%). LRAPA requests this rule apply only to wood/biomass-fired boilers in Lane County; LRAPA needs additional time to evaluate the proposed revisions to the visible emission monitoring method as it applies to sources other than wood/biomass-fired boilers. 4. OAR 340-226-0210 - Particulate Emission Limitations for Sources Other Than Fuel Burning, and Refuse Burning Equipment and Fugitive Emissions 5. OAR 340-228-0210 – Grain Loading Standards for Fuel Burning Equipment 6. Division 200 – Definition of “Categorically Insignificant Activity” 7. OAR 340-222-0090 – Combining and Splitting Sources 8. OAR 340-208-0210(2)(a), (b), and (3) – Visible Emission Monitoring for Fugitive Emissions 9. OAR 340-214-0114(5) – Recordkeeping for 5 years   All other existing LRAPA rules are at least as strict as the proposed DEQ rules and/or can be proposed by LRAPA for adoption at a later time. (31)  In this rule revision package, DEQ has revised the language in the applicability provisions of OAR divisions 200, 202, 208, 210, 212, 214, 216, 218, 220, 222, 224, 225, 226, 228, 234, 236, 268 with respect to when these divisions apply within the jurisdiction of Lane Regional Air Pollution Authority. The comparison involves a division or chapter of LRAPA’s rules with the particular DEQ division, rather than a rule by rule comparison. The proposed language is not clear if LRAPA’s rules are at least as strict as the particular OAR division, the LRAPA rules apply in lieu of the OAR division or in addition to the OAR division. Given the importance of knowing which rules apply within LRAPA’s jurisdiction prior to action on a SIP revision for DEQ or LRAPA, DEQ will need to provide clarifying documentation, including an attorney opinion before action can be taken on such SIP revisions. (52)  *Response:*  *DEQ added the following language to OAR 340-200-0010 Purpose and Application and changed the jurisdiction rule language in OAR 340 divisions 202, 208, 210, 212, 214, 220, 222, 225, 226, 228, 234, 236, and 268.*  *(3) DEQ administers divisions 200 through 268 in all areas of the State of Oregon except in Lane County where LRAPA administers most air pollution control regulations. Subject to and when provided in divisions 200 through 268, LRAPA is authorized by the EQC as the agency to implement these state rules, and must apply the requirements and procedures contained in these state rules, within its area of jurisdiction. LRAPA may apply any LRAPA rule in lieu of a state rule(s) provided that the LRAPA rule is at least as strict as the state rule(s), LRAPA has submitted the rule to the EQC for its approval, and the EQC has not disapproved the rule.*  *Subject to the requirements in this division and OAR 340-200-0010(3), LRAPA is designated by the EQC to implement the rules in this division within its area of jurisdiction.*  *DEQ agrees with the commenter and changed the proposed rule as the commenter suggested.* |
|  | DEQ proposes to expand the requirements applicable to marine loading of gasoline to include the marine loading of any volatile organic compounds liquid with a true vapor pressure greater than 10.5 kPa (1.52 psia) that occurs in the Portland Air Quality Maintenance Area. Existing air pollution control equipment for gasoline vapors cannot be applied to vapors from these other liquids.  There also does not appear to be any basis for removing the current flexibility that allows a loading facility to request written approval to use an alternative monitoring method.  DEQ should address this rule through a separate rulemaking that should include a detailed technical and economic analysis. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 57, 58)  *Response:*  *The Portland Air Quality Maintenance Area is a former nonattainment area for ozone. The intent of the marine loading rule is to reduce emissions of volatile organic compounds, which are ozone precursors, to help ensure that the Portland area will not revert to nonattainment for ozone. DEQ understands that there are volatile organic liquids with vapor pressures that exceed the vapor pressure of gasoline that are or may in the future be handled by terminals in the Portland Air Quality Maintenance Area, and DEQ wishes to address these liquids in a proactive way by revising this rule.*  *However, based on the comments received, DEQ reconsidered the proposed changes. DEQ realized that the original proposal was too stringent and would require control of emissions from liquids with very low vapor pressures. DEQ believes now that it is appropriate to require control of emissions for liquids that have a vapor pressure that is the same as or greater than the vapor pressure of gasoline.*  *However, the vapor pressure of gasoline is specified as the Reid vapor pressure (RVP), which is is defined as the absolute* [*vapor pressure*](http://en.wikipedia.org/wiki/Vapor_pressure) *exerted by a liquid at 100 °F (37.8 °C) as determined by the test method ASTM-D-323. The test method applies to volatile crude oil and volatile nonviscous petroleum liquids, except* [*liquefied petroleum gases*](http://en.wikipedia.org/wiki/Liquefied_petroleum_gas)*. DEQ understands that terminals may handle crude oils that have an RVP that is less than the RVP of gasoline, but which must be heated to reduce viscosity before they can be pumped. These heated fluids may have absolute vapor pressures at the actual pumping temperature that exceeds the absolute vapor pressure of gasoline at ambient conditions.DEQ believes emissions from such fluids should also be controlled, and has determined that gasoline with an RVP of 4.0 psi will have an absolute vapor pressure of approximately …*  *need to finish this up, need to discuss with terminals and PoP.* |
|  | The proposed changes to the Loading Gasoline or Volatile Organic Compound Liquids onto Marine Tank Vessels rules will place businesses and terminals located in the Portland region at a competitive financial and potentially operational disadvantage when compared to those businesses located in other parts of the state. Requiring additional controls for these operations only in the Portland Air Quality Management Area is not justified from an air quality perspective. The limits should be applied statewide. If the statewide applicability of the control requirements cannot be reasonably accomplished, the loading emission control requirements for gasoline and volatile organic compounds liquids should form the baseline for any typically achievable control technology determinations for controls at other facilities anywhere in the state. (46)  *Response:*  *agree on LNG, probably agree on LPG, need to research propane - who is the commenter?* |
|  | The definition of a volatile organic compounds liquid in the proposed rules is unclear and could be interpreted to apply to LNG based on LNG’s transport pressure. This rule should not apply to LNG because OAR 340-232-0110 is a volatile organic compounds control rule for the Portland AQMA and LNG is mostly methane, a non-volatile organic compounds. (46)  *Response:*  *agree, need to exclude LNG- who is the commenter?* |
|  | The increased emissions that result from vapor destruction equipment used to control fugitive emissions from LNG, LPG, and propane loading outweigh the limited benefits of volatile organic compounds emission reductions by creating criteria pollutants, including volatile organic compounds, carbon monoxide, nitrogen oxides, and particulate matter; as well as air toxics such as formaldehyde and benzene. (46) |
|  | DEQ should not make changes to alter the requirements of the construction approval process. DEQ proposed rules are considerably more stringent because they eliminate the ability of a source to net any increase against any decreases associated with the project. This existing provision to allow internal netting has been the most successful aspect of Oregon’s air permitting program in allowing sources to avoid lengthy and costly permitting processes through removal of old emissions units to allow installation of new, cleaner emitting units. This internal netting has fueled growth in Oregon and has resulted in dramatic emission decreases as historical sources in the state with an efficient and effective permitting process. A source replacing a flare with 50 tons per year of CO emissions with another flare with 50 tons per year of CO emissions should be able to conclude that there is at best a de minimis increase of emissions rate. The proposed language would eliminate this flexibility. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  *Response:*  *have to reconsider major mod, I think that is what this comment is about*  *No change to the proposed rule amendments is proposed in response to this comment.* |
| 1. Update particulate matter emission standards |  |
| Change permitting requirements for emergency generators and small natural gas or oil-fired equipment |  |
| Establish two new state air quality area  designations, “sustainment” and “reattainment,” to help areas avoid and  more quickly end a federal nonattainment  designation |  |
|  | The commenter agrees that the current Plant Site Emission Limit rule should be revised so that minor sources are not required to demonstrate a net air quality benefit as a condition to increase their Plant Site Emission Limit by a significant emission rate or more above netting basis. There is no need to create a whole new section of the regulations to accomplish this relatively straightforward improvement. We support retaining the Plant Site Emission Limit rule as it currently is structured with this improvement. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  *Response:* |
| Designate Lakeview as a state sustainment  area while retaining its federal attainment  designation |  |
|  |  |
|  | Lakeview, one area that DEQ proposes to designate as a Sustainment Area, suffers from air quality problems are driven by woodstove smoke and no amount of additional regulation can change the Lakeview Area’s air quality status. Yet the only way to attract natural gas to the town or to improve employment so people can afford to replace their woodstoves with newer lower-emitting models is if employment can expand. DEQ’s Sustainment Area proposal is likely to be the very thing that makes it impossible for the Lakeview Area to actually improve its air quality. Since February 2013, the Town of Lakeview, Lake County, DEQ, and Collins have been actively engaged in US EPA’s PM Advance Program hopefully eliminating the need for the Sustainment Area concept to be applied to the Lakeview Area. If the Lakeview PM Advance Plan is successfully implemented and other jurisdictions like Prineville or Burns utilize the PM Advance option, there is no need for DEQ to impose additional regulations such as a “Sustainment Area” designation for the Lakeview area or any other local jurisdiction. (12)  *Response:*  *This needs to be put with other Lakeview comments, because the response is the same* |
|  | DEQ should clarify the language within the Plant Site Emission Limit rules regarding emissions from categorically insignificant activities. Since division 224 has been expanded to include minor New Source Review as well as major New Source Review, the proposed language would greatly expand the stringency of minor New Source Review in that emissions from categorically insignificant activities are not considered as part of the minor New Source Review program. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  *Response:*  *DEQ agrees with the comment. As discussed in the response to comment XXX, Major New Source Review and Type A State New Source Review are equivalent to the 2001/2015 New Source Review program. To maintain program continuity, DEQ has revised OAR 340-222-0035(5) to read as follows:*  *(5) Plant Site Emission Limits do not include emissions from categorically insignificant activities. Emissions from categorically insignificant activities must be considered when determining Major New Source Review or Type A State New Source Review applicability under OAR 340 division 224.* |
|  | DEQ is proposing to significantly increase the stringency of division 224 by deleting the minor New Source Review provisions and using OAR 340-222-0041(4) as the “gate keeper” provision to OAR 340-224-0010. If OAR 340-222-0041(4) is supposed to be the gatekeeper to State New Source Review, OAR 340-224-0010(2) serves no function.  DEQ’s language is very confusing and internally inconsistent. DEQ should not revise division 224 this time and instead do so in a separate future rulemaking. If DEQ does not wish to leave division 224 changes to another rulemaking, the rules should be clear that a source does not consult division 224 unless it is requesting a Plant Site Emission Limit that exceeds the netting basis by a significant emission rate or more. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  *Response:*  *DEQ has revised OAR 340-222-0041(4) to restore subsections (a) and (b), which were formerly OAR 340-222-0041(3)(a) and (b). This change effectively means that the new rules have the same structure as the old rules.*  *Commenters state with regard to OAR 340-224-0010(2) that “As written, this means that by requesting to increase a nitrogen oxides Plant Site Emission Limit to 40 tons per year or more in a nonattainment area--regardless of the source’s netting basis--that source will trigger nonattainment State New Source Review and be required to provide offsets and demonstrate a net air quality benefit.” DEQ’s intent with these rule revisions is essentially to maintain the overall new source review program as it was from 2001 through early 2015, with the following exceptions:*   * *rules have been added for the new sustainment and reattainment areas; and* * *offset and net air quality benefit requirements have been revised and in some cases are more stringent.*   *On the whole, however, DEQ did not intend to dramatically increase the stringency of the new source review program.*  *In consideration of the comment above, DEQ reviewed the applicability requirements in OAR 340-224-0010(2) and has revised to clarify the applicability of State New Source Review. In addition, both OAR 340-224-0010(1) and (2) follow the structure of OAR 340-224-0010(1) and (2) in the 2001/2015 New Source Review applicability rules in OAR 340 division 224.*   |  |  | | --- | --- | | ***OAR 340-224-0010(2) rule language*** | ***Review/discussion of rule*** | | *(a) In a nonattainment, reattainment or maintenance area:*  *(A) Construction of a new source that will have emissions of the nonattainment, reattainment or maintenance pollutant equal to or greater than the SER; or*  *(B) Major modification for the nonattainment, reattainment or maintenance pollutant, at an existing source that will have emissions of the nonattainment, reattainment or maintenance pollutant equal to greater than the SER over the netting basis.* | *A new source is a physical change; if emissions are greater than or equal to the SER, it is essentially a major modification.*  *A new source has no netting basis, therefore the increase over the netting basis is over the SER. This triggers Type A State New Source Review (formerly 2001/2015 New Source Review)*  *If emissions are equal to or greater than the SER over the netting basis, then they are also equal to or greater than the SER. With a major modification, this triggers Type A State New Source Review (formerly 2001/2015 New Source Review).* | | *(b) In a nonattainment, reattainment or maintenance area, increasing emissions at an existing source to an amount equal to or greater than the SER over the netting basis but not subject to subsection (a).* | *If emissions are equal to or greater than the SER over the netting basis, then they are also equal to or greater than the SER. Not subject to (a) means no major modification. This triggers Type B State New Source Review (formerly 2001/2015 Plant Site Emission Limit rule).* | | *(c) In an attainment, unclassified or sustainment area:*  *(A) Construction of a new source that will have emissions of a regulated pollutant equal to or greater than the SER; or*  *(B) Increasing emissions of a regulated pollutant to an amount that is equal to or greater than the SER over the netting basis.* | *Essentially a major modification, but not subject to Major New Source Review unless source is a federal major source, in which case you would not be in this section. This triggers Type B State New Source Review (formerly 2001/2015 Plant Site Emission Limit rule).*  *May or may not be a major modification, but not subject to Major New Source Review unless source is a federal major source, in which case you would not be in this section. This triggers Type B State New Source Review (formerly 2001/2015 Plant Site Emission Limit rule).* |   *DEQ believes that the changes to OAR 340-222-0041 and 340-224-0010 maintain the 2001/2015 structure of OAR 340-222-0041 and 340-224-0010. DEQ therefore does not agree to pull back the proposed changes and address them in a future rulemaking.* |
|  | DEQ should remove the proposed requirement to send both State New Source Review permit applications and major NRS applications to EPA. Our experience indicates that EPA is not interested in receiving New Source Review applications as EPA has no involvement with the implementation of Oregon’s SIP approved Prevention of Significant Deterioration, Maintenance and nonattainment New Source Review programs. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  DEQ should revise its rule requiring notification of EPA of permit applications subject to New Source Review to render it enforceable. History has demonstrated that permit applicants fail to submit a copy of the New Source Review permit application directly to EPA, without consequence. DEQ should revise the application forms for New Source Review permit actions or change the rule. DEQ also committed to notifying EPA by separate email or letter for future applications subject to New Source Review. (40)  *Response:*  *DEQ agrees with the comment and has revised OAR 340-216-0040(7) to clarify that a copy of an application subject to Major New Source Review under OAR 340 division 224 must also be sent to EPA.*  *DEQ thanks the commenters for pointing out the earlier discussion with DEQ staff on this matter. Upon further consideration, DEQ believes the most effective way to ensure that applicants submit a copy of Major New Source Review permit applications to EPA is to add this requirement to the permit application directions. DEQ staff will make this change as soon as possible. With this action, DEQ does not believe it is necessary to revise this rule.* |
|  | DEQ should not adopt any changes to the current definition of major modification. DEQ is proposing to change the definition to require that sources perform a netting basis to potential to emit comparison to determine the emissions increases due to physical changes and changes in method of operation.   * This significant change ignores the clear wording of the existing rule that the emissions increases must be “due to” the changes. The emissions increase due to any change that occurs post-baseline is the increase in potential to emit, not the difference between baseline and potential to emit. * The rule requires that a source be able to calculate each “unit’s portion of the netting basis,” something few sources will be able to do. * The definition specifies that the categorically insignificant emissions must be included in the calculations. However, categorically insignificant activities do not have a netting basis. (2, 3, 4, 7, 12, 20, 41, 42, 44, 47, 48, 58)   *Response:*  *Need to think about major mod* |
|  | DEQ should delete the proposed requirement requiring a source seeking a first extension must update its control technology analysis. According to EPA, redoing or reviewing the Best Available Control Technology analysis should not be necessary for the first extension request. Pollution control technologies are unlikely to be available within the first 18-month period. The commenter also requests that the payment requirement be changed to simple technical permit modification fee for the first extension period since there is no air quality analysis involved. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  The commenter recommends that for the first extension, the source also be required to review the original Lowest Achievable Emission Rate or Best Available Control Technology analysis to determine if lower emission limits are feasible. For both a first and a second extension, the commenter recommends the source be required to evaluate Lowest Achievable Emission Rate or Best Available Control Technology for any pollutants with National Ambient Air Quality Standards that have been developed since the original application was submitted. The commenter recommends the rules require DEQ to notify Federal Land Managers about requests for permit extensions. (39)  *Response:*  *The XX/XX/*XX EPA guidance on extensions states that  first Prevention of Significant Deterioration permit extension request should include  a detailed justification of why the source cannot commence construction within the initial 18-month deadline. For example, relevant factors for this justification could include ongoing litigation over the Prevention of Significant Deterioration permit, natural disasters that directly affect the facility, significant or unusual economic impediments (including inability to secure financial resources necessary to commence construction) and/or delays in obtaining other required permits.  The EPA believes that in most cases a request for a second extension of the commencement of construction deadline should include a substantive re-analysis and update of Prevention of Significant Deterioration requirements.  *Response:*  *DEQ proposed the following in OAR 340-224-0040(5):*  *(a) For the first extension, the owner or operator must submit an application to modify the permit that includes the following:*  *(A) A Lowest Achievable Emission Rate or Best Available Control Technology analysis, as applicable, if any new control technologies have become commercially available since the original Lowest Achievable Emission Rate or Best Available Control Technology analysis for the original regulated pollutants subject to Major New Source Review or Type A State New Source Review; and*  *(B) Payment of the moderate technical permit modification fee in OAR 340-216-8020 Part 3.*  *(b) For the second extension, the owner or operator must submit an application to modify the permit that includes the following for the original regulated pollutants subject to Major New Source Review or Type A State New Source Review:*  *(A) A review of the original Lowest Achievable Emission Rate or Best Available Control Technology analysis for potentially lower limits and a review of any new control technologies that may have become commercially available since the original Lowest Achievable Emission Rate or Best Available Control Technology analysis;*  *DEQ believes the comment overstates the requirement to perform a Lowest Achievable Emission Rate or Best Available Control Technology analysis for the first extension. As stated in the proposed rule, the analysis is required “if any new control technologies have become commercially available since the original Lowest Achievable Emission Rate or Best Available Control Technology analysis.”*  *DEQ’s intent here is limited to analysis of new control technologies that were not commercially available when the original analysis was performed, where new control technology means a technology that uses a physical or chemical process that is different from those reviewed in the original analysis. For example, SCONOx uses a chemical process that is different from the chemical process used in SCR, whereas an SCR system that achieves a lower nitrogen oxides emission rate does not use a different chemical or physical process from other SCR systems.*  *DEQ believes this is not a particularly onerous requirement. The likelihood of such new technology becoming available in such a short period of time is low and more than likely there will be nothing to analyze. On the other hand, if a new technology does become available that can achieve lower emissions, then it should be considered and DEQ has retained this requirement. However, in view of the comment, DEQ has added language (underlined below) to the proposed rule to clarify the intent:*  *(A) A Lowest Achievable Emission Rate or Best Available Control Technology analysis, as applicable, if any new control technologies, meaning control technologies that use a physical or chemical process that is different from those reviewed in the original analysis, have become commercially available since the original Lowest Achievable Emission Rate or Best Available Control Technology analysis for the original regulated pollutants subject to Major New Source Review or Type A State New Source Review;*  *DEQ must review a control technology analysis if any new control technologies have become commercially available since the original Lowest Achievable Emission Rate or Best Available Control Technology analysis was done. Therefore, a moderate technical permit modification fee for the first extension is required.* |
|  | The proposed revisions to the rules appear to be missing language related to the use of priority offsets. Klamath Falls priority offsets should be identified in OAR 340-204-0320. OAR 340-224-0510(4) requires that emission reductions used as offsets be equivalent to the emissions being offset in terms of short term, seasonal, and yearly time periods to mitigate the effects of the proposed emissions. Because woodstoves are only operated seasonally, offsets generated from their retirement arguably would not meet this requirement for an industrial source operating year round. DEQ should revise the rules to clarify that this is not an impediment to the use of wood stove derived offsets. (2, 3, 4, 7, 20, 41, 42, 44, 47, 48, 58)  *Response:*  *DEQ believes the commenters raise good points and has found that the proposed rules failed to address priority sources for other designated areas, as well the values to be used for priority source offsets in Lakeview.*  *DEQ does not believe that priority sources will be defined for all areas designated as sustainment, nonattainment, reattainment or maintenance areas. DEQ expects that this will only be done in cases where there is clear evidence that a certain type of source is a major contributor to the air quality problem in the area. Further, DEQ did not consider “looking back” to determine if priority sources should be identified for existing designated area. DEQ believes that identifying priority sources for areas other than Lakeview would require a more in-depth review than this rulemaking allows and therefore will not identify priority sources for other areas in this rulemaking, except as proposed in OAR 340-204-0320(2).*  *With respect to the Lakeview sustainment area, DEQ believes it has correctly identified uncertified residential wood fuel-fired devices as the priority source. However, DEQ failed to identify the annual emission reduction offset values for residential wood-fired devices in Lakeview.*  *DEQ notes that annual emission reduction offset values for residential wood-fired devices have been identified for Klamath Falls in OAR 340-240-0560. DEQ compared the winter monthly average low temperatures in Klamath Falls and Lakeview, and notes that the average monthly low temperatures in Lakeview are generally somewhat lower than the monthly average low temperatures in Klamath Falls. This suggests that households in Lakeview that heat with wood fuel are likely to use somewhat more fuel, or at least not less fuel, than similar households in Klamath Falls. DEQ therefore concludes that the annual emission reduction offset values for residential wood-fired devices in Klamath Falls can reasonably and conservatively be applied in Lakeview as well.*  *Comparison of monthly average low temperatures (degrees F) in Klamath Falls and Lakeview (source: Wikipedia)*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | *Oct* | *Nov* | *Dec* | *Jan* | *Feb* | *Mar* | | *Klamath Falls* | *35.4* | *28.2* | *22.7* | *20.6* | *24.5* | *28.1* | | *Lakeview* | *33.1* | *26.0* | *20.6* | *20.6* | *24.0* | *27.8* |   *DEQ has therefore revised OAR 340-240-0560 to allow the use of the Klamath Falls annual emission reduction offset values for residential wood-fired devices in other areas when referred to this rule, and OAR 340-268-0030(f) to specify that a source must use the procedures in OAR 340-240-0560 to calculate the emission reductions from residential wood fuel-fired devices in Klamath Falls or Lakeview.*  *DEQ agrees with this comment and has revised OAR 340-224-0510(4) to state that offsets must be equivalent to the emissions being offset in terms of short term, seasonal, and yearly time periods to mitigate the effects of the proposed emissions, or “must address the air quality problem in the area, such as but not limited to woodstove replacements to address winter-time exceedances of short term PM2.5 standards.”* |
|  | Proposed changes to the New Source Review requirements are insufficient to protect air quality. Under DEQ’s proposal, sources subject to State New Source Review in sustainment areas are required to either conduct an air quality analysis (modeling) or demonstrate a Net Air Quality Benefit (offsets), differing for State New Source Review sources in attainment areas that only have the option of conducting an air quality analysis. It is unclear whether this program would even work in areas that are above the National Ambient Air Quality Standards. A requirement of State New Source Review is that the source demonstrates it will not cause or contribute to a new violation of the National Ambient Air Quality Standards even if their emissions model below the significant impact level. Unless the modeling shows zero impact, it is unclear whether, even under the sustainment designation, new sources and modifications can meet the requirements of State New Source Review.  The offset ratios chosen by DEQ are wholly insufficient to achieve the goals of the sustainment program to keep an area under the National Ambient Air Quality Standards, let alone reducing emissions in an area violating the National Ambient Air Quality Standards enough to help the area get below dangerous levels. If DEQ insists on using the sustainment program, DEQ should at least modify the offset ratios to a more modest level so that the program might actually have a chance of succeeding in stabilizing or reducing the ambient concentration of air pollutants.  It is unclear whether a source subject to Major New Source Review in reattainment area would need to meet both nonattainment and reattainment requirements for a pollutant designated as reattainment. The regulations could potentially be read as only requiring a federal major new source of a reattainment pollutant to meet the requirements of the reattainment section, a clear violation of the Clean Air Act because the requirements of that division bear no semblance to the requirements of Nonattainment New Source Review in the Clean Air Act. (40)  *Response:*  *Commenters have identified the very problem that sustainment areas were created to solve, at least partially.*  *The following is copied from the response to comment number 87:*  *“Lakeview is currently designated as an attainment/unclassified area. To obtain a permit, a source must complete an air quality analysis that demonstrates that their emissions do no cause an exceedance of a National Ambient Air Quality Standards. However, if the air quality already exceeds a National Ambient Air Quality Standards, as it does in Lakeview, this test is very difficult or impossible to pass.*  *The only alternative prior to this rulemaking was to designate the area as a nonattainment area. In a nonattainment area, the air quality analysis is not required but other requirements must be met, such as obtaining offsets and meeting the net air quality benefit requirements. However, it takes years to change the area’s designation. During that time, the area remains designated as attainment/unclassified and obtaining a permit is practically impossible.”*  *To restate the above, a source seeking to locate in an attainment area where air quality exceeds National Ambient Air Quality Standards has little or no chance of showing compliance with the air quality analysis requirement. For such a source, have the area designated as nonattainment would eliminate the requirement for the air quality analysis and replace it with requirements to obtain offsets and demonstrate net air quality benefit. Although these requirements are not easy to meet, they are at least possible. However, it takes years to change the way an area is designated, during which time an effective permit roadblock exists.*  *DEQ created the sustainment area designation to remove the permitting roadblock, at least for those sources subject to State New Source Review. Sources that are subject to Major New Source Review in such areas will still face the permitting roadblock because the Major New Source Review requirements must comply with the federal Prevention of Significant Deterioration requirements; DEQ cannot make these requirements less stringent. Sources subject to Major New Source Review for the sustainment pollutant must still meet the air quality analysis requirement, which, as stated above, will be difficult if not impossible. DEQ is well aware that the sustainment area requirements for Major New Source Review do not change the situation and tried to be clear about this in the rulemaking public notice and meetings.*  *To remove the permitting roadblock for sources subject to State New Source Review, DEQ essentially blended the requirements for attainment and nonattainment areas to allow sources a choice of performing the air quality analysis or of obtaining offsets and demonstrating net air quality benefit. In reality, the air quality analysis requirements will likely still be very difficult or impossible to meet, leaving offsets and net air quality benefit the only real choice. In effect, for sources subject to State New Source Review, the requirements are similar to those in a nonattainment area.*  *DEQ believes the rules pertaining to Major New Source Review in a reattainment area are quite clear. The Major New Source Review reattainment area rule states that source subject to Major New Source Review in a reattainment area must meet the requirements for a nonattainment area, treating the reattainment pollutant as a nonattainment pollutant.* |
| Other Comments | The commenter has lived in Oregon for 35 of 41 years and has recently developed asthma. The commenter wondered if moving back into SE, near Johnson Creek & Precision Cast parts has something to do with his/her half lung capacity. PCP might provide local jobs but at the cost of what? Stricter regulations on air pollutants are a no brainer. (28)  *Response:*  *DEQ does not conduct health studies or evaluations but relies on EPA standards which are based on extensive scientific and technical assessments and undergo extensive review. In this regard, EPA has classified six air pollutants as criteria pollutant because EPA uses health-based criteria as the basis for setting permissible levels of these pollutants in the atmosphere.*  *EPA periodically conducts comprehensive reviews of the scientific literature on health effects associated with exposure to the criteria pollutants. The resulting “criteria documents” critically assess the scientific literature and serve as the basis for making regulatory decisions about whether to retain or revise the National Ambient Air Quality Standards that specify allowable concentrations of each of these pollutants in the air. The standards are set at a level that protects public health with an adequate margin of safety. However, the standards are not “risk free.” Even in areas that meet the standards, there may be days when unusually sensitive individuals, including children, experience health effects related to air pollution. This is especially the case for pollutants such as ozone and particulate matter that do not have discernible thresholds below which health effects are absent. Comparisons of pollutant concentrations with longer-term air quality standards can help identify the pollutants that pose the greatest concerns. Such comparisons can provide a perspective on whether pollutants pose equal or different levels of concern with respect to long-term exposure.*  *Some of the standards are designed to protect the public from adverse health effects that can occur after being exposed for a short time such as one hour or one day. Other standards are designed to protect people from health effects that can occur after being exposed for a much longer time, such as a year. For example, current standards for carbon monoxide are for short-term periods of one hour and eight hours. By contrast, the current standard for nitrogen dioxide is for one year. Some pollutants have both short-term and long-term standards.*  *Health effects that have been associated with each of these pollutants are summarized below. This information is drawn from EPA’s criteria documents as well as more recent studies.*   * *Ground-level ozone – Short-term (also known as “acute”) exposure to ground-level ozone can cause a variety of respiratory health effects, including inflammation of the lung, reduced lung function, and respiratory symptoms such as cough, chest pain, and shortness of breath. It also can decrease the capacity to perform exercise. Exposure to ambient concentrations of ozone also has been associated with the exacerbation of asthma, bronchitis, and respiratory effects serious enough to require emergency room visits and hospital admissions. Some evidence suggests that high ozone concentrations may contribute to increased mortality.*   *Health effects associated with long-term (also known as “chronic”) exposure to ozone are not well established and documented as health effects associated with short-term exposure, but long-term exposures also are of concern. In 1996, EPA’s criteria document for ozone concluded that there was insufficient evidence to determine whether health effects resulted directly from long-term exposure, along with other environmental factors, could be responsible for health effects. Since 1996, a few studies suggest that long-term exposure to ozone is associated with decreases in lung function in humans, increased prevalence of asthma, increased development of asthma in children who exercise outdoors, and exacerbation of existing asthma.*  *Ozone trends in Eugene, Portland, Salem, Hermiston and Bend have decreased over time since a peak in 2004 but have increased in Medford. The standard is 0.075 parts per million and the monitored values range from approximately 0.058 to 0.063 ppm.*   * *Particulate matter in the air (often called PM10 or PM2.5) has been found to cause increased risk of mortality (death), hospital admissions and emergency room visits for heart and lung diseases, respiratory effects, and decreases in lung function. Such health effects have been associated with both short-term and long-term exposure to particulate matter. Children and adults with asthma are considered to be among the groups most sensitive to respiratory effects. Studies published since the release of EPA’s criteria document for particulate matter have found further evidence of an association between particulate matter and increased respiratory disease and symptoms in children with asthma and increased hospitalizations or emergency room visits for persons with asthma. Studies also have that chromic exposure to particulate is associated with morality in adults and suggest that it may be associated with mortality in infants. Also, recent studies suggest that chronic exposure to particulate matter may affect lung function and growth. Prior to 1997, the National Ambient Air Quality Standard for particulate matter was based on particulate matter measuring 10 microns or less (PM10). In 1997, the standard was revised to address the health risks from particulate matter measuring 2.5 microns or less (PM2.5).*   *PM2.5 trends around the state have been variable, with most locations increasing lately. Some of the increases in PM2.5 emissions seem to be due to woodstoves since the high monitored values happen during the winter at night. Portland 42 ug/m3 in 2013!!! Standard is 35!!!*   * *Sulfur dioxide poses particular concerns for those with asthma, who are considered to be especially susceptible to its effects. Short-term exposures of asthmatic individuals to elevated levels of sulfur dioxide while exercising at a moderate level may result in breathing difficulties accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Effects that have been associated with longer-term exposures to high concentrations of sulfur dioxide, in conjunction with high levels of particulate matter include respiratory illness, alterations in the lung’s defenses, and aggravation of existing cardiovascular diseases.*   *Hourly sulfur dioxide trends, monitored in Portland, have decreased since 2006 and are around 10 parts per billion compared to the 75 ppb standard.*   * *Carbon monoxide – Exposure to carbon monoxide reduces the capacity of the blood to carry oxygen, thereby decreasing the supply of oxygen to tissues and organs such as the heart. Short-term exposure can cause effects such as reduced time to onset of angina pain, neurobehavioral effects, and a reduction in exercise performance. Long-term exposure has not been studied adequately in humans to draw conclusions regarding possible chronic effects, though a recent study reported an association between long-term exposure to carbon monoxide and other traffic-related pollutants and respiratory symptoms in children.*   *Carbon monoxide levels in the Portland area, the only location monitored in the state, are far below the 8-hour federal health standard of 9 parts per million and have been trending down since approximately 1990 (currently less than 2 ppm).*   * *Nitrogen dioxide – Exposure to nitrogen dioxide has been associated with a variety of health effects. Effects include decreased lung function, increased respiratory symptoms or illness, and increased symptoms in children with asthma. Nitrogen dioxide also is a major contributor to the formation of ground-level ozone.*   *Hourly nitrogen oxides trends, monitored in Portland, have decreased since 2008 and are around 35 parts per billion compared to the 100 ppb standard. Annual nitrogen oxides trends have remained about the same since 2008 and are around 10 parts per billion compared to the 53 ppb standard.*  *The Portland Air Quality Maintenance Area is designated as being in attainment (meeting the standards) for nitrogen oxides, sulfur oxides and particulate and as being in maintenance for ozone and carbon monoxide. Maintenance for ozone and carbon monoxide means that air quality in the Portland area once exceeded the National Ambient Air Quality Standards for these pollutants but now meets the standards.*  *Permit emission limits and actual emissions for Precision Castparts are contained in the following table:*   |  |  |  | | --- | --- | --- | | *Pollutant* | *Permit Limit* | *Actual Emissions* | | *CO* |  |  | | *nitrogen oxides* |  |  | | *PM2.5/PM10* |  |  | | *sulfur dioxide* |  |  | | *volatile organic compounds* |  |  | | *greenhouse gases* |  |  | | *Hazardous Air Pollutants* |  |  |   *Precision Castparts is a fairly small source of pollutants comparatively speaking. HAPS? Process? Constant? Spikes? Other sources in the area? Close by monitors?* |
|  | There is so much in the air that we breathe that singly could be considered non toxic or even benign when considered individually. Many of these chemicals combine in the atmosphere to actually create a very hazardous "stew." DEQ should consider the cumulative effects of concentrations in neighborhoods and the "spike phenomenon" where total releases remain within limits, but concentrated bursts create poor air quality. Some airsheds are already overloaded. (8)  *Response:*  *The primary focus of DEQ’s Air Quality program in the past was addressed at regulating the criteria air pollutants ozone, carbon monoxide, oxides of nitrogen, sulfur dioxide, particulate matter and lead from automobile exhaust. Cumulative effects of criteria pollutants from all sources in an area are taken into account when ambient monitoring is done in an area and the results compared to the National Ambient Air Quality Standards for criteria pollutants. Based on DEQ’s ambient monitoring network, the Portland area is meeting all ambient air quality standards, meaning that the existing air is protective of public health and welfare on both a short-term and long-term basis for the criteria pollutants.*  *DEQ shares the commentator’s concern for hazardous air pollutant emissions in the Portland Metro airshed and the need to reduce these emissions. This problem is not unique to Portland, but rather affects the majority of the large industrialized cities of the country. The general need to reduce HAP emissions nationwide was the basis for the current Federal HAP program, which DEQ has adopted in its rules by reference. This program, established by the 1990 Amendments to the Clean Air Act, requires EPA to develop Maximum Achievable Control Technology Standards (MACT) to control HAP emissions from over 170 categories of major stationary sources that release 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs.*  *The Clean Air Act, prior to the 1990 amendments, directed EPA to regulate toxic air pollutants based on the risks each pollutant posed to human health. EPA became involved in many legal, scientific, and policy debates over which pollutants to regulate and how stringently to regulate them. Debates focused on risk assessment methods and assumptions, the amount of health risk data needed to justify regulation, analyses of the costs to industry and benefits to human health and the environment, and decisions about "how safe is safe." the chemical-by-chemical regulatory approach an approach based solely on risk proved difficult, and from 1970 through 1989, EPA regulated only seven pollutants (asbestos, benzene, beryllium, inorganic arsenic, mercury, radionuclides, and vinyl chloride). Collectively, these standards only cut annual air toxics emissions by an estimated 125,000 tons nationwide.*  *The present program is in two phases. The initial phase is technology based and when fully implemented, the standards will reduce air toxics emissions by about 1 million tons per year nationwide, or approximately 75% from 1990 levels. After setting a MACT standard, EPA has 8 years (9 years for the earliest standards) to examine the risk posed by continued emissions from regulated facilities and to issue requirements for additional controls if they are necessary to reduce an unacceptable residual risk.*  *As previously stated, DEQ recognizes there is additional need to address possible health impacts from HAP emissions that are not subject to the federal program. To develop such a hazardous air pollutant program of the magnitude necessary to address the HAP problem requires incredible resources. DEQ has never had sufficient resources to accomplish a project of this magnitude and has heavily relied on EPA for this function. Because of the need to address HAP emissions not subject to the federal program, DEQ is developing an additional HAP rule to supplement the current HAP program. A Scientific Advisory Panel of experts will assist DEQ in its development of HAP thresholds.*  *For toxic air pollutants, DEQ has recently developed an Air Toxics Program as outlined in Oregon Administrative Rules 340, division 246. The purpose of this program is to address threats to public health and the environment from toxic air pollutants that remain after implementing the state delegated technology-based strategies of the federal air toxics program (MACT standards). Oregon’s program may use several procedures to evaluate the impacts of toxic air pollutants, including a community-based effort that focuses on geographic areas of concern. The Air Toxics Program is still in its infancy but has established ambient benchmarks (not standards) for 51 toxic air pollutants. At this time no ambient monitoring has been done in the \_\_\_\_\_\_\_\_\_\_ area for any of these toxic air pollutants. DEQ is currently pursuing legislative funding for additional toxic monitors to gather data on toxic air pollutant concentrations at various locations in the state. DEQ will prioritize the location of these monitors and the geographic areas of concern based on criteria outlined in division 246. It is not known at this time where the \_\_\_\_\_\_\_ area will fit in this prioritization.*  *The results of EPA’s Cumulative Exposure Project show that in areas like Northwest Portland, over 50% of the exposure to HAPs are from vehicles and less than 20% is for large industrial sources (for more information about what is being done about air toxics go to EPA’s website* [*www.epa.gov/cumulativeexposure)*](http://www.epa.gov/cumulativeexposure))*. DEQ currently does not have a regulatory approach to evaluate cumulative impacts from air pollution.*  *DEQ does not agree with the idea that Intel could emit a “spike” of emissions that would emit all or a significant part of the annually allows emissions in a short time. The estimates of Intel’s emissions are based on all processes operating all the time for a full year. Intel operates a number of manufacturing processes that operate as separate batches. Each batch process produces only a small part of the annually allowed emissions. Even if all of the processes were to operate simultaneously, the emissions would still not result in a significant spike compared to the annual limit.*  *No change to the proposed rule amendments is proposed in response to this comment.* |
|  | First, Intel should be held to the highest standards for pollution control and required to use the best achievable control abatement technology. It is incumbent upon DEQ to work with the legislature to require zero toxin release from their plants. Allowing Intel and other semiconductor plants to release toxins that we breathe so they can make money is unacceptable. Intel says they reduce their pollution by 85% or so. If they can do that, then just keep adding the scrubbers, charcoal filters, etc. to reduce the toxic emissions to zero. If required to do so they will find a way to do it. Emissions should be monitored continuously by two independent third parties funded by Intel. We cannot allow Intel to self-report. Not reporting their flouride emissions for decades needs to be considered. A paltry $143,000 fine was a slap in our faces.  To protect children’s health, it is important for Oregon DEQ to adopt rules for Intel and any other producer of semiconductors or related materials to employ Best Available Control Technology for fluoride and other toxic emissions. Silica particulate emission should be very carefully evaluated, especially silica particulates that are created when volatile organic compounds produced by the organic solvent hexamethyldisilazane (HMDS) are captured in the plant's solvent exhaust ducts, and sent to the plant's volatile organic compounds abatement systems (thermal oxidizers), which incinerate the HMDS emissions and convert them to silica.  Silica in the lungs can lead to pulmonary fibrosis. The use of fluorides and their related compounds are equally concerning because of their toxicity, especially combined with other chemicals, and should not be emitted all.  Specifically, please retain Oregon's current regulations and in addition please add to Section (66) "Federal Major Source" part (e) Source categories:  add Manufacturing - Semiconductor and related devices (SIC Code 3674 so that Intel will be classified as a major source and be required to adhere to more stringent air quality regulations. (1, 5, 6, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 28, 32, 33, 34, 36, 37, 45, 49, 50, 51, 54, 55, 60)  *Response:*  *DEQ appreciates these comments, but does not agree with the proposed change. The proposed change would have the effect of making it more likely that Intel will trigger Prevention of Significant Deterioration in the future, and be required to perform a Best Available Control Technology analysis. In DEQ’s opinion, Intel already operates emission control systems that would very likely be considered Best Available Control Technology, so there is nothing to be gained from making the proposed change.*  *Intel is also not the only source of emissions in the Hillsboro area. There are many other sources of air pollution, including other industrial sources as well as non-industrial sources such as motor vehicles, dry cleaners, boilers, home furnaces, household chemical products, etc. Intel’s emissions are controlled by modern control devices that most likely would qualify as Best Available Control Technology.*  *Intel will be required to get a Title V operating permit based their current emissions. Title V permits are required by the 1990 Clean Air Act Amendments for all large sources and a limited number of smaller sources. The Title V permit program streamlines the way permitting authorities regulate air pollution by consolidating all air pollution control requirements into a single comprehensive operating permit that covers all aspects of a source’s year-to-year air pollution activities. The program was designed to ensure better compliance, to allow for more thorough air pollution control and provide an opportunity for citizens to be involved in the permit review process. Sources are required to provide emissions reports at least semiannually and must certify their compliance status annually. These compliance certifications must be signed by a responsible official of truth, accuracy, and completeness based on information and belief formed after reasonable inquiry. A responsible official is someone in upper management that has the authority to influence the day-to-day operations of the facility. There is civil and criminal liability for false reporting. Because of the compliance certification requirements under the Title V program, there is no need for independent third party monitoring.*  *Not reporting their flouride emissions for decades needs to be considered. A paltry $143,000 fine was a slap in our faces.*  *No change to the proposed rule amendments is proposed in response to this comment.* |

| List of People Submitting Comments (by Commenter Number) | | | |
| --- | --- | --- | --- |
| Number | Name | Organization | Receive date |
| 1 | Howard Ashley | General public |  |
| 2 | John Ledger | Associated Oregon Industries | 08/28/14  09/15/14 |
| 3 | Mike Riley | ATI Primary Titanium Operations (AOI) | 09/02/14 |
| 4 | Mike Riley | ATI Specialty Alloys & Components (AOI) | 09/02/14 |
| 5 | Robert Bailey | General public |  |
| 6 | Myra Beeler | General public |  |
| 7 | Russell Strader | Boise Cascade Wood products (BCWP) | 08/28/14 |
| 8 | Michael Byrne | General public |  |
| 9 | Rev. Caren Caldwell | General public |  |
| 10 | Eric Canon | General public |  |
| 11 | Pat Clark | General public |  |
| 12 | Jess Brown | Collins Companies | 08/28/14 |
| 13 | Darren Nichols | Columbia River Gorge Commission | 08/27/14 |
| 14 | Kristina DiPaola | General public |  |
| 15 | Russell A. Dondero | General public |  |
| 16 | Paul & Stephanie Edwards | General public |  |
| 17 | Jules Elias | General public |  |
| 18 | Mildred Estrin | General public |  |
| 19 | Val Evers | General public |  |
| 20 | Drew Gilpin | Evraz (AOI) | 08/28/14 |
| 21 | Dale Feik | General public |  |
| 22 | Linda Feik | General public |  |
| 23 | Anne Ferguson | General public |  |
| 24 | Richard Till | Friends of the Columbia Gorge | 08/28/14  09/15/14 |
| 25 | Steve & Marilyn Hall | General public |  |
| 26 | The Rev. Heather Lynn Hanson | General public |  |
| 27 | John Hayes | General public |  |
| 28 | Gitanjali Hursh | General public |  |
| 29 | Rafael Ortega | IQ Collision Center Inc |  |
| 30 | Sandra Hicks | Intel | 09/15/14 |
| 31 | Max Hueftle | Lane Regional Air Pollution Agency | 08/28/14 |
| 32 | Warren Lancaster | General public |  |
| 33 | Jim Lubischer | General public |  |
| 34 | Rudy Marchesi | General public |  |
| 35 | Peter Nelson | Marc Nelson Oil Products |  |
| 36 | Fred Marsh | General public |  |
| 37 | Bonnie McDowell | General public |  |
| 38 | Martha Moore | General public |  |
| 39 | Tonnie Cummings | National Park Service |  |
| 40 | John Krallman | Neighbors for Clean Air/ Northwest Environmental Defense Center/Columbia Riverkeeper | 08/28/14 |
| 41 | Shanna Brownstein | NW Natural (AOI) |  |
| 42 | Kathryn VanNatta | Northwest Pulp & Paper Association (NWPPA) (AOI) |  |
| 43 | Janet A. Gillaspie | Oregon Association of Clean Water Agencies (ACWA) |  |
| 44 | Lincoln Cannon | Oregon Forest Industries Council (OFIC) (AOI) |  |
| 45 | Karin  Pfeiffer-Hoyt | General public |  |
| 46 | Sam Hartfield/David Breen | Port of Portland |  |
| 47 | Ray Hendricks | PGE (AOI) |  |
| 48 | Kristana Lee | Roseburg Forest Products (AOI) |  |
| 49 | Bob Sagar | General public |  |
| 50 | Del Schrag | General public |  |
| 51 | Jack  Timmons | General public |  |
| 52 | Debra Suzuki | US Environmental Protection Agency |  |
| 53 | James Pena | US Forest Service (USFS) |  |
| 54 | Loren Waltz | General public |  |
| 55 | Ruth and William Warren | General public |  |
| 56 | Paul Burns | Waste Management |  |
| 57 | Frank E. Holmes | Western States Petroleum Association (WSPA) |  |
| 58 | Dale Wonn | Weyerhaeuser (AOI) |  |
| 59 | Rob Vance | DEQ |  |
| 60 | Sharon Genasci | General public |  |