State of Oregon
Department of Environmental Quality Memorandum

Date: June 11, 2013

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda item N, Informational item: Director's report

Clean Fuels Program update

The commission adopted the Oregon Clean Fuels Program Dec. 7, 2012. The three basic pieces of this first phase of this program are registration, recordkeeping and reporting requirements. Beginning on Jan. 1, 2013, Oregon producers and importers of gasoline, diesel, ethanol and biodiesel have been required to register with DEQ.

Program staff reached out to over 300 fuel terminals, bulk plants and transporters in an effort to identify who the importers are, what types of fuel they are importing, where they get their fuel from and how it gets into Oregon. Staff issued a web-based survey and followed up with phone calls to complete the survey.

As of the end of May, DEQ has identified 57 companies that would be subject to recordkeeping and reporting. Seventeen of these parties have registered, and DEQ has contacted the other 40 parties to remind them that the deadline to register is June 30. DEQ held workshops in Portland and Pendleton to discuss the details of the program and answer questions, including the overall goal of the program, how it fits in with other state and agency climate change policies and getting feedback on how to improve the effectiveness of the program's design in the future. DEQ intends to develop a web-based reporting tool for the regulated companies and parties in the Clean Fuels program.

Klamath Falls air quality attainment status update

The Klamath Falls area has struggled with air quality concerns in the past few years, with monitor data showing the community near or exceeding pollution levels at times. The monitoring data is used by EPA to assess if a community is in attainment, or meeting air quality standards. EPA is the agency responsible for designating communities in attainment or nonattainment, which requires specific community actions to come back into compliance with air quality standards. A large hay fire occurred near Klamath Falls Dec. 14, 2011. Local government officials claim the hay fire caused the extreme pollution levels measured at the ambient monitor and assert the pollution caused by the hay fire was beyond the community's control. Federal regulations allow the exclusion of monitored data if it was substantially influenced by an

exceptional environmental event. EPA uses specific criteria to evaluate the omission of monitored data during these exceptional events, and wildfires and dust storms are commonly approved. Local officials requested the hay fire be regarded as an exceptional event and the monitored impacts removed from the ambient data record.

DEQ reviewed and considered all factors surrounding the hay fire event such as modeling, meteorology, and historical conditions. County employees, fire department, and eyewitnesses participated in the DEQ investigation. In January 2013 DEQ submitted an exceptional event request to EPA, concluding the hay fire may have played a significant role in the severe monitored values.

Following the DEQ investigation and request, Chair Blosser submitted a letter to EPA, encouraging serious consideration of the exceptional event request. EPA met with the Klamath County commissioners in April 2013 to discuss nonattainment issues, the community's future and concerns over exceptional events affecting the community.

In May 2013, EPA sent a letter informing DEQ of its decision to not review the Klamath Falls hay fire exceptional event request. Klamath Fall's attainment status will be based on 2013-2015 data, so the air quality during the hay fire will not affect any foreseeable regulatory decision. However, if the recorded ambient data does become significant in the future, EPA will reconsider the request at that time. For now the monitored data during the hay fire event will remain part of the ambient record.

Oregon Smoke Management Program review nearing completion

This month, the Oregon Department of Forestry will complete its periodic review of the Oregon Smoke Management Program. Conducted every five years, DEQ participates in this effort, providing oversight and working with Forestry's advisory committee. The last review, completed in 2007, resulted in some program improvements, such as designating more urban areas and the Columbia River Gorge National Scenic Area as "smoke protected" areas, and voluntary measures to protect visibility in Class I wilderness areas across the state.

The Department of Forestry provided an overview of the plan to its board on June 5, and explained that it will seek authorization to begin rulemaking this fall. This will be a joint rulemaking effort between ODF and DEQ, since any changes to the program require amending DEQ's State Implementation Plan to meet the federal Clean Air Act. Overall, ODF is planning to propose only minor changes to the Oregon Smoke Management Program. Both ODF and DEQ will be seeking adoption of this rulemaking in spring 2014 from the Board of Forestry and EQC, respectively. DEQ anticipates a much more extensive review and update of the smoke management plan in the 2017-2018 timeframe as part of Oregon's next regional haze plan.

On a separate track, DEQ and ODF will be discussing ways to improve the collaborative joint-agency process for evaluating and updating future smoke management plans. Under state law, both the State Board of Forestry and EQC are responsible for approving changes to Oregon Smoke Management Program, while ODF is responsible for smoke management rules and program operation. DEQ hopes to update the plan review and approval process to make it more efficient and better reflect the dual agency approval authority in statute.

In response to the severe forest fires experienced in Oregon last summer, such as the large Pole Creek wildfire in Central Oregon, DEQ has been working closely with other state and federal agencies, including the Oregon Department of Forestry, Oregon Health Authority, and U.S. Forest Service, to better address the health risk posed by major smoke impacts. As a result of this collaboration, DEQ helped develop a written protocol to ensure a coordinated response to these events. The recently completed Oregon Wildfire Response Protocol identifies general roles and responsibilities of each agency, how to improve communication with the public, tribal governments, local governments and school districts, and identifies recommended public health actions based on the level and duration of smoke exposure. This protocol will be in place this summer.

Division 12 rulemaking update

DEQ is finalizing its proposed changes to the Division 12 penalty rules. The impetus for the rulemaking was a 2009 bill that increased the maximum penalties for most violations in the programs that DEQ administers. DEQ's Office of Compliance and Enforcement convened two advisory committees – one to look at how to implement the statutory increase for most penalties from a maximum of $10,000 to a maximum of $25,000 and a separate committee to look at how to implement a special penalty maximum of $100,000 for certain spills of oil or hazardous materials.

The Office of Compliance and Enforcement gathered comments and suggestions and reviewed proposals with two advisory committees and agency programs. The rules modify a fairly complex penalty formula that considers a number of factors and circumstances related to the violation and the violator. DEQ expects to send the rulemaking package for public notice and comment in July, and to bring the rules to EQC for action at its October meeting.

Updated guidance document helps communities, utilities in planning for public wastewater improvement projects

DEQ, in cooperation with three other funding organizations, recently published a guidance document for public wastewater projects. The document provides communities and utilities throughout Oregon with guidelines on how to best plan for and follow through on publicly financed wastewater improvement projects. Utility managers, public works directors, engineering consultants and environmental consultants can use guidelines in the document to

ensure they're prepared for planning and following proper procedures to develop the planning documents needed for the projects. Many of Oregon's public wastewater collection, treatment and discharge systems are aging, undersized or unable to meet increased regulatory requirements. The guide helps municipalities and agencies working to upgrade wastewater systems and covers projects funded in part by DEQ, the Oregon Business Development Department's Infrastructure Finance Authority, U.S. Department of Agriculture's Rural Development Program and the Rural Community Assistance Corporation. DEQ posted the guide online at: **http://www.deq.state.or.us/wq/loans/docs/FacilitiesPlansGuidelines.pdf.**

Planned rulemaking for corrections and clarifications to Toxics Water Quality Standards

DEQ has restarted a rulemaking to correct errors related to the toxics water quality standards regulations. DEQ delayed this rulemaking due to external concerns about timing for the proposed rules and other unresolved water quality standards issues. DEQ plans to hold two advisory committee meetings in June and July, bring the draft rules for public comment in September and propose rules for commission action in December 2013.

DEQ is conducting this rulemaking in response to EPA's Jan. 31, 2013, action disapproving a number of Oregon's toxics criteria to protect aquatic life that DEQ submitted to EPA in 2004. Some of the disapproval actions resulted from errors or lack of clarification, while other disapproved criteria are more substantive in nature. The objective of this rulemaking is to correct some of the disapproved criteria where the remedies are more straight-forward, such as the technical correction of 11 pesticides and selenium criteria. DEQ also anticipates correcting typographical errors associated with the Human Health Toxics Rulemaking, adopted in 2011, and will also propose to consolidate the aquatic life toxics criteria into one table to address confusion from the toxics criteria currently being distributed among three tables.

EPA also disapproved several toxics criteria, which will require more complex analysis and discussion among DEQ, EPA, National Marine Fisheries Service, U.S. Fish and Wildlife Service and stakeholders. Rulemaking for the more complex issues will occur after the corrections rulemaking. DEQ is initiating the corrections and clarifications rulemaking to ensure that these straight-forward corrections are completed in a timely manner, and are not unnecessarily delayed by the more substantive issues DEQ anticipates arising from the other disapproved criteria.

Preventing aquatic invasive species through ballast water regulatory enforcement

On May 20, DEQ inspected the Port of Portland Terminal 4 and found a bulk carrier vessel that had sourced ballast water from the upper San Francisco Estuary, which presents a high risk for invasive species, but had not performed the required ballast exchange practices prior to entering Oregon waters. The ship had already discharged approximately 2,500 m^3 of moderate-risk ballast water into the lower Willamette River, and still contained about 9,000 m^3, over two million

gallons, of high-risk ballast water. DEQ advised the vessel operator about options to manage the water, and the vessel operator eventually opted to return to ocean waters in order to perform the required management practices and ballast water exchange. After a four-day delay in operations, the vessel returned to the Willamette River and completed its cargo loading and de-ballasting of low-risk oceanic water. DEQ issued a pre-enforcement notice to the vessel operator for the ballast that had been discharged prior to inspection and the case has been referred to the DEQ Office of Compliance and Enforcement for further review.

Compliance verification efforts are dependent upon DEQ staff screening pre-arrival ballast reporting declarations and targeting limited inspection resources toward vessel arrivals that represent the greatest risk. The new ballast management fee, established in 2012, has allowed DEQ to hire a half-time vessel inspector and increase the inspection rate from less than four percent to over 13 percent of the 1500 vessels arriving in Oregon's waters each year. The increased inspections have resulted in a roughly four-fold increase in violations identified, which are violations that otherwise would have been missed.

Materials management update

The EQC unanimously adopted the *2050 Vision and Framework for Action* last December. This summer, staff will be organizing the Materials Management Workgroup. The purpose of the workgroup is to guide the implementation of the 2050 vision and to solicit input and gain support for key actions. In addition to the Material Management Workgroup, there will be three subgroups focusing on goals and measures, funding and recycling. The Materials Management Workgroup will meet seven times from fall 2013 to fall 2014. DEQ will start selecting and inviting workgroup members soon, and commissioners are invited to participate or stay apprised of the workgroup's progress.

Annual report on total dissolved gas

The U.S. Army Corps of Engineers operates four dams on the lower Columbia River, and is responsible for ensuring that migrating salmon are not negatively affected by the dams' presence and operation. One requirement is that the Corps monitors for total dissolved gas levels in the water and gas bubble trauma in the migrating fish, and prepares an annual report to DEQ and the commission. The 2012 report is included here as a separate document. In summary, the Corps saw an increase in the number of days on which the total dissolved gas figures exceeded the 110 percent standards; however, the increase in total dissolved gas did not correlate to an increased risk to fish. There is no commission action necessary, and the current waiver and requirements are in effect until Aug. 31, 2014.

State of Oregon
Department of Environmental Quality Memorandum

Date: June 10, 2013

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: 2012 Annual Report on Columbia River Total Dissolved Gas and Spill for Fish Passage

Annual report and update

This is an informational summary about the total dissolved gas levels during the 2012 fish passage spill season at the lower four Columbia River dams. The commission requires this report as part of the June 2010 total dissolved gas waiver issued to the federal government and the 2002 total dissolved gas TMDL. The dams affected are Bonneville, The Dalles, John Day and McNary federal hydropower dams on the mainstem Columbia River. DEQ received the 2012 total dissolved gas report from the Army Corps of Engineers December 27, 2012.

2012 results

The total dissolved gas standard is 110 percent of barometric pressure. The 2010 waiver allows for 120 percent in the tailwater, the area downstream of the spilling dam, for the purpose of endangered species fish passage. The waiver applies only to the fish passage spill period of April 1 to August 31. In 2012, Columbia River flows were 106 percent of average, compared to 117 percent in 2011. There were no days of high flows above the 7Q10[1] when the waiver criterion was not applicable due to flood flow conditions on the Columbia River between May and June.

In 2012, 40 percent, or 244 out of 616, of the total days in the fish passage spill season exceeded the waiver limit. In 2011, 27 percent, or 164 out of 616, days exceeded the waiver limits. The 2012 exceedances were due to several factors:

- The Corps' uncertainty when applying fish passage spill guidance criteria at the dams, such as not properly accounting for runoff patterns from watersheds, water travel time, degassing of total dissolved gas, water temperature effects and spill gate patterns
- A malfunctioning total dissolved gas monitoring gauge at Bonneville Dam due to destruction from high flows and
- High runoff flows and flood control operations.

The Fish Passage Center conducted biological monitoring of juvenile salmon and trout for gas bubble trauma at the Bonneville and McNary dams two days per week for the duration of the fish passage spill period. The commission-issued total dissolved gas waiver states that the fish passage spill program must be halted if either 15 percent of the fish examined show signs of gas bubble trauma or if five percent of the fish examined have signs of gas bubble trauma over 25

[1] The average peak annual flow for 7 consecutive days that has a recurrence interval of 10 years, defined in the 2002 TDG TMDL.

percent of their surface area. The Fish Passage Center examined 7,301 juvenile salmonids and 42 individuals, or 0.6 percent, had signs of gas bubble trauma with less than 25 percent of their surface area affected. Similarly in 2011, 0.6 percent, or 41 salmonids of 7,429 examined, exhibited gas bubble trauma.

Risks to fish

Although the total dissolved gas levels exceeded the waiver limit for a portion of the time, the biological monitoring indicated a low risk to out-migrating salmonids. When total dissolved gas did exceed the waiver limit, the Corps reduced the amount of fish passage spill in order to reduce the total dissolved gas levels in the river. The Corps' goal is to meet the total dissolved gas waiver limit when implementing the fish passage spill program. DEQ will continue to work with the Corps to reduce the number of waiver exceedances during the fish passage spill season in 2013 and until the waiver expires Aug. 31, 2014.

Maintaining waiver limits

During the February 2012 presentation of the 2011 Annual Report on Columbia River Total Dissolved Gas and Spill for Fish Passage, EQC inquired about raising the waiver limit to 125 percent in the tailwater to allow increasing fish passage. As documented in his letter, NOAA Regional Administrator, William Stelle, Jr., supports DEQ's biological rational for maintaining the waiver limit at 120 percent. DEQ asserts this limit provides a balance between increased fish survivorship from fish passage spill and increased gas bubble trauma from increased total dissolved gas levels due to spill at the dams. Increasing the waiver limit will expose resident and migrating fish species to greater risk of gas bubble trauma and increase total dissolved gas downstream where there is less mitigation through depth compensation. The Corps can make structural and operational modifications to increase spill without increasing total dissolved gas.

Approved:

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