State of Oregon
Department of Environmental Quality Memorandum

Date: July 9, 2018

To: Environmental Quality Commission

From: Richard Whitman, Director

Subject: Agenda item K, Informational and Discussion Item: Director's Report
July 11-13, 2018, EQC meeting

1. Air Quality Division

1.1. Permitting Program Update

An audit of DEQ's air quality permitting programs in 2018 contained ten recommendations for improvement of the agency's air permits programs. These recommendations spanned operational, technological and procedural elements of the program, and are summarized as follows:

- **Recommendation 1**: Conduct a Lean process improvement, as suggested by EPA in 2016. As a first step, improve tracking of the permit backlog. **Actions:** DEQ held a LEAN process improvement initiative on June 4 through 7, with the implementation of the process improvement review to follow this summer.
- **Recommendation 2**: Centralize and improve inspection tracking to ensure compliance inspections are completed timely. **Actions:** DEQ has implemented an interim inspection tracking tool, with the eventual integration of this tool into the agency's Environmental Data Management System (2019).
- **Recommendation 3**: Implement the Basic Air Contaminant Discharge Permit for Auto Body Repair Facilities in the Northwest Region. **Actions:** DEQ notified all operations potentially subject to the permit requirement of the need to either apply or seek confirmation that the operation is exempt. DEQ held a technical assistance session for auto body shops subject to the ACDP permit requirement in the agency's Northwest Region. DEQ has taken the following actions to implement the permit:
    - 15 shops have received warning letters with an opportunity to correct, and continue to work with DEQ;
    - 40 shops have submitted complete applications and most permits are already issued;
    - 30 shops have been exempted;
    - 22 shops have submitted some application materials but need to finish their applications;
    - Three shops appear to be out of business with no contact;
    - 57 additional shops are to be contacted by DEQ in Phase 2 of the permit engagement
- **Recommendations 4**: Determine staffing levels needed to issue air quality permits and complete inspections within established timeframes, based on current and projected

workloads. Based on the results of the analysis, work with the legislature to identify funding for staffing levels necessary to align with workload. **Actions:** DEQ improved its tracking of staff time and carried out an assessment of workload based on those data. DEQ is continuing discussions internally and with external partners regarding necessary staffing levels. This analysis is the basis for a proposed policy option package in the agency's request budget, which will be filed in August of this year for consideration by the Governor later in the year.

- **Recommendation 5**: Fill vacancies in a timely manner. **Actions:** DEQ has filled seven program vacancies since February 2018. DEQ has instituted an agency-wide system to track and prioritize vacancies and recruitments.
- **Recommendation 6**: Carry out succession planning within the division. **Actions:** The program is working with DAS and staff to assess areas of knowledge vulnerability due to limited staffing and/or expected staff retirements. Training is under development to facilitate positional succession in the program
- **Recommendation 7**: Provide permit writer guidance and support. **Actions:** Existing guidance documents are being reviewed for consistency and systems are being improved so that these are maintained in a central location. Based on the Lean event, DEQ is developing additional process improvements that will address this recommendation.
- **Recommendation 8**: Improve pre-application guidance for applicants, including development of documents such as: a permitting process overview; a completeness determination checklist for applicants; and guidance written in plain language. **Actions:** DEQ formed a team on 5/7/15 to review pre-application guidance from six other states. The team has conducted and summarized research, and shared findings with lead permit writers and regional managers. DEQ will develop and implement additional process improvements that address this recommendation as a follow up to the June process improvement event.
- **Recommendation 9**: Improve the Title V and ACDP permitting webpages to enhance usability for permit applicants, especially as it relates to content, navigation and organization. **Actions:** A group of agency staff involved in the Air Quality permitting process improvement efforts has been designated to focus on improving the webpages.
- **The group will meet and propose improvements to the website by July 31st.**
- **Recommendation 10**: Provide clear information to the public on the purpose of public comment and participation in the permitting process, including what matters DEQ can and cannot consider in making permit decisions. **Actions:** DEQ is on schedule to design and implement a strategy to strengthen public comment and participation by the end of 2018. An assessment of the permit process identified several ways that the agency can engage the public more effectively, including making clear what DEQ can and cannot do. New resources (i.e., participation guides, examples of successful public comments) will help clarify roles, identify opportunities for engagement, and provide best practices for providing public comment to inform a permit process.

2. Water Quality Program Update

2.1. Harmful Algal Blooms

Recent detections of cyanotoxins in drinking water caused by Harmful Algal Blooms have raised health concerns across the state and particularly in the Salem area where residents were advised to refrain from using drinking water for several weeks. Not every algal bloom results in the presence of toxins, but when it does it can pose a health risk to people that recreate in or drink the water. Pets and livestock are also particularly vulnerable to these toxins. The Oregon Health Authority, Department of Environmental Quality, Oregon Department of Agriculture, Oregon Emergency Management, Oregon Military Department, municipalities, nonprofit organizations and community partners are working together to protect public health.

Rule development

OHA, DEQ and other agencies have coordinated monitoring and response for reported HABs for some time, but until the most recent HAB affecting the City of Salem, there has been no federal or state requirement for the testing of drinking water for HAB related toxins. At the request of Oregon Governor Brown, OHA recently adopted a temporary rule that will require drinking water suppliers using surface water sources that may be more prone to harmful algae blooms, to routinely test for cyanotoxins. The water suppliers are required to issue do-not-drink advisories when levels of those toxins go above health-based guideline values.

The rules establish a baseline for testing, requiring water suppliers to test their raw intake water at least every two weeks. If a detection at or above the health advisory level is found, suppliers must increase monitoring to weekly of both the raw intake and finished water. If any finished water detection occurs, monitoring of finished water must then occur daily. If testing of water samples from a finished water sampling point exceeds the health advisory level and is confirmed by a subsequent analysis, a health advisory is required.

The rule is effective July 1, 2018, and the first round of required testing will take place the week of July 16. The temporary rules will be in place July 1-Dec. 31, 2018. In the meantime, OHA will open a public process for developing permanent cyanotoxin testing rules.

Development of in-state lab capacity

DEQ will provide laboratory analysis services required under the rule at no cost to the covered systems. Doing so will enable faster turn-around for drinking water systems, and will allow the state to collect data from all of the systems in one place. These data will be valuable to OHA as it develops permanent rules later this year. DEQ will test for cyanotoxins by the ELISA method, commonly used in other states and required by the temporary rule. If a system wishes to do further or confirmatory testing by the LC/MS/MS method, which is not required by the rule, DEQ also can conduct that testing for a fee. A system may also choose to conduct testing through an independent lab.

Partnership with local water suppliers

OHA and DEQ are working closely with water suppliers to ensure compliance with the new rules so that cyanotoxins are kept out of drinking water and people in Oregon can kept safe from

exposure to toxins. The agencies have developed joint FAQs for the public and water systems. The DEQ Lab will lead a webinar for water systems aimed at providing information and guidance regarding sampling and testing kits on July 10.

Resources

OHA and DEQ are using existing resources to develop this program and the laboratory capacity needed to support it. For DEQ, that means that some work monitoring and analyzing groundwater quality will be delayed. ODA and DEQ do anticipate a budgetary request to the Legislative Emergency Board in September that will support this effort, including continuation of the program through June of 2019 (when the next legislatively-adopted budget will take effect). The agencies also are developing policy option packages for the continuation of this work after June of 2019. Until results are obtained from the more extensive testing about to begin, we will not know what scale of effort may be required in the longer term. Test results may also trigger further inquiries into recreational waters upstream of drinking water intakes.

2.2. Water Quality Permitting Project

DEQ is implementing the 2018 NPDES individual permit issuance plan, and the process improvement efforts are allowing permit writers to focus on development of permits. Feedback from the dedicated permit writing team is supporting new and existing projects.

DEQ is developing information from the time reporting system in order to complete a full workload analysis from this data as it matures. By having the workload analysis, DEQ can begin to apply more targeted solution where obvious gaps or overages of staff time exist in the current permitting process.

PG Environmental, the contractor DEQ selected for the implementation of the process improvement, is completing permit drafts of two Oregon NPDES individual permits: Tillamook Sewage Treatment Plans and GP Toledo. The contract team is providing valuable feedback regarding DEQ processes and tools. DEQ expects permit drafts to be on public notice during the month of August. Additionally the contract team will be providing process improvement recommendations.

Lastly, the data bridging group is nearing its deadline to provide a plan for process improvements related to the acquisition and use of data in permit development. These tools will help standardize and streamline permit writing related to data needs. Additionally, these efforts will inform the upcoming EDMS project.

2.3. Total Maximum Daily Loads (TMDLs)

DEQ is working on a number of new and amended TMDLs across the state this and next year to meet court deadlines and ensure Oregon's waters remain protected through the implementation of watershed management plans. Once DEQ issues a final TMDL, EPA must approve the submittals.

Western Hood Subbasin Temperature TMDL

EPA approved a modified Western Hood Subbasins Temperature TMDL on June 20, 2018. This modification updated the TMDL to include the current temperature standards and established new waste load allocations for a variety of municipal and industrial wastewater. EPA also approved for the first time alternative waste load allocations that would be effective if the dischargers chose to discharge to a waterbody with greater dilution capacity.

Coquille River Subbasin TMDLs

DEQ is developing TMDLs for the Coquille River Subbasin to address dissolved oxygen, bacteria, and chlorophyll a. Modelling of the North, Middle, and South Fork Coquille River has been completed with waste load allocations developed for the Coquille Valley wastewater dischargers. The narrative for the Coquille TMDL draft is currently under development along with outreach to designated management agencies. DEQ will solicit public comments in the fall of 2018. DEQ expects to submit the Coquille River Sub basin TMDL to the EPA for approval in the fourth quarter of 2018.

Upper Klamath and Lost River Subbasins TMDLs

DEQ issued a modification of TMDLs for the Upper Klamath and Lost Rivers in December 2017, which EPA is reviewing. These TMDLs address dissolved oxygen, pH, ammonia toxicity, and chlorophyll a impairments, and were originally issued in December 2010, along with temperature TMDLs. DEQ granted petitions for reconsideration of that 2010 TMDL and made changes to allow seasonal, not annual average, waste load allocations. DEQ also granted a petition for reconsideration of this TMDL in order to clarify the responsibilities of irrigation districts identified as designated management agencies. EPA also is revising the temperature TMDLs in response to a lawsuit challenging Oregon's temperature standard, particularly the Natural Conditions Criterion rules. EPA is under court order to establish new temperature TMDLs by April 2019, and DEQ continues to coordinate with EPA the technical work and approach.

Willamette Basin Mercury TMDL

DEQ and EPA are working together to revise the 2006 Willamette Basin Mercury TMDL. EPA is the technical lead and DEQ is the public engagement lead. DEQ is also drafting the TMDL and Water Quality Management Plan. The TMDL work is on schedule to meet the court ordered deadline for submission of an EPA-approved TMDL before April 11, 2019. To satisfy elements of the court's ruling, the TMDL is being revised to include recent data, provide waste load allocations for permitted sources, provide daily loading capacity and meet the current water quality standard, which was revised 2011 from 0.3 mg/kg (milligram of methylmercury per kilogram of fish tissue) to a significantly more protective 0.040 mg/kg.

Mid-Coast watershed TMDLs

DEQ is developing TMDLs for various watersheds in the Mid-Coast area to address impairments for bacteria, temperature, biocriteria, and dissolved oxygen. Bacteria TMDLs for the Upper Yaquina and Big Elk watersheds are targeted for issuance and submission to EPA in the fourth quarter of 2018. Bacteria TMDLs on Nye, Agate, and Yaquina Bay State Park beaches are scheduled for issuance in the second quarter of 2019, and in the third quarter of 2019 for the Salmon River watershed. DEQ expects to issue a temperature TMDL for the Yachats River Watershed by the first quarter of 2019, and dissolved oxygen TMDLs for the Upper Yaquina in the second quarter of 2019. DEQ expects to issue TMDLs addressing biocriteria impairments in the Indian Creek Watershed in the third quarter of 2019.

Powder River Basin TMDLs

DEQ is working on TMDLs that will address impairments for bacteria, dissolved oxygen, and chlorophyll a in the Powder River, Burnt River and Brownlee Reservoir Subbasins. The target date for completion of the TMDLs is the fourth quarter of 2019.

2.4. Waters of the U.S. – Federal Rulemaking

On June 29, 2018 EPA and the U.S. Army Corps of Engineers issued a supplemental proposal regarding the federal definition of waters that are covered by the federal Clean Water Act. The supplemental notice does two things: (1) it clarifies that EPA and the Corps intend to repeal the 2015 Waters of the U.S. (WOTUS) rule and recodify the WOTUS rule that existed prior to the 2015 rule (and to implement the old rule "in accordance with Supreme Court decisions, agency guidance, and longstanding practice."); and (2) it requests comment on the legal basis for the 2015 Waters of the U.S. rule. As to the second question, EPA and the Corps state that "[t]he agencies also propose to conclude that the 2015 Rule exceeded the agencies' authority under the CWA by adopting such an interpretation of Justice Kennedy's "significant nexus" standard articulated in *Rapanos v. United States* and *Carabell v. United States*, 547 U.S. 715 (2006) ("*Rapanos*") as to be inconsistent with important aspects of that opinion and to cover waters outside the scope of the Act, even though that concurring opinion was identified as the basis for the significant nexus standard articulated in the 2015 Rule." As a practical matter, the proposed new EPA rule and agency interpretations may exclude most intermittent and ephemeral tributary streams from the scope of the Clean Water Act. Given the importance of intermittent streams (in particular) in affecting water quality, the proposed EPA action is of concern to Oregon DEQ.

3. Land Quality Program Update

3.1. Regional Oil Spill Task Force and Clean Pacific 2018

Oregon DEQ had the privilege of hosting two important conferences in June. The Oil Spill Taskforce is a regional collaboration between Oregon, California, Washington, Hawaii, Alaska and British Columbia. The executive committee met on June 18, and discussed opportunities for strategic planning as the forum approaches its 30th anniversary in 2019. The full Taskforce meeting (June 19) focused on abandoned and derelict vessels, and brought in the US Coastguard,

EPA, NOAA, ASTDR and others. This is a complex and multifaceted international issue, complicated by a patchwork of federal, state and local authorities and responsibilities, with no single agency holding full ownership. The conference used the current clean-up situation in Goble, Oregon, to discuss each agency's contribution, along with private contractors, to explore the challenges and opportunities. There is an abandoned and derelict vessel workgroup underway to continue our collaborative efforts to address the situation.

The Clean Pacific conference ran from June 20 - 21. The conference explored the challenges of emergency response at all levels, ranging from local issues, like the River Street Warehouse fire in Portland to FEMA, USCG and EPA's response to the 2017 hurricanes in the Caribbean. A number of our staff gave presentations and provided updates on state level spill response, as well as updates on coastal geographic response plan activities. The response strategies for Oregon's coastal are 25 years old and need updating. Including estuaries, Oregon has 2,200 miles of coastal shoreline. As we update these plans, we are identifying sensitive resources along the shoreline and developing strategies to protect these resources from oil spills. Our work includes coordination with the State Historic Preservation Office and tribal governments; consulting with state and federal natural resource agencies; collaborating with the Oregon Coastal Management Program, and providing stakeholders with multiple ways to comment and get involved. This two-year project will be completed in August 2019.

Both conferences underscored the importance and a broadly shared commitment to teamwork, collaboration and reciprocity in protecting communities from natural disasters and manmade spills. The conference offered an important forum for Oregon DEQ to thank our federal, state and county partners in responding to many spills over the last couple of years, such as the Mosier oil train derailment, tanker accidents, the River Street Warehouse Fire, and the NW Metals fire.

3.2. Materials Management Roadmap Report

David Allaway recently provided an update to the Oregon Global Warming Commission on the status of actions taken to reduce greenhouse gas emissions through how Oregonians management

Key Actions/"Tier One" Recommendations	Status as of June 2018	Additional Notes
1. Conduct research to develop a consumption-based GHG inventory and inventory methodology; consider integration with State's conventional inventory, identify high-carbon product categories.	• Original consumption-based GHG inventory completed; periodic updates underway (most recent update published May 2018). • Consumption-based and conventional ("sector-based") inventories are generally integrated. • Reports identify high-carbon product categories.	Oregon published the first sub-national consumption-based inventory in the US in 2011 (for calendar year 2005). Subsequent updates include 2010 and 2015 and high-level estimates for 1990. See http://www.oregon.gov/DEQ/mm/Pages/Consumption-based-GHG.aspx

2. Develop and disseminate information: easy-to-use life cycle metrics for different food types.	Tested at pilot-scale for nine foods and food-related topics. One outcome is new DEQ research with Oregon's beer and wine industry into packaging options.	"Product environmental footprint summaries" for foods published in 2017 at: http://www.oregon.gov/deq/mm/food/Pages/Product-Category-Level-Footprints.aspx. Project was a collaboration of DEQ and the Oregon Sustainability Board.
3. Standards, incentives and/or mandates for carbon footprinting, labeling of products.	• DEQ's Concrete Environmental Product Declaration (EPD) Program is a voluntary partnership with Oregon Concrete & Aggregate Producers Association (OCAPA). The Program helps concrete producers measure and disclose the carbon impacts of their concrete mixes. • 2017 legislation (HB 3161 & 3162), proposed that ODOT require product carbon labels for concrete, asphalt and steel, and that a "carbon score" be used to adjust price. These bills were not enacted. • Generally limited progress in North America, except building materials (LEED version 4).	OCAPA partnership is voluntary; includes technical assistance and limited financial incentives. See http://www.ocapa.net/oregon-concrete-epds.
4. Focus product stewardship on upstream emissions, and design for appropriate durability, reusability, efficiency, and recovery.	No significant progress.	A forthcoming DEQ analysis of the environmental impacts of popular material attributes (such as "recyclability") may inform application of select material attributes by brand owners, as some popular attributes do not consistently correlate with reduced environmental impacts.
5. Establish higher standards for new buildings: "net zero" plus offset of materials.	Executive Order 17-20 (November 2017), is primarily focused on increasing the energy efficiency of state and privately owned buildings towards a goal of "net zero ready" buildings. One provision directs agencies to ensure that newly constructed state buildings permitted after January 1, 2022 are carbon neutral across their lifecycle, which includes materials. This provides an opportunity to propose measurement and reduction strategies for the material-related carbon impacts of state buildings.	Standard measurement and reporting of embodied carbon of materials needs to happen prior to the requirement of material offsets.

6. Provide information and outreach to consumers on product impacts and opportunities to reduce those impacts.	Limited progress.	• Oregon Health Authority's Public Health Division educates the public about healthy eating, including increasing consumption of fruits and vegetables. • To support waste prevention outreach requirements of local governments contained in SB 263 (2015), DEQ has developed a "shelf-ready" campaign toolkit specific to clothing; see http://www.oregon.gov/deq/mm/wpcampaigns/Pages/textiles.aspx.

4. Information Technology - Environmental Data Management System Update

Since March 2018, DEQ has accomplished several important milestones in the ongoing development of the EDMS software solution procurement and implementation process:

- Secured an independent quality assurance vendor, Public Knowledge, which is a required step in this procurement process.
- Worked with agency subject matter experts to refine the system requirements prior to the release of requests for proposals for software solutions
- Initiated the procurement kick-off meeting, including the definition of the roles and timeline for the project team. The request for proposals, or RFP, includes a description of the EDMS software solution requirements, current systems and permits used at DEQ that will be supported by the software.
- Received direction from the EDMS Steering Committee regarding the RFP and Solutions Requirements and kept the EDMS Steering Committee updated on progress and next steps.
- Secured approval from the state's Enterprise Security Office for the financial and security portion of the EDMS software solution requirements.
- Worked closely with the Oregon State Chief Information Office regarding the Solutions Requirements content, format, and organization

DEQ will issue the RFP on Aug. 8, 2018, and will review the proposals and hold an evaluation period from September 1 through October 25. Once DEQ selects a vendor in late October, DEQ will negotiate and execute the contract by December 2018.

5. Reorganization Update

5.1. Office of Compliance and Enforcement (OCE)

Kieran O'Donnell was selected as DEQ's Compliance and Enforcement Manager, effective June 4. Kieran joined DEQ in 2013 as an Environmental Law Specialist in the Office of Compliance and Enforcement, where he drafted compliance and enforcement orders, led settlement negotiations and represented DEQ in contested case hearings. He has been a very proactive member of DEQ's Project Management Pool, leading several process improvement projects. Prior to joining DEQ, Kieran opened and operated a law practice in Portland, representing a diverse array of clients. Most recently, Kieran served as Acting Northwest Region Air Quality Manager.

5.2. Chief Information Officer

Travis Luckey began as the new DEQ Chief Information Officer in June. Travis was selected for this new agency position following a national search that resulted in more than 30 qualified candidates from around the country. Travis is an accomplished technology leader with extensive experience building high-performing IT organizations and directing complex project portfolios. He has led IT at Stumptown Coffee Roasters, ZOOM+Care, FHC Property Management and VTM Group. In addition to his professional experience, he serves as an adjunct instructor at the University of Oregon where he teaches graduate-level courses on Information Security, Business Continuity and IT Disaster Recovery Planning.

5.3. Leadership Team Retreat

By the beginning of June, reorganization was largely complete, and DEQ's Leadership Team had many new members. While it is important to have the right people and perspectives on the team, it's equally as important to build relationships within the team. To that end, the DEQ Leadership Team spent two days in early June working on how we function as a group so that we can effectively lead the agency.

The team focused attention on the collective vision of the group, what we care about and the characteristics that are key to the team's future success. We utilized tools such as Gallup StrengthsFinders to map out the team's strengths, and established shared expectations of accountability, supporting agency decisions, and an ethic of teamwork.

Leaving the retreat, the team set some key next steps to advance the work of DEQ:

- We are finalizing the Leadership Team Charter and work plan.
- We are finalizing a Decision Matrix, a document that clarifies roles and responsibilities for leadership and the agency.
- Later this year the team will begin outlining the development of a strategic plan, and how staff, the EQC and partners will be involved in that effort.

6. Eastern Region

6.1. Lost Valley Ranch

The Oregon Department of Agriculture and DEQ have jointly issued an order revoking Lost Valley Farm's Confined Animal Feeding Operation (CAFO) permit with notice. Lost Valley Farm may file a request for contested case hearing in response to the revocation order. If a contested case hearing is requested, the Oregon Department of Agriculture will refer the matter to the Office of Administrative Hearings to hold the hearing.

ODA and DEQ issued the revocation because the agencies do not believe the operator can or will comply with its CAFO permit now or in the future. Weekly inspections, since the permit was issued a year ago, show continuous failures to comply with the terms of the permit, and inability or unwillingness to remedy identified compliance issues.

If Lost Valley Farm does not file an appeal than the order will be final in 61 days. Then the owner has another 60 days to shut-down facility. In the revocation order ODA and DEQ provide a list of actions Lost Valley Farm must complete in order to shut down the operation.

- All animals must be moved off of the CAFO facility.
- All waste storage and control facilities must be cleaned and re-purposed or decommissioned.
- All waste must be applied or exported according to the facility's animal waste management plan, and cleaning and flush water must also be applied according to the facility's animal waste management plan.
- All facilities must be left in a condition where they will not cause pollution to surface or groundwater.

6.2. Calico Resources Grassy Mountain Mine

The Director's Report for the March 2108 EQC meeting discussed the proposed Calico Resources Grassy Mountain Mine near Vale. On May 24, 2018, Calico Resources announced the receipt of the Preliminary Feasibility Study (PFS) for the mine. A PFS is a detailed analysis of the key parameters for constructing and operating a proposed mine, including the expected costs and economic returns. The PFS was prepared by independent consultants and follows the protocols established under Canadian securities regulations. These protocols also require the company to provide the complete technical report supporting the conclusions in the study within 45 days after announcing the results of the study. Calico estimates releasing the technical report in July 2018.

The release of the PFS is an important step in the permitting process for several reasons:

- Release of the study is evidence that the company is likely to go forward with development of the mine.
- The PFS provides a relatively reliable estimate of the economic impact of the project.

- The engineering technical report supporting the PFS provides the details regarding the mine plan, processing systems, and tailings disposal facilities needed to complete data collection and develop the consolidated application for all the state permits need for the mine.
- Similarly, the PFS provides information required to begin the federal NEPA review and BLM plan approval, which is also needed for the mine.

With respect to the economic impacts, the company has report from the PFS estimates, among many other things, capital costs of $110 million, including $12.2 million in mine development and pre-production costs. It also estimates mining and milling approximately 750 tons of ore per day to annually produce an estimated 47,000 ounces of gold and 50,000 ounces of silver during the first 7.25 years of production.

The exact timing for submittal of the consolidated applications has not be established, but it may be as early as the fourth quarter of this year. In the meantime, we plan to provide the Commission with a detailed briefing on the project at the September 2018 meeting. We are also working with DOGAMI to provide a communications plan to ensure that information relating to the permitting phase of the project is readily available and the somewhat complicated permitting process remains transparent.

6.3. Hells Canyon Complex Hydropower 401 Certification

The Hells Canyon Complex includes three hydroelectric dams on the Snake River where it forms the boundary of Oregon and Idaho. The complex has 1600 megawatts of electrical generating capacity and is owned and operated by Idaho Power Corporation. The complex operates under a license from the Federal Energy Regulatory Commission and has been operating under a series of one-year administrative extensions since the license expired in July 2005. IPC filed its first application for Section 401 Water Quality Certification with Oregon and Idaho in 2003 and has withdrawn and resubmitted its application at least yearly since that time. The most recent withdrawal and resubmittal occurred on June 14, 2018. DEQ has one year to approve or deny the request for certification unless the applicant withdraws and resubmits.

In addition to DEQ's responsibility to condition the FERC license to meet Oregon's water quality standards, this application is designed to meet load allocations assigned to IPC in the Snake River-Hells Canyon TMDL, issued by DEQ in coordination with Idaho in July 2003 and approved by EPA following revisions in September 2004. The current application proposes to control pollutants that impair water quality within the reservoirs and downstream of Hells Canyon Dam with respect to temperature, dissolved oxygen, pH, nuisance algae, total dissolved gas and biocriteria.

Temperature, dissolved oxygen, pH and nuisance algae are expected to be controlled or mitigated through measures upstream of the complex both in the mainstem of the Snake River and in tributaries located in Oregon and Idaho. These measures would also provide substantial ancillary benefits to Snake River tributaries in Oregon and Idaho. Control measures include restoration of riparian corridors on tributaries, reduction of phosphorus loads from irrigation

return flows, and reduction of sediment loads that carry phosphorus and alter the channel of the Snake River. Total dissolved gas will be controlled by alterations to spillways on the dams. Biocriteria include both resident organisms and migratory fish that are unable to pass the dams to enter Oregon tributaries. The Governor's Natural Resource Office is currently engaged in discussions with IPC and the Idaho Governor's Office to reach a resolution on fish passage. The most recent withdrawal and resubmittal of the application occurred to accommodate these discussions.

6.4. J.C. Boyle Dam 401 Water Quality Certification (for dam removal)

John C. Boyle Dam is the uppermost of four hydroelectric dams on the Klamath River and is the only one sited in Oregon. The owners of the facility, Pacific Power have determined that the cost of modifications to these dams to meet environmental requirements make continued operation infeasible. PacifiCorp applied to the Federal Energy Regulatory Commission to transfer ownership to the Klamath River Renewal Corporation, which was formed as the Dam Removal Entity in anticipation of the decommissioning and removal of these four hydroelectric facilities.

DEQ has authority under Section 401 of the Clean Water Act and state statutes to condition the licenses issued by FERC for the transfer and removal of J.C. Boyle Dam. Given that a proposal to remove all four of these dams is before FERC, DEQ has coordinated closely with the State of California to ensure consistency of conditions placed on these licenses between certifications by both states.

DEQ issued a Draft 401 Certification and Evaluation Report for a 45-day public comment on May 23, 2018. Upon request of the KRRC, DEQ extended the comment period by 15 days and will close on July 23, 2018. DEQ also held two public information meetings, each followed by a public hearing in Klamath Falls on June 12, 2018. DEQ expects to issue a decision by September 2018. California released its draft 401 for comment and will also close the comment period on July 23, 2018.

Decommissioning and removal of the dams are scheduled to begin with the drawdown of the reservoirs in January 2021. This drawdown will impact water quality for approximately one year while sediment held behind the dams is flushed downstream to the ocean. In 2012, the EQC adopted rules that allowed a short-term impairment due to removal of J.C. Boyle Dam with the expectation that it will result in improvements to water quality once the system has reached some new equilibrium. The certification conditions allow a two-year period for the effects of dam removal to be expressed, after which there should be no measurable difference between upstream of the project and downstream within Oregon waters resulting from the removal activities. Once removed, the Klamath River will be free-flowing from Keno, Oregon, to the Pacific Ocean in California. Manifold benefits are predicted including free passage of anadromous fish, cooler temperatures and fewer harmful algal blooms.

6.5. Pelton Round Butte Dam and Litigation

Pelton Round Butte Dam and Hydropower facilities are owned and operated by Portland General Electric. The project includes three dams and reservoirs on the Deschutes River south of the city of Madras. DEQ issued a Section 401 water quality certification conditioning the FERC license for the project in 2003. Operations of the dams from the 1950s until 2009 released only cold water from the bottom of the reservoir and caused river temperatures downstream of the project to warm more slowly in the spring than it would in the project's absence. Conditions of the water quality certification required development of a Water Quality Management and Monitoring Plan, which was developed following certification with the input of parties to a settlement agreement and was issued in 2004.

The certification and plan required PGE to construct and install a selective water withdrawal structure capable of blending warm surface water with cold bottom water to achieve temperatures consistent with estimated river temperatures absent the reservoirs. Blending surface and bottom waters also improves concentrations of dissolved oxygen immediately downstream of the project. The plan also required a fish handling facility connected to the withdrawal structure to allow downstream passage of anadromous fish. Allowing fish passage and improving temperature and dissolved oxygen conditions were stated priorities of the settlement parties through the Water Quality Management and Monitoring Plan.

Although the structure has worked well in adjusting temperatures to match those of incoming rivers (Metolius, Deschutes and Crooked Rivers), the plan invoked water quality standards that were not current at the time of issuance and likely could not have been met by the project at all times. The certification requires the facility to control temperatures at or below the calculated discharge temperatures based on a relationship between flow-weighted average of river inflows and local air temperature, termed Without Project Temperature.

Temperature standards required the project begin blending when discharge temperatures neared the very restrictive bull trout criteria (10 deg. C) and dissolved oxygen standards required meeting the salmon and steelhead spawning criteria (11 mg/L) year around prior to 2003. With adoption of new criteria, fish distribution maps and salmonid spawning maps, DEQ provided a relatively fine scale of beneficial use definition in 2003. These changes relaxed the water quality criteria for both temperature and dissolved oxygen during the warmer months of the year. With application of the Salmon and Steelhead Spawning criteria, the project begins blending when discharge temperatures near the 13 deg. C criterion for salmon and steelhead spawning. The current criteria for dissolved oxygen require meeting the spawning criterion of 11 mg/L from October 15 through June 15 of each year, with the coldwater criterion of 8 mg/L for the remainder of the year.

DEQ has been entering into interim agreements with PGE since 2011, allowing the company to meet the current criteria rather than those in the plan. These changes have allowed the project to conserve cold bottom water (by not having to blend as early in the year) so that temperatures can be managed later into the summer. Typically, the coldest water is gone by September and temperature mitigation is not as effective. DEQ has plans to modify the 401 certification to align its conditions with current water quality standards. The Confederated Tribes of the Warm Springs are co-operators of the project and have also issued a certification to the project. The

Tribes are currently modifying water quality standards and we expect them to be consistent with DEQ's.

There is ongoing litigation between PGE and the Deschutes River Alliance over perceived violations of water quality criteria and violation of the 401 certification. These perceived violations are mostly explained by temperatures and dissolved oxygen concentrations that do not meet the more restrictive criteria in the Water Quality Management and Monitoring Plan, though they generally do meet those criteria included in the interim agreements. The exception is pH, which was often not met prior to construction of the SWW unit, and often is not met now during summer and fall months. DEQ is studying this and PGE is developing new mathematical models that should better inform how the reservoirs and river interact and possible operational changes.

6.6. Agricultural Drainage to Upper Klamath Lake

DEQ issued the Upper Klamath Lake TMDL in 2002, and it was subsequently approved by EPA in 2002. The TMDL set phosphorus limits based on a required 40 percent reduction compared to the conditions existing at the time of analysis. Over the last two years, it has become apparent that a number of large agricultural operations store water on their land during the winter and discharge high concentrations of phosphorus to Upper Klamath Lake when draining their land in the spring. These discharges have, in some cases, resulted in very poor water quality and fish kills in an embayment of the lake. DEQ and the Klamath Tribes have been cooperating in ongoing investigation of these impacts.

ODA has direct authority for managing effects of agricultural operations and is the Designated Management Agency for implementing TMDLs in the basin. After investigation and sample analysis on the discharge water, ODA opened a compliance case at two of the properties in response to elevated concentrations of phosphorus and other nutrients. Subsequent discharges were limited to periods when their phosphorus concentrations did not exceed the target annual average concentration of the lake. DEQ continues to work closely with ODA and the landowners to ensure solutions will meet the necessary levels for WQ improvement in UKL.

The two agencies met in November 2017 and then met with stakeholders, including Director Whitman and ODA Deputy Director Lisa Hanson, as well as ODA Water Quality Planning staff. DEQ staff participated in another meeting with many external parties, and explained what is required in the plans. Discussions with the parties have demonstrated that they are committed to finding solutions that protect water quality and meet TMDL requirements while still allowing them to farm.

6.7. PGE Carty Update

PGE requested a permit modification for its Carty natural gas electric power generating plant near Boardman. The revised permit reflects current understanding of startup emissions, specifically for carbon monoxide and volatile organic compounds. Emissions of these pollutants are greater than initially anticipated due to a correction of emission information and not due to an actual emissions increase or any changes in the way the facility is currently permitted to operate.

An air quality analysis of the proposed emission increase indicates no adverse impact to human health.

DEQ held a comment period but extended the comment period for another 60 days based on requests to do so. Ultimately, DEQ received comments from just under 1000 people including ratepayers, environmental advocacy groups, and Tribes. DEQ is formulating official responses to these comments and are considering changes to the draft permit modification. DEQ requested supporting information from PGE regarding its proposed start-up emission factors and is awaiting response. Based on that data, DEQ will either make permitting changes or ask for additional information.

6.8. PGE Coyote Springs Update

PGE submitted an application to renew its Title V permit for the natural gas power electric generating facility located at the Port of Morrow. Within the permit application, PGE included VOC start-up emission factors for the turbines. However, unlike the Carty plant, PGE is not proposing a plant site emission limit increase for this facility. DEQ requested supporting information from PGE regarding the proposed start-up emission factors specific to the Coyote Springs facility and is waiting for the response.

7. Northwest Region

7.1. Northwest Metals

There have been several developments concerning the NW Metals operation and fire reported on in the March and May Director's reports. DEQ has issued a Pre-enforcement Notice of Violation (PEN) following an initial assessment of the automobile dismantling facility following the fire in mid-March. The PEN identifies issues with storm water and an underground dry well, as well as improper storage of waste tires. DEQ is continuing to assess whether the facility is operating with all required permits, as well as broader issues raised by fire and how the environmental impacts of the facility are appropriately controlled.

Recent media attention has brought to light that there was a complaint regarding storm water and waste management at the facility filed in December of 2017, several months before the fire. While the complaint was appropriately logged, it appears that there was no follow-up in response to the complaint. We are currently assessing this series of events in detail, to identify what system failures may have occurred and steps needed to avoid similar failures in the future.

7.2. Grimm's Fuel Company

In recent months, Metro and DEQ have received many odor complaints regarding Grimm's Fuel Company, a locally owned yard debris compost facility located in Tualatin that operates under a DEQ permit and a Metro solid waste license. DEQ and other government partners held an evening meeting May 7 to hear from the community and provide an update on collective efforts to assess and improve operations at the site. In addition to Metro and DEQ, these government

partners with a regulatory or technical assistance role include the City of Tualatin, Tualatin Valley Fire and Rescue, and Washington County Health and Human Services.

About 150 local residents attended the meeting, which included a brief introduction by the organized neighborhood group, Clean Air & Safe Environment, or CASE, of the neighbors' concerns and of the various government agencies present. The focus of the event was a constructive question-and-answer session that lasted nearly two hours. The event was also covered by multiple TV stations, with links to the stories below.

- KPTV: Smelly Tualatin compost facility draws big crowd of frustrated neighbors for meeting
- KATU: Metro holds community conversation on odors from Tualatin compost facility
- KOIN: Tualatin locals speak out against 'putrid' compost odor
- KGW: Metro considers options for 'putrid' Tualatin smell

NW Region DEQ representatives met with the CASE group on June 9 to continue a dialogue. CASE has submitted a petition to DEQ and the Governor's office requesting that the Grimm's composting facility in Tualatin be issued an Air Quality permit. DEQ is currently considering the request. A consultant hired by Metro, Green Mountain Technologies, is currently drafting a site assessment of Grimm's. This assessment will include operational recommendations to mitigate dust, odors and other conditions. The results and recommendations from that report will be shared with the public at another community meeting in Sherwood on Thursday, July 19. DEQ expects the recommendations from that report to inform DEQ's modification of Grimm's solid waste permit and future license conditions placed by Metro on the facility. DEQ issued Grimm's a Pre-Enforcement Notice in March 2018 regarding multiple composting operation violations.

7.3. Armstrong World Industries Clean-up

The Armstrong World Industries site consists of approximately 38 acres of developed upland property and over 100 acres of wetland adjacent to Scappoose Bay in St. Helens, Oregon. Beginning in 1930, the site was used to manufacture a variety of fiberboard products including ceiling boards and tiles, carpet board and roof insulation. From 1930 until the late 1960s, plant process wastewater was discharged directly into bordering wetlands and Scappoose Bay.

Armstrong World Industries has owned the property since 1987 and began operating the plant in 1990. On May 10, 2018, Armstrong closed the plant, affecting 130 jobs. Armstrong cited changing market conditions as the reason for closure. DEQ is working with economic development stakeholders to determine environmental considerations that may affect future industrial activity at the site.

Former property owners include: Fir-Tex Insulation Board and Dant and Russell (1929-1956), Kaiser Gypsum Company (1956-1978), and Owens Corning (1978-1987). DEQ identified the site as a high priority in 2000 and began working with Kaiser Gypsum, Armstrong World Industries, Inc., and Owens Corning on a remedial investigation and feasibility study in 2010.

Primary contaminants include metals, particularly arsenic and mercury, chlorinated dibenzodioxins, known as dioxins, and chlorinated dibenzofurans, known as furans. Upland contamination exceeds acceptable risk levels to site workers and has the potential to migrate to lower lying areas and wetlands. Contaminant concentrations in the surrounding wetlands pose health threats to humans, fish and wildlife.

On Sept. 30, 2016, Kaiser Gypsum filed for bankruptcy, delaying work on the wetland portion of the property. As part of the bankruptcy, DEQ filed a claim against Kaiser for remedial action costs for both the upland and wetland areas. On June 14, 2018, DEQ issued its final clean-up plan as a Record of Decision to address contaminated surface soils in the upland portion of the site. Clean-up of the upland will include soil excavation and disposal, and installation of a gravel and asphalt cap. DEQ has begun working with Armstrong World Industries on remedial design. The clean-up is estimated to cost $1.4 million and take five weeks to complete.

7.4. Oil Re-Refining Company Air and Solid Waste Permits

On June 25, DEQ issued a modified and renewed air contaminant discharge permit and a new solid waste permit to Oil Re-Refining Company Inc., or ORRCO. DEQ considered comments received during the public comment period and made adjustments to the permits based on input. The permits and supporting documents are available online on the ORRCO webpage on DEQ's site: http://bit.ly/PDXNorthHarbor.

8. Western Region

8.1 Jordan Cove Project

On May 22, 2018, DEQ opened a 60-day comment period on a Section 401 Water Quality Certification application from the Jordan Cove Energy Project. Due to extensive public interest in the project, DEQ has extended the public comment period by 30 days. DEQ's public comment period will end on Aug. 20, 2018. The additional 30 days will allow more time for the public to review the application, while still providing adequate time for review of those comments. If DEQ develops a draft certification, it intends to conduct an additional public comment period, during which the public will have an opportunity to provide comment prior to a final decision. DEQ may issue the final certification decision on the project as proposed, issue the certification with conditions, or deny the certification.

The U.S. Army Corp of Engineers is managing its public comment period independent of DEQ's public comment period.

To see a copy of the May 22 public notice, sign up for alerts on the project and see regular updates, view DEQ's Jordan Cove Energy Project webpage at http://www.oregon.gov/deq/Programs/Pages/Jordan-Cove.aspx.

8.2. Wildfire

Wildfire season started early for the majority of the state. The first big fires cropped up the weekend of June 23, and included the Boxcar fire near Culver, which resulted in smoke impacts to the area including unhealthy air monitoring results briefly for the Prineville monitor.

Since 2016, DEQ has made a commitment as part of the Wildfire Protocol for public affairs staff to be the main gatekeeper for the Oregon Smoke Blog, and since 2013 to host interagency calls on a rotating basis and help with wildfire smoke messaging to the public. Air Quality staff also help emergency managers and fire response authorities understand the impact of smoke on communities.

Specific tasks for our public affairs specialists, in consultation with lab and air quality staff, include:

- Post, edit and share content on the Oregon Smoke Blog
- Manage the Oregon Smoke Blog Twitter feed
- Share information and updates on DEQ's social media feeds
- Update key staff (Regional administrators, air quality program managers, communications staff, director's office and in severe episodes all staff in a given office)
- Participate and sometimes host interagency wildfire calls
- Issue advisories to media and provide to National Weather Service
- Conduct or arrange media interviews
- Respond to concerns and questions from the public, via phone, email and blog comments

Last year's intense fire season saw record traffic to the DEQ Air Quality Index page, which overwhelmed it and caused it to crash several times. In response, DEQ has upgraded the site, built an app (iPhone and Android) linked to it, and made it much more comprehensive and user friendly.

8.3. Logsden Biosolids

The cities of Lincoln City, Depoe Bay, Newport and Toledo land apply biosolids on agricultural land in the Siletz Valley near the community of Logsden. Biosolids are the solids derived from primary, secondary or advanced treatment of domestic wastewater that have been treated through one or more controlled processes to significantly reduce pathogens and reduce volatile solids or chemically stabilize solids to the extent that they do not attract vectors. These solids are treated to meet state and federal requirements that allow for their beneficial use in land application activities. Biosolids are also referred to as treated sewage sludge. The land application of biosolids is regulated through biosolids management plans that are reviewed and approved by DEQ, and through detailed site authorization letters issued by DEQ.

Neighbor complaints and concerns about excess application rates and odor impacts have risen in the last several months. DEQ staff have been to the area multiple times and have not identified a violation at this time. DEQ continues to work with the cities to ensure they are properly applying biosolids. DEQ expects that the biosolid plans will be updated during the next permit renewal cycle to ensure there are limited neighbor impacts and no environmental impacts. These permit renewals are not currently scheduled; however, DEQ is reviewing the current site authorizations and expect that several of these will be updated within the next year.