
Date: July 9, 2020
To: Environmental Quality Commission
From: Richard Whitman, Director
Subject: Item C: Update on Water Quality Permitting Program (Informational)
July 16-17, 2020, EQC meeting

Purpose of Item DEQ has committed to periodic updates to the commission on the status of agency efforts to eliminate a backlog of administratively-continued permits in the Water Quality Permitting Program. The changes will take years to fully realize and will require additional and ongoing resources to achieve and maintain the legally mandated level of permitting, and, more importantly, allow DEQ to work continuously toward restoring, maintaining and enhancing the quality of Oregon's water.

Background Protecting Oregon's rivers, lakes, streams and groundwater quality keeps our waters safe for a multitude of beneficial uses, such as drinking water, protecting fish and other aquatic organisms, irrigation, recreation, and the ability to consume fish safely.

The Water Quality Permitting Program issues more than 5,000 permits for industrial wastewater, domestic wastewater, application of biosolids, use of recycled and gray water, operation of pretreatment facilities, discharge of stormwater to surface waters, and discharge to underground injection control systems. These include both "individual" permits tailored to specific facilities and "general" permits to cover classes or categories of dischargers under a single permit. Individual and general permits are issued for a fixed period of time not to exceed five years for federal National Pollutant Discharge Elimination System, or NPDES, permits issued by DEQ under delegated EPA-delegated authority of the federal Clean Water Act, or ten years for state Water Pollution Control Facility, or WPCF, permits. Permits can be administratively continued beyond their expiration date, but should be renewed, which includes agency review of current science or new conditions since the last permit issuance date, to incorporate new standards and allow for upgrades to facility operations.

Core responsibilities of DEQ's Water Quality Permitting Program include:

- Issuance and renewal of discharge permits that protect or improve the quality of receiving waters, and protect the beneficial uses of those waters
- Inspect facilities and review discharge monitoring reports to ensure adherence to permit requirements
- Take prompt and appropriate enforcement actions when violations occur
- Develop policy and guidance for permit writing staff to ensure consistent permit development
- Work with internal and external stakeholders to implement process improvements designed to reduce time for permit development, to improve communication, and to provide permits that communities can successfully implement
- Provide appropriate technical assistance and outreach for permittees, external stakeholders, and the general public to help assure ongoing compliance with permits

Achieving these program objectives requires development and coordination of permits that are effectively integrated with current water quality standards, assessments, clean watershed plans, known as TMDLs, and federal regulations. Strategic planning efforts for DEQ's Water Quality Program and all of its subprogram areas are summarized and available in an annual Program Plan, included as a link at the end of this report. The Plan provides an overview of all the work the Water Quality Program performs, including wastewater permitting, and includes a 2020 work plan identifying core work and special projects each program area is undertaking during the current calendar year.

**Permitting
program
evaluations**

DEQ's Water Quality program has had a longstanding backlog of NPDES wastewater permits. The 2015 Oregon Legislature directed DEQ to hire an independent consultant to evaluate and recommend solutions to improve NPDES permit quality and timeliness. This evaluation culminated in a permit program review by MWH in 2016 and a subsequent NPDES permit issuance review evaluation by PG Environmental in 2018. Both reports are available as links at the end of this report.

The reviews included short-term and long-term recommendations addressing a variety of concerns, including: compliance with new updated water quality standards, delays in the permit planning process, and on-going program sustainability related to staff knowledge, skills and abilities. The

recommendations were formed with staff and stakeholder input, known best practices and established performance benchmarks.

Recommended actions, actions taken to-date

The MWH review described seven recommended areas in which the program should focus. These are:

1. Leadership - Including organizational structure, managerial style, organizational culture and approaches to stakeholder engagement
2. Community Capacity - The perceived ability of communities and facilities to address changing permit requirements
3. Alignment - Addressing NPDES permitting not within a vacuum but rather by incorporating complimentary Clean Water Act programs (Standards, Water Quality Assessment, and TMDLs)
4. Quality and Efficiency - Not utilizing better practices and available tools to more optimally write and issue permits
5. Staffing and Workload - A lack of available and dedicated resources to sufficiently address the permitting workload
6. Funding - Budgetary support for the direct and indirect resources needed to fully address the program
7. Progress Reporting - Developing and implementing metrics and measurable expectations, both from an output and outcome perspective

DEQ implemented many changes as a result of the 2016 MWH review. These include organizational structure changes to better define the decision making process using a RACI (Responsible, Accountable, Consult, Inform) process, addressing consistency of processes, centralizing policy development, focusing on regulatory process as opposed to more consultative actions and creating a dedicated team of eight permit writers with specific allocations of protected work time for permit development and writing.

The 2018 PG Environmental review was a very detailed programmatic and permitting review that focused on both procedures and resources. The review assessed elements associated with application and file review, compilation of data, reasonable potential analysis and effluent limit calculation, TMDLs, permit and fact sheet development, internal review, applicant and EPA review, public review, templates, mixing zones, antidegradation, monitoring, biosolids, recycled water, compliance schedules, quality assurance and training.

PG Environmental's recommendations focused on:

1. Modernizing the permit development process
2. Identifying subject matter experts to support challenging permit issues

3. Improving the acquisition and use of data needed for individual NPDES permit development
4. Evaluating the “readiness” of all individual NPDES permits statewide
5. Establishing a more robust quality assurance review to ensure permits are developed consistently
6. Implementing a RACI chart for permitting program decision making process and internal accountability
7. Shifting staff workloads to prioritize NPDES permit development over other activities

The DEQ wastewater program has implemented these recommendations by updating and standardizing permit related templates, utilizing advanced spreadsheet analysis for reasonable potential analysis, developing and implementing a quality assurance process, utilizing a subject matter expert approach to permit writer support, standardizing how data is received, performing a permit readiness review of all permits, utilizing a more formal decision making and conflict resolution process, focusing dedicated staff on NPDES permitting, creating a culture of accountability and employing a continuous improvement approach to the whole program.

Other recommendations addressed sufficiency of the program’s direct and indirect resources. Direct resources equates to having enough staff dedicated to permit work to address approximately 20 percent of the permits each year, which would allow the five-year permit cycle to function effectively. Indirect resources for permitting include water quality assessment, ambient monitoring, water quality standards and TMDL development and updates. These tangential and integrated programs support and compliment the permitting program to measure success of water quality protection and to set the future goals for the permit to address. The resource needs were partially addressed by the Legislature in the 2019 session, but there are still gaps in the capacity of each program that need to be filled to be fully functional and to be able to keep the permits current.

Importance of maintaining current permits

Up-to-date permits allow facilities to focus on the most current water quality standards and goals. This allows for a more predictable operational landscape that is both environmentally and economically advantageous. Facility budgets for maintenance and capital improvements are generally predictable. This in turns provides a more stable environment for the rate payers. Further, improving water quality can allow for more economic growth among private business as it provides for more options, in part because resources and budgets

can be reallocated to other areas besides expensive environmental mitigation upgrades. An additional benefit to maintaining up-to-date permits is that less frequent permit renewal can increase data gathering costs, as facilities are asked to make larger adjustments rather than incremental adjustments over time.

**Process
improvements**

The backlog of permits and delays to updates was created by functional deficiencies in both resource allocation and processes over time. Four areas of process improvements that are being addressed include data gaps, stakeholder discussions, EDMS (permit and data handling system) and templates.

Gaps in data, such as available monitoring data, can cause delays in DEQ being able to renew a permit or can result in overly restrictive permit limits because of a need to use more conservative assumptions in the absence of actual data. DEQ is undertaking a gap analysis of the permits before starting the renewal process. Currently, this gap analysis is taking place for the 2021 issuance plan. DEQ soon expects to be able to assess data needs one to two years before a permit is renewed, allowing time for budgetary and monitoring activities that could result in better, and more accurate, permit limits based on known and verified data.

The second area is stakeholder discussions. Throughout the permit renewal process, DEQ staff engage in dialogue with the facilities. This dialogue is primarily through the permit writer, however, as issues arise, the implemented RACI process allows for issues to be elevated to subject matter experts, managers and administrators as needed, with the ultimate goal of providing a clear pathway to compliance.

Third is the agency's move to an Environmental Data Management System or EDMS. The system is a web-based platform that will centralize permit applications, payments, effluent data collection, compliance documents and the like into a single system that will be accessible by DEQ and facilities. EDMS will be yet another step forward for consistency and efficiency.

Lastly, DEQ has updated its permitting template to be consistent and easier to understand. In addition to the updated permitting template, which will be reviewed and updated on an ongoing basis, DEQ is developing complementary updates to agency fact sheets.

**NWEA
settlement**

The Northwest Environmental Advocates sued DEQ in 2017 because of the NPDES Individual Permit and General Permit backlog. DEQ and NWEA

settled this suit in 2018 and DEQ must meet numerous conditions over a 10-year period. These conditions include reducing the backlog of permits by reissuing 148 of the oldest permits, ensuring the backlog does not stagnate or grow over time, creation of an annual and a five-year permit issuance plan, updating templates, data gap analysis, permit writer training, utilization of subject matter experts, the use of a quality assurance process, publically posting issued permits and fact sheets, and developing annual reports outlining the progress. To date, DEQ has met all requirements of the settlement.

**Next steps and
EQC
involvement**

DEQ has made good progress towards meeting the goals of the NPDES individual permit program; however, there are still significant gaps in the NPDES general permit program. One gap is staffing, as there is only one coordinator for all of the 20 general permits covering approximately 1,500 permittees, and most of the general permits are administratively continued or otherwise out of date. In order to better staff the NPDES individual permit program, resources were taken from the WPCF and compliance programs, which are now struggling to meet their goals.

DEQ will continue to implement the program and process improvements outlined above, including sharing lessons between NPDES and WPCF improvements to capitalize on successes for both programs. DEQ will continue to provide updates to the commission over the coming years as the process improvements and issuance plans are realized and the backlog is eliminated as permits are renewed.

**Supporting
materials**

1. Water Quality Program Plan
<https://www.oregon.gov/deq/FilterDocs/WQdivPlan2020.pdf>
2. 2016 Water Quality Permit Program Review (MWH)
<https://www.oregon.gov/deq/FilterDocs/wqp-FinalReport.pdf>
3. 2018 NPDES issuance report (PG Environmental)
<https://www.oregon.gov/deq/FilterDocs/NPDESprogramreport.pdf>
4. Statewide Water Quality Permits summary reports
<https://www.deq.state.or.us/wq/sisdata/swpsrpts.asp>

Report compiled from program information