Comments on OAR 340-224, and 240-250 revisions.

**340-224-0045 Requirements in Sustainment areas**.

My understanding is that preconstruction monitoring will be required with no exemptions, including 0070(1)(a)(C) that allows for use of Significant Monitoring Thresholds (SMCs), and 0070(1)(a)(D) that allows for post construction monitoring using representative ambient data.

**340-224-0070 PSD Requirements**

1. The language in **0070(1)(a)(C)** that deals with SMCs may have to be revised to account for the 1/22/2013 District Court decision vacating the SMC for PM2.5. This decision for PM2.5 will probably affect the use of the other SMCs.

2. The language in **0070(1)(a)(D)** is somewhat ambiguous. (I'm not sure if this section was in the old rules, or whether it was re-worded.) The language states that post-construction monitoring may replace pre-construction monitoring ***IF*** modeled impacts from the new source plus modeled impacts from competing sources plus representative background are less than the NAAQS. The key piece here is representative background. This section is saying that if you have representative background and a competing source inventory you don't need pre-construction monitoring. But this is a step that we do anyway for PSD if the new source impacts are above the SIL.

The ambiguous part is if the source passes the competing-source modeling test with background, and it always does or else the modeling would never be submitted to DEQ, then we are still required to "substitute post construction monitoring" for pre-construction monitoring. However, I can't recall an instance when a PSD source in Oregon has been required to install a post-construction monitor. Current ambient air data, from the same monitor that provided the background concentration used in the modeling, is used to ensure that air quality is below the NAAQS, but this monitor may be located as some distance from the new source.

However, the language is not clear that the post-monitor need not be a purpose-built monitor, but can be --- always has been --- an existing monitor that is considered representative, or conservative, for the area impacted by the new source. Should we be concerned that a legal interpretation of this language would conclude that a purpose-built post-construction monitor be installed.

3. The Air Quality Protection section, specifically **0070(3)(a)**,addresses the Significant Emission Rates (SERs) for the PM2.5 precursors SO2 and NOx. In essence, this section states that a precursor with emissions greater than the SER (40 tpy), must be included as secondary PM2.5 contributors to total PM2.5 concentrations. However the SER was originally developed as a screening tool for the modeling, or not, of impacts of SO2 and NOx, and it was later "borrowed" by EPA in 2008 to serve as the SER for PM2.5 precursors.

Although the recently released draft PM2.5 Guidance for Permit Modeling refers to these precursor SERs of 40 tpy, it also outlines different analytical scenarios for evaluating impacts from direct PM2.5 and precursors. Since a refined analysis of precursor impacts would require the use of complex chemical models, the guidance refers to "qualitative" and "hybrid/qualitative" approaches for estimating secondary PM2.5 concentrations. These approaches are not defined, nor are any examples given, in true EPA fashion.

However, on a recent NACAA-EPA call on the draft PM2.5 guidance, EPA noted that one way to focus only on the important NOx and SO2 sources as contributors to secondary PM2.5 would be to raise the significance levels to screen out smaller sources. That is, raise the SERs for the NOx and SO2 precursors, maybe as high as 100 to 150 tpy. This is all very much under discussion, and decisions only made after comments on the draft guidance and are compiled and responded to, etc. I don't expect a final PM2.t guidance will be forthcoming before the end of 2013.

So, I'm not sure how precursor SERs should be addressed in this section, since the levels may change. One approach might be to refer to a "Precursor SER," as distinct from a "Criteria Pollutant SER," and leave the actual value of the SER undefined, or defined in an easily edited separate table. This would allow flexibility if EPA were to establish separate SERs for the precursors.

There may be references to precursor SERs elsewhere in 224 and 225, and these should be made consistent.

**340-224-0500 Common Offset Requirements**

1. Offsets and interpollutant trading ratios are described in **0500(3)**.The interpollutant ratios shown here no longer have any basis in EPA guidance. Interpollutant trading ratios may be developed in the future for areas in Oregon, Washington, and Idaho with the assistance of EPA Region 10. These ratios may be developed for specific areas based on the local environment, for example urban and rural areas, and by temperature, precipitation, and ambient NH3 and O3.

The language in this section could be revised to read something like, "Interpollutant offsets for PM2.5 may be used. These offsets will be based on ratios for NOx:PM2.5 and SO2:PM2.5 that will be developed for the area in which impacts from the new or modified source are located."

**340-224-5020 Net Air Quality Benefit in Non-Ozone Areas**

1. The purpose of the modeling in **5020(4)(a)** and **(b)** could be made clearer. In **(a)** the modeled impacts must be less than the SIL at all receptors in the designated area. In **(b)**,presumably, the modeled impacts can be greater than the SIL at some receptors as long as they are less than the SIL "at any *location* where DEQ approved ambient monitoring data is available." "Location" can be read as an "area" or as a "specific spot," such as a receptor placed exactly on the monitor itself. If the latter, this is problematic as the dispersion model does a poor job of predicting concentrations at a specific location.

Generally speaking, models do well at predicting a maximum concentration that can be compared to the NAAQS or Increment, and we can have some confidence of the general area where the maximum occurs, say, over a few tens or hundreds of square meters. But to hang one's hat on beating the SIL at one specific location is unrealistic. So, if we can define "location" more broadly, like a radius of 1 km around the monitor, then I think **(b)** will work.

Having said all this, it is not clear why we have **(a)** to begin with, as it is much more stringent than **(b)**,and why not just go to **(b)** in the first place. The backstop of not having **(a)** is **(c)**,where we come back and analyze all receptors again, and this time we look at all emissions increases and decreases since the designation of the area (a cumulative analysis) and compare the results to a concentration that is 10% of the NAAQS. So, I would suggest reducing this to just two tests, **(b)** and **(c),** re-labeled as **(a)** and **(b)**. This in fact mirrors the two-part test that is our current rules, albeit in a less conservative fashion.

(I may be reading this all wrong, which suggests at least that others may also read it "incorrectly" also, and the language could be clarified.)

2. The process of determining the emissions to model is described in **(4)(c)(B)(ii)** and **(ii)**. In **(ii)** it states "the emission increases or decreases ... *including* offsets used for the proposed project, but *excluding* offsets from priority sources." I am not clear what this means, and it suggests to my eye that offsets from priority and non-priority sources are modeled differently in the analysis. I thought the only difference between priority and non-priority offsets was the offset ratio, that is how much value they had as offsets.

A separate issue is the definition of the SIL and how it is to be used, in light of the 1/22/2013 District Court decision. Not sure what Divisions (200, 224, and 225) where the SIL is referenced, but language should reflect its new status.

**340-225-0030 Procedural Requirements**

1. In **0030(1)** submittal of a modeling protocol is required. A question was raised about describing in our rules the specific requirements and timeframe that should be addressed in the protocol. Since there is variability between the characteristics of different sources, and because of the continuing changes in EPA standards and guidance, the content of the modeling protocol is best determined on a case by case basis and not spelled out in rule.

**340-225-0040 Air Quality Models**

1. Reference is made to models that are specified in 40 CFR Part 51, Appendix W, “Guidelines on Air Quality Models,” with revision dates. Appendix W is continually revised as new models and procedures are evaluated and included. As a result, our rules continually reference revision dates that are no longer valid, and if possible it would be to our advantage to not reference specific dates.

The language could read something like, “All modeled estimates of ambient concentrations … must be based on applicable air quality models … specified in 40 CFR Part 1, … as it is written at the time of the permit application for the source for which the modeling is being conducted.”

**340-225-0050 Requirements for Analysis in PSD Class II and Class III Areas**

1. In **0050(1)** procedures for the single source impact analysis are given with reference to the Significant Impact Level (SIL). EPA has revised its approach to the use of the SIL since the 1/22/2013 District Court decision. Although language for EPA modeling guidance is still in progress, additional caveats in our rule would be justified.

Language could read something like, “*For areas where the difference between the measured background and the NAAQS is greater than the SIL*, a single source impact analysis for each pollutant and its precursors is *generally* sufficient to show compliance with the NAAQS … if modeled impacts … are less than the SILs …. In any case, the owner … must not cause or contribute to a new violation of an ambient air quality standard even if the single source impact is less than the SIL ….”

PhA (4/11/2013)