Senator Close, Senator Olsen, Representative Sprenger and interested stakeholders;

Thank you for meeting with us on Friday, October 18th, to discuss the statewide emission standards for grain loading and opacity. I am providing some follow-up information requested at that meeting. We are looking forward to further discussions on Tuesday, November 12th.

As you know, DEQ is considering updating the statewide grain loading and opacity standards as part of a comprehensive update to our permitting rules. Please keep in mind that we are still in the information gathering phase and that we have not yet proposed any amendments. Over the past couple of months, we discussed draft concepts and conducted extensive outreach to get feedback before proposing rule amendments and beginning a formal public comment period. This extra step is not required by Oregon law, but it will help us develop the best possible proposal.

Based on the feedback we’ve received to date, we have decided to delay the public comment period for the comprehensive permitting program update to develop a revised proposal for the grain loading and opacity standards. We plan to form a fiscal advisory committee - including affected mills, asphalt plants and members of the public – to give us feedback on several options we are developing. The committee will meet next month, and we will then propose rule amendments for public comment in January.

We are quite confident that we will be able to develop a revised proposal that meets the original goals of the rule concept without causing significant costs to existing businesses. The goals of the rulemaking are to protect public health, ensure that there is room in the air sheds around older facilities for business expansion as the economy improves, and meet EPA guidelines for rule specificity. These goals can be achieved without requiring any business to replace a biomass boiler with a natural gas boiler or to incur large costs for pollution control equipment. This is because many of the affected businesses already operate well below the current rule limits or could meet a lower limit with modest improvements to operations or controls.

At our meeting on November 12th, we will be prepared to discuss options for the grain loading and opacity standards that will be presented to the fiscal advisory committee. In brief, here are some of the options we are developing:

* Option 1: Set the default grain loading standard at a level most facilities can meet by tightening up operations without adding emission control equipment. For those who can’t meet this limit, set a source-specific limit they can meet with an existing or new multiclone dust collector (the most basic particulate emission control device for a boiler).
* Option 2: Set the default grain loading standard at a tighter level, but allow companies to emit at less stringent levels if dispersion modeling shows their emissions do not cause air quality violations.
* Option 3: Set the default opacity standard at a tighter level, but allow meeting a less stringent standard based on data from an in-stack continuous opacity monitor showing they can’t meet the default standard.
* Option 4: Exempt specific cases, such as backup boilers, or allow the standards to be exceeded for short periods of time due to operational variability.

All of these options would meet our original goals by reducing public exposure to air pollution and creating room in the air shed for new and expanding businesses. They could also all be crafted to meet EPA guidelines for rule specificity. These and perhaps other options will be reviewed by the fiscal advisory committee before we put an actual rule proposal on public notice.

At the last meeting, participants asked a number of questions that we would like to address:

* **What are the health impacts of breathing fine particulate and what scientific evidence supports that conclusion?**

Fine particulate is one of the most studied air pollutants, and its health effects are well documented. The size of particles is directly linked to their potential for causing health problems. Fine particles less than 2.5 micrometers in diameter pose the greatest problems, because they can get deep into the lungs, and some may even get into the bloodstream. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

* premature death in people with heart or lung disease,
* nonfatal heart attacks,
* irregular heartbeat,
* aggravated asthma,
* decreased lung function, and
* increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

People with heart or lung diseases, children and older adults are the most likely to be affected by particulate pollution exposure. However, even healthy people may experience temporary symptoms from exposure to elevated levels of particulate pollution.

EPA has established national ambient air quality standards that limit the maximum daily and annual concentrations of pollution in the air we breathe. States are required to meet the national ambient standards by limiting emissions from equipment such as boilers and woodstoves. In September 2006, EPA tightened the standard for fine particulate based on recent health studies showing that this air pollutant was more dangerous than previously thought. Reviewing and changing a national standard is a lengthy undertaking governed by the Clean Air Act. This link will take you to EPA’s website and a description of the process: <http://www.epa.gov/ttn/naaqs/review.html>

EPA lowered the daily standard from 65 to 35 ug/m3. EPA’s Clean Air Science Advisory Committee (CASAC), which provides independent advice to the EPA Administrator on the technical bases for national standards, was concerned about public health impacts at levels as low as 25 ug/m3. Here is a link to the documents produced during the standard review, which detail the extensive work of EPA and CASAC on the standard: <http://www.epa.gov/sab/panels/casacpmpanel.html>

* **What prompted DEQ to consider changes to the grain loading standard at this time?**

The changes are part of a comprehensive update to our permitting rules to protect public health, support economic development and make the rules easier to understand. DEQ also needs to update the grain loading standard to align it with federal guidelines for specificity. The pre 1970 and post 1970 standards are currently stated with one significant digit, but to avoid conflicts with EPA guidance they must be in two significant digits to provide clarity and regulatory certainty. EPA guidelines specify that two significant digits apply to all standards, and if a second digit is not specified it is considered to be zero.

For example, Oregon’s current particulate standard for post 1970 boilers is 0.1. DEQ interprets 0.1 to mean 0.149. However, this interpretation is not consistent with EPA policy which would interpret the standard to mean 0.10.

* **What prompted DEQ to consider tightening the standard?**

EPA dramatically tightened the outside air particulate standard in recent years causing some communities to be in violation of the 35 ug/m3 standard. In addition, the particulate emissions standard for pre-1970 boilers has not been revised for 40 years, although many businesses have upgraded their boilers and changed operational practices over that time. It is normal practice for DEQ to periodically review standards to ensure that they are appropriate given changes in technology, air quality, and federal requirements.

DEQ conducted preliminary dispersion modeling (see attachment A) for three of the facilities identified as being impacted by a tightened standard. Two of these facilities show potential exceedances of the federal standard. Modeling for the third facility does not show exceedances but shows consumption of most of the available air shed (71%). This type of air shed consumption makes it costly or impossible to permit new businesses and can prevent expansion of existing nearby facilities.

DEQ understands that health impacts from old boilers vary by community, and we further understand that our data also varies by community. In some communities we have monitoring data and in other communities we must rely on modeling to estimate pollution and health impacts. As a result, and in acknowledgement of varying degrees of health impacts and reliable data, DEQ is being careful to consider a state-wide standard that improves public health but is also readily achievable without undue costs on industry.

* **What standard would improve air quality without significant investment?**

DEQ reviewed stack test data for 60 pre and post 1970 boilers and found 47 boilers consistently met a 0.10 standard and 13 boilers did not. Seven of these thirteen sources met the 0.10 standard during some tests, but not all tests, indicating that operational variation significantly affects emission levels. For this reason, DEQ decided to seek additional information from affected sources to determine the emission level they can achieve through operational changes alone and what investments would be needed to meet a 0.10 standard.

Based on the feedback received to date, DEQ believes a standard between 0.10 and 0.20 can be met by most sources without significant investment. The exact number will be determined in consultation with the fiscal advisory committee based on a review of company’s emission source test data and emission control costs. DEQ also believes that exceptions will likely be needed for specific facilities based on their location or the type of equipment they have installed.

* **Which sources would be impacted by a standard of .15 gr/dscf and .175 gr/dscf?**

Based on DEQ’s source test data, the following sources using pre 1970 equipment may be impacted by a .15 or a .175 particulate standard:

* + **Sources over 0.15 gr/dscf:**
		- Swanson Group Roseburg (1 boiler)
		- Boise Cascade Pilot Rock (2 back-up boilers)
		- Columbia Forest Products (1 boiler)
		- Harney Rock and Paving (asphalt drying and heating equipment)
		- Cascade Pacific Pulp (power boiler when burning backup crude oil)
	+ **Sources over 0.175 gr/dscf:**
		- Boise Cascade Pilot Rock (1 back-up boiler)
		- Harney Rock and Paving (asphalt drying and heating equipment)
* **Will the planned fiscal committee be advisory or will their decision be binding?**

The committee will be advisory. DEQ follows the Oregon Administrative Procedures Act (see below) related to the planned fiscal committee. We will seek recommendations and will consider them in preparing the fiscal impact. In addition to what is required by statute, DEQ is going to seek information from fiscal advisory committee members on potential secondary fiscal and economic impacts on the surrounding community, which may arise from a tightened particulate standard.

**ORS 183.333** **Policy statement; public involvement in development of policy and drafting of rules; advisory committees.** (1) The Legislative Assembly finds and declares that it is the policy of this state that whenever possible the public be involved in the development of public policy by agencies and in the drafting of rules. The Legislative Assembly encourages agencies to seek public input to the maximum extent possible before giving notice of intent to adopt a rule. The agency may appoint an advisory committee that will represent the interests of persons likely to be affected by the rule, or use any other means of obtaining public views that will assist the agency in drafting the rule.

 (2) Any agency in its discretion may develop a list of interested parties and inform those parties of any issue that may be the subject of rulemaking and invite the parties to make comments on the issue.

 (3) If an agency appoints an advisory committee for consideration of a rule under subsection (1) of this section, the agency shall seek the committee’s recommendations on whether the rule will have a fiscal impact, what the extent of that impact will be and whether the rule will have a significant adverse impact on small businesses. If the committee indicates that the rule will have a significant adverse impact on small businesses, the agency shall seek the committee’s recommendations on compliance with ORS 183.540.

 (4) An agency shall consider an advisory committee’s recommendations provided under subsection (3) of this section in preparing the statement of fiscal impact required by ORS 183.335 (2)(b)(E).

* **How does Oregon’s air quality compare to other states, including neighboring states and east coast states?**

DEQ assesses overall air quality by the number of nonattainment areas in the state and by the number of unhealthy air days for sensitive groups - the very young, the elderly and those with asthma or other respiratory problems. Oregon has three areas that violate the daily fine particulate standard - Klamath Falls, Oakridge and Lakeview. (Lakeview is violating the standard but has not been officially designated nonattainment.)

Our neighboring states both have one nonattainment area. In Washington, the Tacoma area has been designated nonattainment and in Idaho, the Logan, UT nonattainment area extends into Franklin county Idaho. In the northeastern United States, Connecticut is the only state with a daily fine particulate nonattainment area. Fairfield and New Haven counties are part of a large nonattainment area that extends into New York and New Jersey. Further south, Virginia has no areas violating the daily fine particulate standard whereas Pennsylvania has numerous nonattainment areas.

While a nonattainment designation highlights a consistent problem in a community, the air is unhealthy for citizens to breathe in many Oregon cities on many individual days. Due to fine particulate, Oregon experienced 41 days of unhealthy air for sensitive groups in 13 different cities in 2012, while Washington experienced 48 unhealthy days in 11 cities, and Idaho had 22 unhealthy air days in six cities.

* **Where do we monitor air quality in Oregon?**

The attached map provides a view of the entire Oregon fine particulate monitoring network. Along with the DEQ sites, DEQ operates eight sites for the United States Department of Forestry, three sites for the Oregon Department of Agriculture (summer field burning monitors) and one site each for Union and Jefferson counties (summer time field burning monitors.) These entities reimburse DEQ for the costs of operating the monitors and we are able to gather valuable monitoring information that would otherwise be unaffordable.

Since the 2007-2009 biennium, three monitoring sites have been eliminated as a result of the economic downturn and state budget shortfalls. Two of those monitors were regularly moved from community to community to assess the air quality in areas where we had no previous monitoring data. For example, using these monitors we found high fine particulate levels in Prineville and low levels in Madras and McMinnville.