UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND
WATERSHEDS

MAR 17 2016

Ms. Lydia Emer, Operations Division Administrator
Oregon Department of Environmental Quality
700 NE Multnomah St, Suite 600
Portland, OR 97232-4100 *(sent to: Emer.Lydia@deq.state.or.us)*

Re: U.S. Environmental Protection Agency Final Permit Quality Review for Oregon

Dear Ms. Emer:

The EPA Region 10, accompanied by EPA headquarters staff, conducted a Permit Quality Review (PQR) of Oregon's Department of Environmental Quality (DEQ) National Pollutant Discharge Elimination System (NPDES) Program on September 14-18, 2015. The EPA provided the draft PQR report to DEQ for review and comment on January 22, 2016. DEQ comments and EPA's responses and edits where incorporated as mark ups on the draft document. Please find enclosed the final PQR Report dated February 2016.

PQRs are a key review mechanism for the EPA to promote national consistency, identify successes in implementation of the NPDES program, and describe opportunities for improvement in the development of NPDES permits. The primary focus of the PQR is an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations.

The report includes general information about Oregon's NPDES program; a discussion of findings for core permit reviews, national topic areas and regional topic areas; and action items developed based on the findings.

Beyond the compulsory PQR elements, EPA Region 10 used the PQR process to consider the current state of Oregon's NPDES program and intends to work with DEQ to address areas of significant concern and in need of improvement, including:

Permit Backlog – The high permit backlog impacts many aspects of Oregon's NPDES program. As the permit backlog persists, DEQ is in effect deferring implementation of new standards and TMDLs, in large measure by not providing the permitting rationale for facility upgrades that are needed to improve water quality. DEQ and EPA need to work on an approach to reduce the backlog and maintain timely issuance of permits. EPA expects states to maintain a backlog of 10% or less. Oregon's NPDES permit backlog is currently 64%.[1]

[1] DEQ Summary of Active and Backlogged Individual Permits
http://www.deq.state.or.us/wq/sisdata/docs/sisdata/BackloggedIndividuallPermitsReport.pdf, (January 13, 2016)

Permit and Permit Evaluation Report (PER) Quality – Use of a standardized template has helped improve quality, but the permit-specific technical analysis and justification for permit conditions, including identification of pollutants of concern, correct reasonable potential analysis and limits development, is often lacking.

Program Consistency among Regional Offices – DEQ should strive for consistency of permits, PERs, permit records and permit implementation. The lack of program consistency and the sometimes-significant unevenness in organization of permit records across the regional offices hindered EPA's ability to evaluate DEQ's NPDES program and may result in difficult to justify differences, and even inequities, in permitting across the state.

The EPA thanks DEQ staff and managers for their cooperation in preparing for PQR and the time provided to us during our on-site file reviews at DEQ headquarters in Portland and the regional offices in Portland and Salem. We appreciation DEQ's assistance with and participation in the PQR process. From our discussions, I know that we share the objective of improving DEQ's NPDES program, and I am confident that the PQR and our joint follow-up work on it will prove to be a constructive element in our continued efforts towards achieving that objective.

Please contact me at (206) 553-1855 or by email at lidgard.michael@epa.gov if you have any questions about this letter or related matters, or you may contact Karen Burgess, of my staff, at (206) 553-1644 or burgess.karen@epa.gov.

Sincerely,

Daniel D. Opalski, Director
Office of Water and Watersheds

Enclosure: Final PQR Report

cc: Mr. Ron Doughton, DEQ NPDES Permits Manager (doughten.ron@deq.state.or.us)

U.S. EPA Region 10

NPDES Permit Quality Review (PQR)

For

Oregon Department of Environmental Quality

February 2016

U.S. EPA Region 10
1200 6th Avenue
Suite 900
Seattle, WA 98101

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Executive Summary

National Pollutant Discharge Elimination System (NPDES) Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations.[1] Through this review mechanism, EPA promotes national consistency, identifies successes in implementation of the NPDES program and identifies opportunities for improvement in the development of state-issued NPDES permits.

The PQR report covers background information about the state program including the program structure and the NPDES permit universe, which cover the types and numbers of NPDES permit issued by the state agency. The EPA uses the PQR to become acquainted with challenges the program is facing and new and novel state initiatives related to NPDES permitting. The result of the PQR report is a list of mandatory and recommended actions to improve the state's NPDES program.

The PQR process begins with EPA evaluating the permit universe and selecting permits to be included in the in-depth PQR review. Selected permits are meant to represent the permit universe in terms of distribution of facility type and major/minor status. Selected permits must also include permits that represent the national and regional topic areas. Twenty-six (*26)* permits were reviewed as part of the PQR. Twenty-one (21) permits were reviewed for the core review. Of the core permits, eleven (11) permits were also reviewed for regional topic areas with three CSO/SSO permits and eight permits with TMDL implementation. Permits were selected based on issue date and the review categories that they fulfilled. Additionally, nutrient, pesticide, pretreatment and stormwater permits were reviewed to address the national topics portion of the PQR.

The EPA has established a variety of checklists to assist regional EPA staff in conducting PQR consistently across all states and territories. The EPA makes the PQR checklists and guidance documents available on the PQR webpage. This PQR employed materials assembled by EPA Headquarters to assist regions with a standardized review process including checklists and companion documents.

The EPA evaluated the following major permit elements as part of the PQR process.

A. Basic Facility Information and Permit Application
B. Technology-based Effluent Limitations
C. Water Quality-Based Effluent Limitations
D. Monitoring and Reporting
E. Standard and Special Conditions
F. Administrative Process
G. Administrative Record
H. National Topic Areas

[1] EPA NPDES Permit Quality Review, < http://www.epa.gov/npdes/npdes-permit-quality-review-standard-operating-procedures>, (Jan. 22, 2016)

Following review of the primary permit elements, the EPA identified action items necessary to ensure state-issued NPDES permits meet the requirement of federal NDPES regulations. The action items are aligned with the major permit elements above. The proposed action items are divided into three categories to identify the priority that should be placed on each item and facilitate discussions between Regions and states.

Critical Findings (Category One) **-** Most Significant: Proposed action items will address a current deficiency or noncompliance with respect to a federal regulation.

Recommended Actions (Category Two) **-** Recommended: Proposed action items will address a current deficiency with respect to EPA guidance or policy.

Suggested Practices (Category Three) **-** Suggested: Proposed action items are listed as recommendations to increase the effectiveness of the state's or Region's NPDES permit program.

The following table provides a summary of the number of action items identified under each element. Appendix E of the report provides a detailed description of each action item.

	Category			
Permit Element	**1**	**2**	**3**	**Total of Findings in Element**
Administrative Process (including public notice)			2	2
Basic Facility Information and Application	3	1	1	5
Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)	1	1	1	3
Documentation (including fact sheet)		2	3	5
Monitoring and Reporting	3	2		5
Nutrients	1		1	2
Pretreatment	2		1	3
Standard and Special Conditions	1			1
Stormwater	1		3	4
Technology-based Effluent Limitations	2		1	3
Total Maximum Daily Loads (TMDLs)		2	1	3
Water Quality-Based Effluent Limitations		2	2	4
Grand Total	**14**	**10**	**16**	**40**

EPA will track category 1 action items to ensure critical action items are addressed in a timely manner.

Beyond the compulsory PQR elements, EPA Region 10 used the PQR process to consider the current state of Oregon's NPDES program and intends to work with DEQ to address areas of significant concern and in need of improvement, including:

Permit Backlog – The high permit backlog impacts many aspects of Oregon's NPDES program. As the permit backlog persists, DEQ is in effect deferring implementation of new standards and TMDLs, in large measure by not providing the permitting rationale for facility upgrades that are needed to improve water quality. DEQ and EPA need to work on an approach to reduce the backlog and maintain timely issuance of permits. EPA expects states to maintain a backlog of 10% or less. Oregon's NPDES permit backlog is currently 64%.[2]

Permit and Permit Evaluation Report (PER) Quality – Use of a standardized template has helped improve quality, but the permit-specific technical analysis and justification for permit conditions, including identification of pollutants of concern, correct reasonable potential analysis and limits development, is often lacking.

Program Consistency among Regional Offices – DEQ should strive for consistency of permits, PERs, permit records and permit implementation. The lack of program consistency and the sometimes-significant unevenness in organization of permit records across the regional offices hindered EPA's ability to evaluate DEQ's NPDES program and may result in difficult to justify differences, and even inequities, in permitting across the state.

[2] DEQ Summary of Active and Backlogged Individual Permits
http://www.deq.state.or.us/wq/sisdata/docs/sisdata/BackloggedIndividuallPermitsReport.pdf, (January 13, 2016)

I. PQR BACKGROUND

National Pollutant Discharge Elimination System (NPDES) Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations.[3] Through this review mechanism, EPA promotes national consistency, identifies successes in implementation of the NPDES program and identifies opportunities for improvement in the development of NPDES permits.

EPA's review team conducted a review of the Oregon NPDES permitting program during on-site visits to the Oregon Department of Environmental Quality (DEQ) at Headquarters in Portland, the Northwest Region office also in Portland, and the Western Region office in Salem on September 14 through September 18, 2015. EPA's review team consisted of Karen Burgess (Team Lead), Dru Keenan, Michael Le, Margaret McCauley and Misha Vakoc from EPA Region 10; Erin Flannery-Keith and Elizabeth Eddy from EPA Headquarters; and Steven Geil a contractor from Tetra Tech, Incorporated.

The Oregon PQR consisted of two components: core permit reviews and topic area reviews. The permit reviews focused on core permit quality and included a review of the permit application, permit, fact sheet, which Oregon DEQ calls a "permit evaluation report" (PER)[4], and any correspondence, reports or documents that provide the basis for the development of the permit conditions.

The core permit review involved the evaluation of selected permits and supporting materials using basic NPDES program criteria. Reviewers completed the core review by examining selected permits and supporting documentation, assessing these materials using standard PQR tools, and talking with permit writers regarding the permit development process. The core review focused on the Central Tenets of the NPDES Permitting program to evaluate the Oregon NPDES program.[5] In addition, discussions between EPA and state staff addressed a range of topics including program status, the permitting process, responsibilities, organization, and staffing. Core topic area permit reviews are conducted to evaluate similar issues or types of permits in all states. The permit reviews also include a subset of permits that address national topics. The national topics reviewed in the Oregon NPDES program were nutrients, pesticide general permit, pretreatment, and stormwater.

Regional topic area reviews target specific permit types or particular aspects of permits. The regional topic areas selected by EPA Region 10 included Combined Sewer Overflows and Sanitary Sewer Overflows (CSOs/SSOs) and implementation of EPA-approved Total Maximum Daily Loads (TMDLs) into NPDES permits. These reviews provide important information to Oregon, EPA Region 10, EPA Headquarters and the public with regard to specific program areas.

[3] EPA NPDES Permit Quality Review, < http://www.epa.gov/npdes/npdes-permit-quality-review-standard-operating-procedures>, (Jan. 22, 2016)
[4] The terms PER and fact sheet are used interchangeable throughout this report.
[5] Central Tenets of the National Pollutant Discharge Elimination System (NPDES) Permitting Program, < http://www.epa.gov/npdes/central-tenets-npdes-permitting-program>, (Jan. 22, 2016)

EPA Region 10's permit selection process considered the Oregon's current permit universe. The following graph shows the current percentage of major and minor permits and permits for POTW and non-POTW. The following figure shows the numbers of permits in each category from EPA's ICIS database.[6] EPA's strives to select permits for core permit review in proportion to the permit categories in each state.

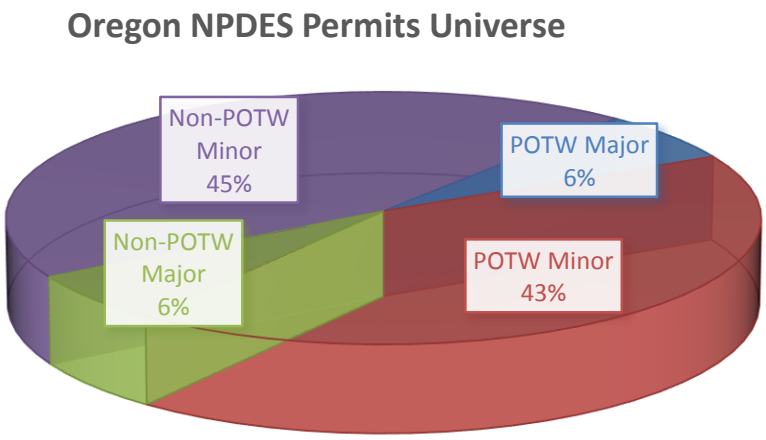
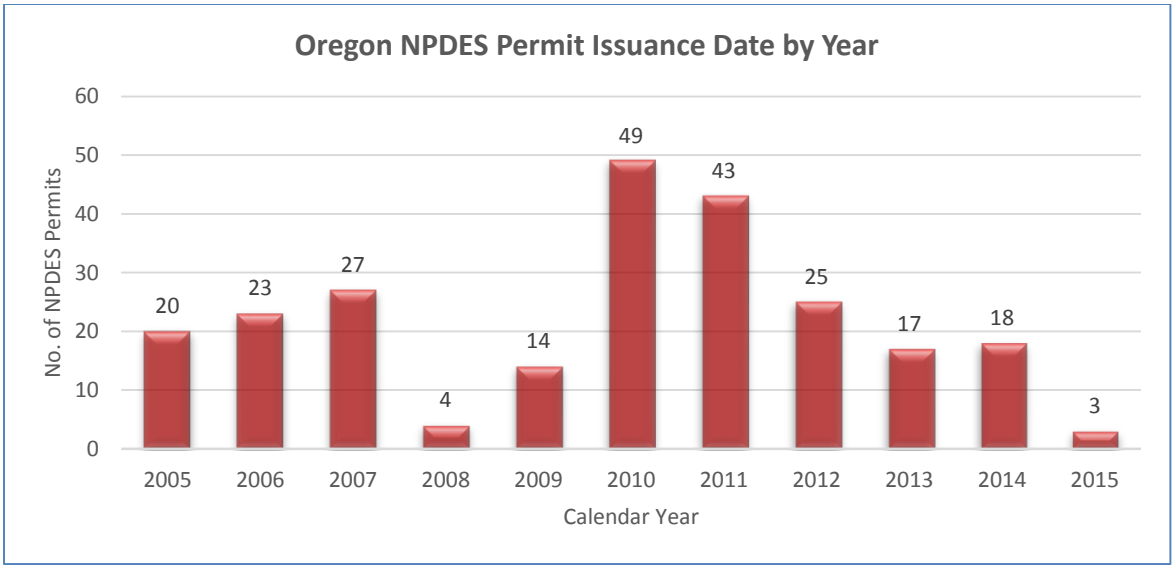


Figure 1. Oregon Permit Universe

Oregon's current backlog of expired NPDES permit resulted in a limited the pool of candidate permits for PQR review. PQR is intended to look at a state's current NPDES permitting processes and quality across permitting regions with the goal of selecting permits issued in the two years prior to the PQR review. The following figure indicates a slow rate of permit issuance in recent years. Thus, there was a limited number of permits available for review that satisfied the criteria for PQR and fulfilled the variety of permit needed for review. The rate of issuance for individual permit has slowed in recent years (source: EPA's Integrated Compliance Information System (ICIS) database).



[6] EPA's Integrated Compliance Information System (ICIS) database. (http://www3.epa.gov/enviro/facts/pcs-icis/search.html)

Figure 2. Oregon Individual NPDES Issued by Year

Twenty-six (26) permits were reviewed as part of the PQR. Twenty-one (21) permits were reviewed for the core review. Of the core permits, eleven (11) permits were also reviewed for regional topic areas with three CSO/SSO permits and eight permits with TMDL implementation. Permits were selected based on issue date and the review categories that they fulfilled. The following table summarizes and provides links to the permits and PERs reviewed under the Core Permits section. Refer to Appendix B: Selected Permits for the complete data table of permits reviewed in this PQR.

Table 1. Permits Selection

PQR ID NO.	NPDES No.	Permit Name	Draft, Modification, Reissue or Final, Reviewed real-time	Core Review[1]				URL Permit	URL Permit Evaluation Report (aka Fact Sheet)
				POTW (issue date)	Non-POTW (issue date)	Major	Minor		
1	OR0026131	Gresham, City of	F	6/30/2014		Y		Permit	PER
2	OR0027561	Astoria, City of	F	11/16/2011		Y		Permit	PER
3	OR0023574	Coos Bay STP No. 1	F	5/22/2013		Y		Permit	PER
4	OR0026361	Corvallis, City of	F	11/30/2011		Y		Permit	PER
5	OR0026905	Portland, Columbia Blvd	F	5/26/2011		Y		Permit	PER
6	OR0020885	The Dalles, City of	F, D reviewed	10/31/2007		Y		Permit	PER
7	OR0020877	Warrenton, City of	F, reviewed	6/4/2013			Y	Permit	PER
8	OR0020206	Bandon, City of	F	8/25/2014			Y	Permit	PER
9	OR0020729	Canyonville	F	1/3/2012			Y	Permit	PER
10	OR0020231	Clatskanie	F	6/12/2012			Y	Permit	PER
11	OR0020745	Florence, City of	F, reviewed	5/2/2014			Y	Permit	PER
12	OR0020052	Huntington, City of	F, reviewed	9/13/2012			Y	Permit	PER
13	OR0022551	Lafayette, City of	F	10/6/2014			Y	Permit	PER
14	OR0022306	Umatilla, City of	F	10/11/2013			Y	Permit	PER
15	OR0001708	Northwest Aluminum	F, reviewed		12/9/2014	Y		Permit	PER
16	OR0000795	Georgia-Pacific Wauna	F		3/31/2009	Y		Permit	PER
17	OR0002402	H.J. Heinz Company, L.P.	F, reviewed		9/3/2014	Y		Permit	PER
18	OR0001716	SFPP, L.P.	F, reviewed		12/18/2012		Y	Permit	PER
19	OR0022942	Vigor Industrial	M, reviewed		12/11/2013 mod		Y	Permit	PER
20	OR0032107	Georgia-Pacific Chemical LLC	F		12/19/2012		Y	Permit	PER

PQR ID NO.	NPDES No.	Permit Name	Draft, Modification, Reissue or Final, Reviewed real-time	Core Review[1]				URL Permit	URL Permit Evaluation Report (aka Fact Sheet)
				POTW (issue date)	Non-POTW (issue date)	Major	Minor		
21	OR0034916	Toyo Tanso USA, Inc.	F		4/1/2013	Y		Permit	PER

General Permits

Multi-Sector SW GP

Construction GP

MS4 (Individual NPDES Permits for Phase 1 and 2)

Pesticide GP

Total Permits	**14**	**7**	**10**	**11**

NOTES:

[1]Review includes PQR checklist and/or special topic checklists; Review can include final permits issued within 2 years or draft permits for real-time review; draft permits are expected to be final prior to state visit. Number of reviewed (POTW/non-POTW and Major/Minor) should be reflective of states universe.

[2]Review includes special topic checklists; 4 permits required per special topic unless general permits are used.

II. STATE PROGRAM BACKGROUND

A. Program Structure

Oregon DEQ's Headquarters office (in Portland), includes:

- the Office of the Director,
- the *Operations Division*, which includes water quality permitting, compliance, and state revolving loan programs,
- the *Environmental Solutions Division,* which includes water quality assessments, standards, and TMDL programs, and
- Human Resources and business and development services.

DEQ's water quality permitting program is located within the Water Quality Permitting and Program Development section in the Operations Division. The Water Quality Permitting and Program Development section (hereinafter WQP section) provides oversight, technical assistance and support for the NPDES and Water Pollution Control Facilities (WPCF) permit programs. These programs protect Oregon's water by regulating pollutant discharges from wastewater (domestic and industrial) and stormwater (municipal, industrial, and construction). The WQP section also supports or implements programs for industrial pretreatment, groundwater protection, Underground Injection Control (UIC), biosolids, water reuse, and hydropower 401 certification. Through various activities such as program and policy development, rulemaking, regional coordination and stakeholder involvement, the WQP

section supports permit programs designed to ensure that groundwater and surface water achieve federal and state water quality standards.

In addition to its Headquarters Office, DEQ has three regional offices,

- the **Northwest Region**, with offices in Portland and Tillamook,
- the **Western Region**, with offices in Salem, Eugene, Coos Bay and Medford, and
- the **Eastern Region**, with offices in The Dalles, LaGrande, Bend, Pendleton, and Klamath Falls.

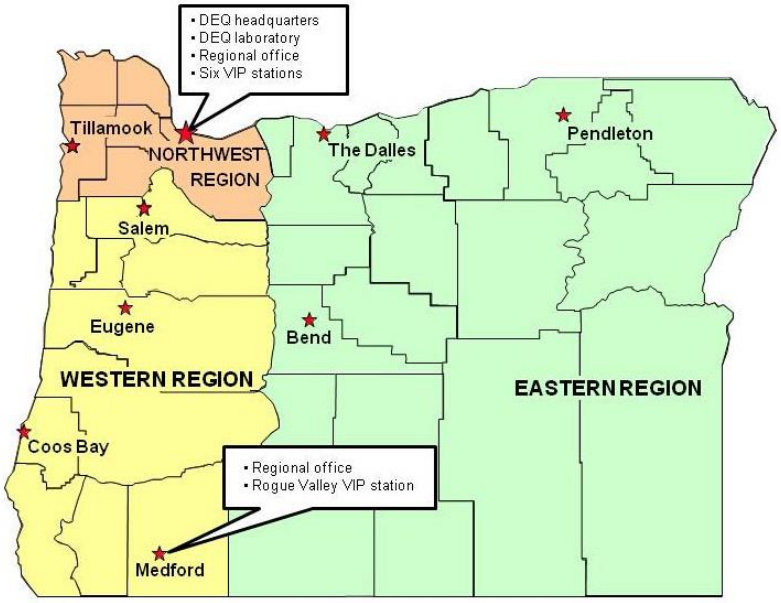


Figure 3. Map of DEQ Regional Office Locations

Source: http://www.deq.state.or.us/pubs/general/Snapshot12-OD-001.pdf

Each office implements the permits program within the region by writing and administering permits, providing technical assistance, ensuring compliance through discharge monitoring report (DMR) review and inspections, initiating enforcement actions, and responding to complaints. Regional offices must develop and implement permit issuance and renewal plans that incorporate NPDES permits, the State's WPCF non-discharge permit program, stormwater and general permits and related work to support the permitting program. The Combined Animal Feeding Operation (CAFO) permits are administered by Oregon Department of Agriculture (ODA).

The WQP section has 23 total staff that have NPDES permit writing duties (19 are assigned to individual permits; 3 are assigned to general permits). The Section estimates that 5.75 FTEs are expended working on individual permits (State data indicate that permit staff spend an average of 30% of time writing permits).

In addition to permit writers, DEQ staff that also support NPDES permitting including:

Staff Assigned	Description
5	water quality modelers,
14	Basin Coordinators,
1	Non-Point Source Program Analyst (i.e., TMDL staff),
2	Program and Policy analysts,

Staff Assigned	Description
3	Permit Coordinators,
2	IT/data staff (support internal systems and data transfers to EPA),
1	Policy and Data Analyst,
1	Compliance Program Coordinator,
1	WET Test Specialist,
1	Electronic Data Delivery (EDD) Support Specialist,
2	Groundwater Hydrogeologists,
3	Biosolids/Recycled Water Specialists,
1	Pretreatment Program Coordinator, and
2	Operator Certification staff.

DEQ uses a 16-week training program for new NPDES permit staff. The training program covers both permit writing and compliance activities. DEQ directs new permit writers to its internal documentation (available on a SharePoint page); DEQ uses an informal internal mentoring program. New permit writers attend the EPA Permit Writers' course, as available.

DEQ uses several data systems to support the NPDES program. DEQ's Source Information System database (WQSIS) contains information on NPDES and WPCF permits. The database is searchable by staff and the public and is available on DEQ's website: http://www.deq.state.or.us/wq/sisdata/sisdata.asp.

DEQ's Central Entity Management database (CEM) captures data on facilities, individuals certified or licensed to provide environmental services regulated by DEQ, organizations and individuals which have an ownership or other business interest in the facilities, geographic data facility and feature locations, and environmental interests (e.g. permits, etc.) of facilities and individuals.

DEQ's Agency Wide Compliance and Enforcement System database (ACES) assists in managing information needed to process complaints, site visits, program enforcement and formal enforcement.

Monthly compliance data for NPDES majors is available in DEQ's Discharge Monitoring System (DMS). DEQ transfers data from DMS to EPA's NPDES-ICIS system (DEQ also uses PCS).

The Oregon Legislature recently approved funds to procure an Environmental Data Management Suite that will provide a comprehensive tools for the water quality permitting program, including receiving applications, managing workflow processes, managing electronic data submissions, etc.

Additional in-house data management tools support individual sub-programs within water quality permitting, such as onsite septic systems, underground injection control, stormwater, pretreatment, etc. These systems may function independently or they may be used as source data for WQSIS, CEM and ACES.

DEQ uses a variety of permitting tools and systems, including templates for permits and permit evaluation reports (i.e., fact sheets), monitoring and reporting matrices to help permit writers determine the appropriate monitoring/reporting requirements for a particular permit holder, and Internal Management Directives, which assist staff in implementing the permitting program. DEQ also uses other tools such as various reasonable potential analysis (RPA) spreadsheets, the Streeter-Phelps model and CORMIX, and an extensive set of training and permitting resources.

DEQ's NPDES permit template is updated twice each year and while it is primarily written for domestic permits, the template is also used and adapted to write industrial permits. The permit evaluation report template (PERT) is updated less frequently. Spreadsheets used to calculate reasonable potential are posted on DEQ's external website at: http://www.deq.state.or.us/pubs/reports.htm. Models such as CORMIX are used to calculate mixing zones. An extensive library of written procedures and guidance for developing NPDES permits is available to permit writers on an internal SharePoint site (i.e., 37 primary permitting topics, several include multiple sub-topics, multiple documents are maintained within each topic).

The State does not use a standardized QA/QC process for permit development and review. Each region follows its own procedures. Internal peer review of permits is most common. A DEQ Headquarters staff person recently reviewed Eastern Region permits for consistency with the permit template. In the Western Region, senior permit writers review permits using a checklist found on the Permit Development SharePoint page (this checklist is available to all permit writers/reviewers).

With regard to NPDES permit file management, the State does not have consistent, documented statewide procedures/expectations for maintaining electronic or paper permit files. Each individual office uses its own filing system for paper files and draft electronic documents (unofficial copies) as described below. Moreover, each office may use different filing procedures for individual permits versus general permits, including applications for coverage. Final versions of all individual NPDES permits and evaluation reports are scanned and electronically stored in a permit repository (http://www.deq.state.or.us/wqpermitsearch/). File management is generally conducted as follows:

- Headquarters – Paper and electronic files are maintained by each individual subprogram. Paper files are maintained in a central filing area. Each subprogram maintains electronic files on shared network drives.
- Eastern Region – Paper files are maintained in Bend and Pendleton offices. Final official records are maintained in the paper files. Electronic files are maintained on a shared drive.
- Northwest Region – Electronic records are maintained in shared folders divided into major sources and minor sources. Within each folder, there are subfolders for each major/minor permit holder. The Region also has paper files for documents that have not

been scanned. The Region has a list of 12 permit file topics and establishes folders for each permit for relevant topics.

- Western Region – Uses shared folders accessible to all Regional staff (Drafting, Applicant Review, and Public Notice) for permit development. The Region also stores paper files for the various permit holders. In Western Region, the permit coordinator maintains the original complete renewal application (a copy is filed and forwarded to the permit writer) and a signed copy of the final permit (the second original signed copy goes to permitted facility, and a copy if filed). When the permit is issued, electronic versions go to the Archived-issued folder. The Western Region permit coordinator moves the electronic files between the various folders.

With regard to the management of correspondence:

- Headquarters – Procedures for maintaining correspondence on permits and permitting actions are available by subprogram. Paper copies of public engagement are generally maintained in central files with the other permit documents.
- Eastern Region – Paper copies (official record) of correspondence go into the individual permit files.
- Northwest Region – Hardcopies of correspondence are stored in individual permit files. The files are organized alphabetically by permit holder name.
- Western Region – Any non-renewal information goes the source file maintained in the satellite office. All original renewal information is maintained in the Salem file.

All Regions receive DMRs and other reports in hardcopy form, however, the latest version of the permit template directs permit holders to provide submittals in both hardcopy and electronic form in accordance with DEQ's approved format. This will assist DEQ in transitioning to receiving all electronic submittals. Regions may store monitoring and reporting records in separate files, depending on their individual filing system. The paper copy is the official record.

DEQ has made recent efforts to gather toxics data in an electronic format to save time when filling in the RPA worksheets. DEQ has set up an Electronic Data Delivery process for toxics data that is described on the following webpage:
http://www.oregon.gov/deq/WQ/Pages/toxics/eddtoxics.aspx

Compliance records are managed by each region. In the Eastern Region official copies of compliance inspection reports are maintained in a separate permit file. Enforcement actions that result from compliance violations are held in a separate locked file until the enforcement action is complete. Completed enforcement actions are integrated into the main hardcopy file. In the Northwest Region compliance records are stored in the permit files according to the organizational scheme described in above. In the Western Region, compliance records are maintained in the source file.

Overall, EPA found DEQ's permit files to be in poor order and without a consistent, easy to following filing schema. The lack of complete permit records hindered EPA's ability to review files under PQR. The EPA recommends DEQ adopt a statewide file schema to be used by each region. Additionally, DEQ should modernize the filing system to accommodate new requirements of electronic reporting.

B. Universe and Permit Issuance

Based on information provided by DEQ, as of July 17, 2015, the universe of individual, non-stormwater NPDES permits includes the following (Source: PQR Questionnaire 1):

- 200 POTWs
    - (50 major and 150 non-major)
- Individual Municipal Stormwater Permits
    - 23 municipalities
- 3 Combined Sewer Overflow systems
- 134 non-POTWs
    - (19 major and 115 non-major)
- 425 concentrated animal feeding operations (CAFO) facilities
    - General permit regulates 421 CAFOs
    - 4 are regulated by individual permits
- 21 general permits that cover numerous categories including:
    - 1,964 stormwater dischargers
        - 1, 027 industrial
        - 914 construction permittees
    - 614 non-stormwater general permittees.

DEQ does not utilize notice of intent (NOI) forms for general permits; DEQ's application for coverage under a general permit is similar to an NOI but not identical. Significant industries in the State include chemical manufacturing, mining, and timber and wood products. DEQ estimates 80 percent of domestic major permits and 68 percent of industrial major permits and 51 percent of domestic non-major and 75 percent of industrial non-major permits are expired and administratively continued (i.e., backlogged).

Nine months prior to permit expiration, DEQ staff send letters to permittees reminding them of permit application requirements including a checklist that is completed by both the applicant and DEQ. Staff receive applications and conduct a review for administrative completeness; there currently is no formal technical completeness review. Managers in each region assign permits to be developed based on factors such as complexity of the facility and discharge, workload, and permit writer experience.

Permit writers utilize a number of sources during NPDES permit development. Data systems include the water quality source information system (WQSIS) which contains information on NPDES permits. The SIS database is searchable by staff and the public and an external version is available on DEQ's website at http://www.deq.state.or.us/wq/sisdata/sisdata.asp.

The central entity management (CEM) database contains data on facilities, individuals certified or licensed to provide environmental services regulated by DEQ, organizations and individuals which have an ownership or other business interest in the facilities, geographic data facility and feature locations, and environmental interests (e.g. permits, etc.) of facilities and individuals.

The agency wide compliance and enforcement system (ACES) tracks information needed to process complaints, site visits, program enforcement and formal enforcement, and the discharge monitoring system (DMS) that contains compliance data for NPDES major facilities.

Data from these systems, along with permit application data, are considered when evaluating the need for and subsequently development of effluent limitations. DEQ permit writers utilize a reasonable potential analysis (RPA) spreadsheet to determine reasonable potential (RP). Where available, ambient data is used to assess assimilative capacity of the receiving waters. DEQ does not have a robust set of ambient water quality data readily available for use in permit development. Although not a general practice, permit writers are increasingly requiring ambient monitoring for some parameters in site-specific cases. In addition, Internal Management Directives (IMDs) assist staff in implementing the requirements of the program. Models such as Streeter-Phelps and CORMIX are available to permit writers in developing effluent limitations.

POTW permits often contain seasonal technology-based effluent limitations (TBELs) based on secondary or equivalent-to-secondary treatment standards. Often, basin requirements in summer months result in effluent limitations either more stringent than secondary treatment standards or permits contain provisions not allowing discharge during the spring and summer. TBELs for industrial facilities are based on applicable effluent limitation guidelines (ELGs) and standards or effluent limitations based on best professional judgment and examination of permits for similar facilities and discharges.

The RPA IMD specifies pollutant parameters to be analyzed in the RPA. These include the following:

- Pollutants with effluent limitations in the current NPDES permit;
- Pollutants with monitoring requirements in the current NPDES permit;
- Pollutants contributing to an impairment for the receiving water (303(d) listed);
- Pollutants “known” to be present in significant concentrations in the source/intake water;
- Pollutants “known” or otherwise expected to be present in significant concentrations in the effluent; and
- Pollutants identified through the permit application process.

Pollutants of concern (POC) are identified for POTWs through a priority pollutant effluent scan submitted with the permit renewal application; the data are then evaluated for RP through a comparison to applicable water quality standards (WQS). In addition, the respective regional office may establish additional monitoring requirements following a review of the data submitted with the permit renewal application. Pollutants of concern in discharges from

existing non-POTWs are evaluated based on monitoring data submitted through pollutant scans required by the permit renewal application. In addition, for discharges for which ELGs apply, permit writers review ELGs to identify potential pollutants of concern. For discharges from new non-POTWs, regional permit writers may evaluate permits for similar facilities to identify potential pollutants of concern. Further, in the absence of data for new facilities for which Effluent Limitation Guidelines (ELGs) apply, permit writers may immediately establish effluent limitations based on the ELGs.

The RPA IMD describes the monitoring that is to occur and the timeframe in which it is to take place. For POTWs, monitoring should be coordinated with other activities such as local-limit evaluations, WET testing, etc., to maximize efficiency and increase the utilization of the analytical results.

DEQ conducts a "tiered monitoring" approach. Within the first two years of the permit term, the permit writer identifies pollutants subject to review and evaluation and performs an end of pipe RPA to determine pollutants of concern (POC) (Tier 1). Tier 2 monitoring involves collecting ambient water quality data and any additional effluent data for identified POC that will better assess the potential impacts of discharges or where water quality criteria have changed or the receiving water is listed as impaired. To initiate Tier 2 monitoring, DEQ sends a monitoring action letter to the discharger providing the results of the end-of-pipe RPA and specifying the POCs. The discharger is required to develop a sampling plan that satisfies the following requirements:

- Ambient characterization of the receiving water for all POCs
- If necessary, effluent and ambient characterization for:
    - Recently promulgated water quality criteria that are applicable to the permittee
    - Any pollutant parameter for which the receiving water body has been recently listed as "Category 5, Water Quality Limited" on the 303(d) list
- All required monitoring and/or data submittal must be completed by the end of the third year of the permit term.

The approach DEQ uses in the RPA is consistent with the approach presented in EPA's *Technical Support Document for Water Quality-based Toxics Control* (TSD). Streeter-Phelps dissolved oxygen modeling, CORMIX, and other models are available to determine the reasonable potential of the discharge to exceed water quality criteria. Mixing zones are allowed by Oregon's WQS, Oregon Administrative Rules (OAR) 340-041-0053.

Anti-backsliding is triggered if there is a change in an effluent limitation where it becomes less stringent than the limitation in the previous permit. A justification is required to change the effluent limitation, sometimes justified by the consideration of new information during an RP evaluation. Permit Evaluation Reports (fact sheets) will include a justification for a change in effluent limitations.

Oregon's antidegradation policy and implementation plan are contained in the WQS in 340-041-0004 of the OAR. An IMD has been developed for implementing DEQ's antidegradation policy. An antidegradation review must be performed for every DEQ water quality action and the results documented in the PER. If a PER is not developed, the results should be included in the administrative record. Refer to http://www.deq.state.or.us/wq/pubs/imds/antideg.pdf. In general, permit writers complete the antidegradation checklist and include in at as appendix to the PER.

DEQ staff have developed a matrix for monitoring and reporting frequency based on the facility type, volume discharged, and other factors. The DEQ recommends different frequencies for lagoons, trickling filter plants, and activated sludge treatment plants and for industrial wastewater treatment facilities. Permit writers implement a standardized approach to establishing monitoring requirements; however, they may tailor requirements in certain scenarios. Monitoring results are reported on DMR forms and noncompliance events are reported at the time monitoring reports are submitted. Permits specify when monitoring reports are due. Currently, reports are submitted to DEQ by hard copy. Refer to the monitoring matrix at http://www.deq.state.or.us/wq/wqpermit/docs/TemplateGuidance/MonMatrix.pdf.

A permit template has been developed and is being used by permit writers. The current template is primarily for domestic dischargers. An additional version of the permit template for industrial dischargers is being developed. A fact sheet/PER template has also been developed. Narrative conditions in DEQ permits generally address requirements related to pollution prevention, sludge management, mixing zones, land application plans, hauled wastes, WET, and pretreatment. In addition, narrative conditions may address permit conditions with respect to downstream reporting requirements. Standard conditions are generated from boilerplate language that DEQ staff update regularly. Refer to the current templates available at http://www.deq.state.or.us/wq/wqpermit/PermitTemplateInfo.htm.

Public notices are provided electronically on the DEQ website and major and critical permits are also published in a newspaper. Notices for minor permits are posted on the respective region's website and distributed to interested parties via a mailing list. Public notices are available at http://www.oregon.gov/deq/Pages/publicnotice.aspx and available to listserv.

DEQ stated there is no standard format for response to comments (RTC) documents. Generally, responses to comments are provided to the commenter, but DEQ does not make publicly available a consolidation of responses to all comment received during public comment periods.

DEQ staff indicated requests for hearings are few, with the exception of the small universe of permits that routinely receive public comments (e.g., major POTWs, major industrial facilities). The files reviewed under this PQR did not include any transcripts from public hearings and it was unclear if DEQ routinely provides transcripts from public hearings.

The administrative record for NPDES permits is retained in the respective regional office, or at headquarters for general permits that are issued from that office.

C. State-Specific Challenges

There is a large backlog of NPDES permits throughout the state; DEQ management and staff are aware of the issue. The number of permit staff, turnover among management and staff, and water quality issues such as temperature impairments of Oregon waterbodies have contributed to the increasing permit backlog. The Oregon legislature has appropriated money for the DEQ to hire an outside consultant to assess the NPDES program and provide recommendations on lowering the percentage of backlogged NPDES permits and developing a strategic plan to maintain permit issuance rates. Additionally, the DEQ will be implementing a 12 percent permit fee increase in 2016 to increase permit writing staff and the NPDES data management system.

D. Current State Initiatives

There is variation in certain practices between the regional offices. Examples include how administrative records are filed and signature processes for NPDES permits. DEQ is examining these differences to determine if they are problematic or working well within each regional office. The DEQ has developed IMDs and permitting tools to aid permit writers in drafting and issuing NPDES permits. The development of templates and matrices, and their use and implementation, will improve permit consistency among the regional offices and aid in permit development.

Oregon has a Blue Ribbon Committee on wastewater permitting to aid in improving the DEQ NPDES program. An April 2015 update listed the following projects and initiatives:[7]

- Copper standards work plan
- Anti-backsliding memo
- Cumulative effects analysis memo
- Statewide permit issuance plan
- Electronic Data Delivery
- Permit application checklists
- Potential for purchasing an environmental data management system to replace the older water quality permit database

III. CORE REVIEW FINDINGS

The EPA has established a variety of checklist to assist regional EPA staff in conducting PQR consistently across all states and territories. The EPA makes all the PQR checklists and guidance documents available on the PQR webpage at http://www2.epa.gov/national-pollutant-discharge-elimination-system-npdes/npdes-permit-quality-review-standard-operating. The core permit reviews were done using the NPDES Permit Review Checklist (July 2013). A summary of

[7] Oregon's Blue Ribbon Committee on Wastewater Permitting, < http://www.oregon.gov/deq/WQ/Pages/Water%20Quality%20Permits/blueribbonprogress.aspx> (Nov. 9, 2015).

the response to each checklist questions was provided in Appendix C: Summary Core Permit Review Checklist. A detailed discussion of EPA's findings during the PQR review is provided below in order of the main checklist topics.

A. Basic Facility Information and Permit Application

1. Facility Information

Basic facility information is necessary to establish permit conditions. For example, NPDES permit application regulations (40 CFR 122.21) require information regarding facility type, location, processes and other factors. This information is essential for developing technically sound, complete, clear and enforceable permits. Similarly, fact sheets must include a description of the type of facility or activity subject to a draft permit.

All of the 21 individual permits reviewed include the necessary authorization-to-discharge language. Fourteen of these permits include issuance, effective and expiration dates as well as authorized signatures. Seven include issuance (i.e., signature) dates and expiration dates but do not explicitly include an effective date (OR0023574, OR0026361, OR0020729, OR0020052, OR0001708, OR0000795 and OR0001716). Each of the permits reviewed include the respective facility address, a good description of the type of activities, waste streams and wastewater treatment process at the facility, and identify the name of the receiving water(s) (e.g. receiving stream and basin information). In general, the permits address all of the outfalls identified. However, in one permit and fact sheet there was no discussion of the absence of eight emergency outfalls addressed in prior permit (OR0023574). In a second permit (OR0020729), the permit does not address outfall 002, which is described in the fact sheet (pg. 12) as an emergency outfall that can be used during certain extreme storm events [citing OAR 340-021-0120 (13) & (14)]. With regard to identifying outfall locations, most of the permits provide this information although, in some cases, only the address and river mile is specified in the permit (e.g., OR0020729, OR0026361, OR0000795). Three permits provide only street names for multiple CSO outfalls (OR0027561, OR0026905 OR0026905), while a fourth permit includes the river mile for the primary outfall and CSO outfalls (OR0026361).

2. Permit Application Requirements

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking NPDES permits. Although federal forms are available, authorized states are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assesses whether appropriate, complete, and timely application information was received by the state and used in permit development.

For the individual permits reviewed, the correct application was identified in the respective permit files for 16 of the permits. For three permits, there was some question about the application form (e.g., for OR0001708, several applications were in the file and it was unclear which was used to develop the permit; for OR0022942 a partially completed application was in the file that indicated an intent to renew permit, for OR0034916 - Submitted NPDES-R instead of EPA Form 1, and submitted EPA Form 2C). For seven of the permits reviewed, the application

was not submitted 180 days prior to expiration of the prior permit. Fifteen of the applications for those permits reviewed appear complete. For three of the permits, questions were identified regarding completeness. For example, no WET data were identified for OR0020745 (a letter in the file and the fact sheet indicated that WET data had been submitted). One permit (OR0022306) was missing data on Form 2A and did not include a facility diagram. Another permit (OR0034916) included NPDES Form R (similar to EPA Form 1 - application form Oregon uses for renewals of individual NPDES permits), which did not include a topo map, SIC codes, or a list of existing environmental permits, as required by EPA Form 1. For POTWs, pollutant scan data were generally present in the permit files. In one case (OR0020729) three pollutant scans were not identified in the relevant file. In addition, for OR0020877, the POTW data requirements were based on the average flow/ dry weather design flow (less than 1 MGD) when design flow is 2.3 MGD (i.e., greater than 1 MGD). With regard to WET data, for four permits four WET tests were not identified in the respective files (OR0020877, OR0020729, OR0020231, and OR0020745; for the last of these a letter in the file indicated the data had been submitted and the fact sheet indicates the data was submitted).

Some additional questions were identified. For OR0026361 it appeared that detection limits may not be sufficiently stringent [expanded effluent testing largely ND with ML (minimum level also referred to as quantification level] at 1 ug/L). While the application was well done and organized the data appears old (2003) for a permit issued in 2011. The record does not include additional, more current data; however, comparison of the application data with the fact sheet data suggests that additional data were considered. For this permit, and for OR0026905, where supplemental information is used, it would be helpful for the application and/or record to summarize the information. Finally, for OR0020885, the March 2007 application was reviewed (for the permit that expired in September 2012) but the application for the 2013 permit renewal was not identified in the permit file.

B. Technology-based Effluent Limitations

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, fact sheets and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether technology based effluent limitations (TBELs) represent the minimum level of control that must be imposed in a permit.

1. TBELs for POTWs

POTWs must meet secondary or equivalent to secondary standards (including limits for BOD, TSS, pH, and percent pollutant removal), and must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133. A total of 14 POTW permits were reviewed as part of the PQR.

All of the POTW permits reviewed include numeric effluent limitations for 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. The following permits contained equivalent to secondary effluent limitations:

- City of Astoria (OR0027561)
- City of Huntington (OR0020052)

Where equivalent to secondary effluent limitations were established, there was variability in the justification for the effluent limits in the fact sheet. Justification for equivalent to secondary limits should be justified in each permit even when carrying over limits from the previous permit.

2. TBELs for Non-POTW Dischargers

Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. Where federal effluent limitations guidelines (ELGs) have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d).

There were a total of seven (7) Oregon Industrial permits reviewed, Northwest Aluminum, Georgia-Pacific Wauna, HJ Heinz, SFPP L.P., Vigor Industries, Toyo Tanso USA, Inc., and Georgia-Pacific Chemicals. See detailed comments below regarding TBEL issues.

Industrial permits:

Northwest Aluminum Specialties, Inc. OR0001708

1. The facility previously operated a primary aluminum smelting operations at the site. The smelting operation was dismantled in 2009, and current operations consist of metals recycling. Wastewater from the facility consists of non-contact cooling water and leachate from a CERCLA landfill located at an adjacent Lockheed Martin tank leachate collection system.
2. All effluent limitations for the facility are water-quality based effluent limits (WQBELs). No national effluent limitations guidelines or standards (ELGs) apply to the facility.

Georgia Pacific Consumer Products, LP Wauna Mill OR0000795

1. A new tissue machine was added in 2004 and an additional tissue machine was under construction in 2007 and was to go online that year. These new machines should have been considered new sources and been regulated under the new source performance standards (NSPS). The fact sheet mentioned the new tissue machines and the necessity for regulating under the NSPS but Attachment A of the fact sheet indicates the effluent limit calculations were performed using the BPT limits.

HJ Heinz Company OR0002402

1. There was no express discussion of categorization in the fact sheet, however, the fact sheet describes the facility processes and performance levels.

SFPP L.P. OR0001716

1. The facility is a bulk storage and distribution facility storing diesel, ethanol, fuel additive, and gasoline. Process wastewater from the facility consists of tank water draws and loading rack water. Contaminated stormwater is created by rainwater collected inside secondary containment around the north and south tank farms.
2. There were no issues with TBELs for this permit.

Vigor Industrial. LLC OR0022942

1. Effluent limits for TSS, oil and grease, pH, tri-butyl tin may be based on BPJ. These limits were carried forward from the previous permit. However, it is difficult to determine if the effluent limits are TBELs or WQBELs.

Toyo Tanso USA, Inc. OR0034916

1. The only TBEL was for pH and was based on BPJ.

Georgia-Pacific Chemical LLC OR0032107

1. Wastewaters discharged and regulated by the NPDES permit include non-process wash-down water, stormwater runoff, and cooling tower blowdown. The stormwater is considered process wastewater since it may come in contact with raw material or finished product (per the fact sheet).
2. There was no mention in the record as to the production amounts at the facility. BAT limits apply to those facilities producing more than 5 million pounds of OCPSF product per year. There was no indication of production values for the facility so it is not possible to determine if BAT limits should have been included in the permit.
3. BOD_5 and TSS effluent limits from the OCPSF ELG were incorrectly applied. The facility is subject to two subparts of the regulation, the BOD_5 and TSS effluent limits for each subpart were examined and the more stringent used as the TBEL for those parameters. The permit should incorporate the effluent limits for each subpart based on the percentage of process wastewater flow applicable for each subpart.
    a. For example – if 65% of the process wastewater flow is from Commodity Organic Chemicals processes and 35% are from Thermosetting Resins, the daily maximum BPT effluent limitation for TSS should be calculated as follows:
        - 216 mg/L * 0.35 = 76 mg/L
        - 149 mg/L * 0.65 = 97 mg/L

- 76 mg/L + 97 mg/L = 173 mg/L BPT daily maximum TSS limit

b. The OCPSF regulation then requires that the concentration limit be multiplied by a reasonable estimate of process wastewater flow to determine a mass limitation to be placed in the permit.

4. The only parameter with a mass limit was the daily maximum effluent limit for TSS. Average monthly and daily maximum effluent limits for BOD_5 and TSS should have been expressed in terms of mass if TBELs and based on the OCPSF ELG.

C. Water Quality-Based Effluent Limitations

The NPDES regulations at 40 CFR 122.44(d) require permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve state water quality standards, including narrative criteria for water quality. To establish such "water quality-based effluent limits" (WQBEL), the permitting authority must evaluate the proposed discharge and determine whether technology-based requirements are sufficiently stringent, and whether any pollutants or pollutant parameters could cause or contribute to an excursion above any applicable water quality standard.

The PQR for Oregon assessed the processes employed by permit writers and water quality modelers to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, and other documents in the administrative record to evaluate how permit writers and water quality modelers:

- determined the appropriate water quality standards applicable to receiving waters,
- evaluated and characterized the effluent and receiving water including identifying pollutants of concern,
- determined critical conditions,
- incorporated information on ambient pollutant concentrations,
- assessed any dilution considerations,
- determined whether limits were necessary for pollutants of concern and, where necessary, and
- calculated such limits or other permit conditions.

For impaired waters, the PQR also assessed whether and how permit writers consulted and developed limits consistent with the assumptions of applicable EPA-approved total maximum daily loads (TMDLs).

Oregon's RPA IMD explains in detail how to identify and analyze pollutants of concern. These include toxic pollutants as well as those limited through *TBELs, wasteload allocations (WLAs) from TMDLs, non-conventional pollutants identified through permit applications and DMR sampling*. Review of PERs during PQR indicated that permit writers did not always fully consider all possible pollutants of concern or perform reasonable potential analysis for all pollutants of concern. Reasonable potential analysis focused on the RPA spreadsheets in the administrative

records, it appeared only toxic pollutants were analyzed for reasonable potential in some instances.

The RPA tool for toxics correctly identifies the approved water quality standards and conducts the analysis similar to that found in EPA's TSD. In some cases, the RPA tool requires the permit writer to input the applicable standard (e.g. temperature, pH). The permit writer should refer to the water quality standards or consult water quality standards staff to ensure the correct standards are used in the evaluation. Where available, ambient data was used in the calculations and in the mixing zone analysis. WQBELs were correctly calculated. However, this was not readily apparent. It is recommended that DEQ develop template language describing the equations and process used, percentiles, etc. There is a need to thoroughly describe the data that is used and where it was obtained (ambient – where does it come from) and more thoroughly describe the effluent data used.

TMDL basin requirements were correctly implemented and often resulted in no discharge requirements during summer months, especially where POTWs with equivalent to secondary effluent limitations discharge to receiving waters with applicable WLAs.

There was no formal comparison of TBELs and WQBELs in the PER. It is recommended that either a table be used in the fact sheet template or a narrative section be added to ensure the most stringent effluent limits are implemented in the permit.

D. Monitoring and Reporting

NPDES regulations at 40 CFR 122.41(j) require permittees to periodically evaluate compliance with the effluent limitations established in their permits and provide the results to the permitting authority. Monitoring and reporting conditions require the permittee to conduct routine or episodic self-monitoring of permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual monitoring for all limited parameters sufficient to assure compliance with permit limitations, including specific requirements for the types of information to be provided and the methods for the collection and analysis of such samples. In addition, 40 CFR 122.48 requires that permits specify the type, intervals, and frequency of monitoring sufficient to yield data that are representative of the monitored activity. The regulations at 40 CFR 122.44(i) also require reporting of monitoring results with a frequency dependent on the nature and effect of the discharge.

Twenty of the 21 permits reviewed require at least annual monitoring for all limited parameters (OR0032107 does not specify monitoring for phenols or ammonia). The permits reviewed specify monitoring frequencies and all except three specify monitoring locations (OR001716 and OR0034916; also, permit OR0002402 did not specify monitoring locations for Table B.1

monitoring requirements). In most cases, the monitoring requirements appear to be sufficient to determine compliance, although without knowing some of the monitoring locations assessing the sufficiency of the monitoring requirements is difficult (e.g., OR0002402, OR0001716) and in a few cases potential issues were identified. For example, in several instances, temperature monitoring specified a grab sample rather than continuous monitoring (e.g., OR0020745, OR0022306 and OR0022551). In permit OR0022551, it appeared that phosphorus should be monitored year-round. Thirteen of the permits require acute and chronic WET testing. The permits reviewed specify that methods must be consistent with 40 CFR Part 136 and in many instances include more specific methods requirements. Many of the permits indicate that quantitation limits must be able to determine limit compliance but in certain permits no clear and express requirement to this effect was identified (e.g., OR0026361, OR0020206 , OR0020231, OR0001708, OR0020855). Permit OR0020052 specifies a quantitation limit for TRC only. The POTW permits reviewed required influent monitoring to support determinations of 85 percent removal of BOD and TSS. Finally, with regard to CSOs, one permit (OR0027561) references an external document (an Amended Stipulation and Final Order) and two others (OR0026361, OR0026905) include characterization and impact monitoring as part of implementation of CSO policy requirements (OR0026361 also has CSO flow monitoring).

E. Standard and Special Conditions

Federal regulations at 40 CFR 122.41 require that all NPDES permits, including NPDES general permits, contain an enumerated list of "standard" permit conditions. Further, the regulations at 40 CFR 122.42 require that NPDES permits for certain categories of dischargers must contain additional standard conditions. Permitting authorities must include these conditions in NPDES permits and may not alter or omit any standard condition, unless such alteration or omission results in a requirement more stringent than required by the federal regulations.

In addition to standard permit conditions, permits may also contain additional requirements that are unique to a particular permittee or discharger. These case-specific requirements are generally referred to as "special conditions." Special conditions might include requirements such as: additional monitoring or special studies such as a pollutant management plan or a mercury minimization plan; best management practices [see 40 CFR 122.44(k)], or permit compliance schedules [see 40 CFR 122.47]. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

In general, the permits reviewed include standard conditions that are consistent with state and federal requirements. In some permits (e.g., OR0020885, OR0020206, OR0022551, OR0020231, OR0002402, OR0022942) state and federal penalty provisions appear to differ in some respects (e.g., some penalty amounts appear to be less than federal penalty amount or amounts adjusted for inflation; for criminal violations no subsequent violation penalty specified; references to some federal penalty amounts are outdated [see 40 CFR 19.4]. The standard language in the permits reviewed also references EPA CWA penalty authority. The POTW permits reviewed include the additional standard condition regarding notification of new introduction of pollutants and new industrial users. Similarly, the non-POTW permits contain the additional standard condition regarding notification levels.

With regard to special conditions, the permits reviewed include special conditions relevant to each discharger. Example conditions for a non-POTW include conditions for a spill response plan, WET testing, maintaining access to outfalls and sampling locations, and designating an environmental supervisor. Example conditions for a POTW include conditions addressing biosolids, certification of wastewater system personnel and operation per application rules, CSO treatment system, use of recycled water, and WET testing.

F. Administrative Process

The administrative process includes documenting the basis of all permit decisions (40 CFR 124.5 and 40 CFR 124.6); coordinating EPA and state review of the draft (or proposed) permit (40 CFR 123.44); providing public notice (40 CFR 124.10); conducting hearings if appropriate (40 CFR 124.11 and 40 CFR 124.12); responding to public comments (40 CFR 124.17); and, modifying a permit (if necessary) after issuance (40 CFR 124.5). EPA discussed each element of the administrative process with Oregon DEQ, and reviewed materials from the administrative process as they related to the core permit review.

All of the permit files reviewed except one (OR0020885) included a public notice for the respective permit and these notices include all of the required information (a checklist in the permit file for OR0020885 indicates that the notice was issued July 16, 2007). With regard to public comments and response to comments, nine (9) of the permit files included comments and responses to those comments. For some of the permits reviewed (e.g., OR0026905, OR0020885, and OR0020231), it was not clear whether public comments on a draft permit had been received.

G. Administrative Record

The administrative record is the foundation that supports the NPDES permit. If EPA issues the permit, 40 CFR 124.9 identifies the required content of the administrative record for a draft permit and 40 CFR 124.18 identifies the requirements for a final permit. Authorized state programs should have equivalent documentation. The record must contain the necessary documentation to justify permit conditions.

At a minimum, the administrative record for a permit must contain;

- the permit application and supporting and supplemental data;
- draft permit and preliminary draft, if the applicant was provided an earlier draft for review;
- fact sheet or statement of basis (i.e., permit evaluation report);
- all items cited in the statement of basis or fact sheet including calculations used to derive the permit limitations;
- meeting reports;
- correspondence between the applicant and regulatory personnel;
- all other items supporting the file;
- final response to comments; and,

Current regulations require that fact sheets include information regarding the type of facility or activity permitted, the type and quantity of pollutants discharged, the technical, statutory, and regulatory basis for permit conditions, the basis and calculations for effluent limits and conditions, the reasons for application of certain specific limits, rationales for variances or alternatives, contact information, and procedures for issuing the final permit.

File organization was inconsistent among the regional offices. For many permits, different sections of the record were not clearly delineated and it was difficult at times to determine draft documents from final. Among the regional offices, the Western Region's file organization, response to comments template, and routing slip were more consistent than the Northwest and Eastern Regional offices' practices. If the DEQ moves to a more robust electronic record, a mechanism and organizational structure is needed to ensure that paper and electronic records contain the same content.

In the Northwest and Eastern Region administrative records that were reviewed, it was often difficult to determine if comments were received on a proposed permit and whether DEQ responded to any comments. Future options include developing a single response to comments document addendum to the fact sheet stating that there were no comments received, if there were none. Ideally, this would also be posted online and made available at the time of permit issuance. The City of Bandon response to comments section was done very well and could possibly be used as a template. There was very clear documentation of comments and the record included both the comments and the RTC.

In reviewing the City of Corvallis permit (OR0026361), it appears a major modification was made prior to the final permit being issued without the proper public notice. A monitoring frequency was reduced and was called a typographical error consistent with a minor modification. DEQ must clearly delineate criteria for major and minor modifications and clearly adhered to those criteria across all regions.

Routing sheets were included in some Western Region permits. However, they were not filled out completely and were located in the middle of the files. If used, these should be located in a prominent position to track who has developed and reviewed the permit and ensure the administrative record is complete. Managers should review the administrative record as well as the permit and PER prior to signature. For major dischargers, the permit file should also include the correct public notice newspaper documentation. For any contested permits, DEQ should ensure that the records/transcripts from the public hearing are included in the administrative record.

In general, the permit files reviewed include supporting documentation referenced in the respective fact sheet that was used to develop permit limits and conditions. For a few permits, some items were not identified in the permit file (e.g., OR0026905 - no RPA worksheet and limits calculations; OR0020745 - WET studies not identified in record; OR0001708 - application and RPA worksheet not identified in record; OR0002402 and OR0026361 - limited documentation about how POCs where identified or the basis for effluent limitations).

Permit records for POTWs and industrial facilities must contain comprehensive documentation of the development of all effluent limitations. Technology-based effluent limits must include assessment of applicable standards, data used in developing effluent limitations, and actual calculations used to develop effluent limitations. The procedures implemented to determine the need for water quality-based effluent limitations as well as the procedures explaining the basis for establishing, or for not establishing, water quality-based effluent limitations should be clear and straightforward. The permit writer should adequately document changes from the previous permit, ensure draft and final limitations match (unless the basis for a change is documented), and include all supporting documentation in the permit file.

H. National Topic Areas

National topic areas are aspects of the NPDES permit program that warrant review based on the specific requirements applicable to the selected topic areas. These topic areas have been determined to be important on a national scale**.** National topic areas are reviewed for all state PQRs. The national topics areas are: nutrients, pesticides, pretreatment and stormwater.

1. Nutrients

Background

Nitrogen and phosphorus pollution of all types of surface waters has consistently ranked among the top causes of degradation in U.S. waters for more than a decade. EPA has worked toward reducing the levels and impacts of this pollution since 1998 and continues to support a range of efforts including the development and implementation of numeric nutrient criteria as part of water quality standards. In March of 2011, EPA announced a framework for nutrient reductions that in part called for ensuring the effectiveness of point source permits in sub-watersheds targeted or identified as priorities due to nutrient pollution (see Working in Partnerships with States to Address Nitrogen and Phosphorus Pollution through use of a Framework for State Nutrient Reductions[8]). The framework specifically identified permits for municipal and industrial wastewater treatment facilities that contribute significant nitrogen and phosphorus loadings, CAFOs, and urban stormwater sources that discharge into nitrogen and phosphorus–impaired waters or are significant sources of nitrogen or phosphorus.

Discussion

DEQ developed a report in 2013, Oregon's Nutrient Management Program, which describes DEQ's program to respond to nutrient problems in state waters.[9] Oregon does not have numeric criteria for phosphorous or nitrogen. Oregon does have a narrative nutrient criteria pertaining to deleterious algal bloom, which is used to assess nutrient impacts to lakes and reservoirs. Oregon has numeric criteria for chlorophyll a, dissolved oxygen, and pH, which are used to asses nutrient impacts to rivers and streams. With regard to point sources, DEQ

[8] EPA Memo dated March 16, 2011 <http://www.epa.gov/sites/production/files/documents/memo_nitrogen_framework.pdf> (Feb. 23, 2016)
[9] An updated report is available. Oregon's Nutrient Management Plan, June 2014, <http://www.deq.state.or.us/wq/standards/docs/NutrientManagementReport.pdf>, (Nov. 9, 2015)

develops water quality based effluent limits designed to meet wasteload allocations identified in TMDLs to address impairments for DO, pH, chlorophyll a, or nuisance algae.

To assess how nutrients are addressed DEQ's permitting program, EPA reviewed POTW and industrial permits with discharges directly or indirectly to waters that are or are likely to be impaired for nutrients. EPA Region 10 reviewed six permits - five POTWs and one industrial for nutrient monitoring and limitations.

Three of the facilities (Canyonville, Lafayette, and Heinz Company) have phosphorous limits based on TMDLs, also refer to Appendix D: Summary of TMDL Implementation Review. These three limits are expressed in pounds per day and are based on facility design flow. Additionally, the limits are applied seasonally (during the critical period May – September). The limits in these three permits were consistent with the approved TMDL. The averaging period for the limit in these three permits is expressed as monthly average, with weekly monitoring frequency. The permits for Lafayette and Canyonville also required monitoring for nitrogen. The permit for Heinz Company did not have monitoring requirements for nitrogen.

Three POTW permits were reviewed for nutrient provisions based on indications that the receiving waters had nutrient related water quality problems. The indications of nutrient impairment included waters being identified on the 303(d) list – Category 3. Additionally, the Region used a GIS tool based on the SPARROW[10] model to identify waters with the potential for high nutrient loading. Neither quantitative nor qualitative reasonable potential analyses (RPA) were conducted for nutrient related parameters, despite indications that the quality of the receiving waterbody showed potential nutrient impacts and the fact these facilities are known contributors of nutrients through their discharges. None of the permits for these facilities contained monitoring requirements for phosphorous or nitrogen.

Findings and Recommendations

EPA recommends that DEQ:

- Conduct reasonable potential analysis for nutrients if the type of facility is known to have discharges that contain nitrogen or phosphorous or the receiving waters are known to have nutrient impairments.
- Include monitoring requirements for phosphorous and nitrogen in permits for such facilities where the receiving waters are known to have nutrient impairments.

The regulations at 40 CFR 122.44(d)(1)(ii) state "*When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of*

[10] SPARROW, a modeling tool for the regional interpretation of water-quality monitoring data. The model relates in-stream water-quality measurements to spatially referenced characteristics of watersheds, including contaminant sources and factors influencing terrestrial and aquatic transport. SPARROW empirically estimates the origin and fate of contaminants in river networks and quantifies uncertainties in model predictions. <http://water.usgs.gov/nawqa/sparrow/>, (Nov. 9, 2015)

pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water."

For nutrients, the RPA can be either qualitative or quantitative. For a qualitative RPA, a permit writer could consider:

- The type of facility and likelihood that discharge contains N or P
- Discharges from similar facilities, even if we decided we would not actually use those data for a quantitative RPA
- Available dilution where concentration is a concern (e.g., we might be more likely to include limits where there is little or no dilution available)
- Receiving water impaired for nutrient-related impacts
- Vulnerability of water body to impacts from nutrient pollution using some of the factors we already have discussed such as light availability, residence time, temperature, etc.

Section 3.2 of EPA's TSD provides some further discussion of considerations for a permit writer in conducting a qualitative reasonable potential analysis.

The regulations at 40 CFR 122.44(i)(1)(iii) provide authority to include monitoring requirements in permits to yield data for development of the permit in the next permit cycle. Being proactive in collecting effluent data allows for the permit writer to be better informed about nutrient problems associated with certain types of facilities, provide data for RPA in subsequent permit cycles, and aid in the development and implementation of nutrient TMDLs.

2. Pesticides

Background

On October 31, 2011, the EPA issued a final NPDES *Pesticide General Permit (PGP) for Discharges from the Application of Pesticides*. This action was in response to a 2009 decision by the U.S. Sixth Circuit Court of Appeals (National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009)) in which the court vacated EPA's 2006 Final Rule on Aquatic Pesticides (71 Fed. Reg. 68483, November 27, 2006) and found that point source discharges of biological pesticides and chemical pesticides that leave a residue, into waters of the U.S. were pollutants under the CWA. The federal PGP applies where the EPA is the permitting authority. Approximately 40 authorized state NPDES authorities have issued state pesticide general permits as of November 2011.

On January 7, 2009, the Sixth Circuit vacated the EPA's 2006 NPDES Pesticides Rule under a plain language reading of the CWA. National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009). The Court held that the CWA unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." In response to this decision, on April 9, 2009, EPA requested a two-year stay of the mandate to provide the Agency time to develop general permits, to assist NPDES-authorized states to develop their NPDES

permits, and to provide outreach and education to the regulated community. On June 8, 2009, the Sixth Circuit granted EPA the two-year stay of the mandate. On March 28, 2011, the U.S. Court of Appeals for the Sixth Circuit granted EPA's request for an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. The court's decision extended the deadline for when permits would be required from April 9, 2011 to October 31, 2011.

As a result of the Court's decision to vacate the 2006 NPDES Pesticides Rule, NPDES permits are required for discharges of biological pesticides and of chemical pesticides that leave a residue, to waters of the United States. EPA proposed a draft pesticide general permit on June 4, 2010 to cover certain discharges resulting from pesticide applications. EPA Regional offices and state NPDES authorities may issue additional general permits or individual permits if needed.

Discussion

The Oregon Department of Environmental Quality issued the Pesticide General Permit (PGP) in October 2011. The permit is a 5-year permit and DEQ is planning to update the permit in 2016. The PGP provides coverage for pesticide application and discharge in, over or within three feet of surface water to control pests.

For this PQR, R10 reviewed Oregon's pesticide general permit (2300-A) with a focus on verifying its consistency with NPDES program requirements.

The PGP provides permit coverage for mosquito and flying insect control, weed and algae control nuisance animal control, forest canopy pest control and area-wide pest control. Oregon is developing an additional general permit that would provide coverage for pesticide use in irrigation systems (2000-J). That permit has not been completed yet. The PGP provides coverage for about 1,500 entities in Oregon and includes small-scale pesticide applications, weed control districts, vector control districts, golf courses, lake and marina managers, public utilities, and municipal, state & federal agencies. Oregon is currently discussing the regulating of pesticide applications to irrigation canals under the same general permit.

The PGP does not allow pesticide applications to waters that are impaired by that pesticide or its by-products. It requires the notification of drinking water suppliers when pesticide products are applied that have potable water use restrictions or setbacks or concentration level requirements on the label which will not be met as a result of the application.

The PGP includes requirements to minimize the discharge of pesticides by using the optimal amount of pesticide, calibrating and maintaining equipment, reducing spills and leaks when mixing and loading application equipment, and assessing weather conditions such as wind direction and speed prior to the application.

The PGP requires the reporting of adverse incidents or spills during the pesticide applications and when performing any post-application efficacy surveys. Incidents include an unusual or unexpected effect, a spill of 25 gallons or 200 pounds of a pesticide, or a visible oil sheen on the water surface.

The PGP requires recordkeeping for 3 years including the PGP, records of the amount of surface area or linear miles treated in a calendar year, adverse incident and spill, and pesticide application records.

The PGP differentiates between small-scale and large-scale operators and has tiered the requirements accordingly. The small operator is automatically covered by the PGP by simply downloading the permit and following the terms and conditions of the permit. Large-scale operators (federal, state, special pest control districts and operators above thresholds) must register with DEQ, pay an annual fee, develop a pesticide discharge management plan, keep additional records, and submit an annual report.

Oregon has developed the PGP for mosquito and flying insect control, weed and algae control, nuisance animal control, forest canopy pest control and area-wide pest control. The PGP generally follows the approach and requirements included in EPA's Pesticide General Permit and complies with a federal court decision that affected pesticide applications nationally. Oregon's PGP provides necessary permit coverage for entities applying pesticides to, over and near water and does so in a way that should result in long-term improvements to water quality.

Findings and Recommendations

- None. EPA plans to review the draft permits in 2016.

3. Pretreatment

Background

The general pretreatment regulations (40 CFR 403) establish responsibilities of federal, state, and local government, industry and the public to implement pretreatment standards to control pollutants from industrial users which may cause pass through or interfere with POTW treatment processes or which may contaminate sewage sludge.

The goal of this pretreatment program review was to assess the status of the pretreatment program in Oregon, as well as assess specific language in POTW NPDES permits. With respect to NPDES permits, focus was placed on the following regulatory requirements for pretreatment activities and pretreatment programs:

- 40 CFR 122.42(b) (POTW requirements to notify Director of new pollutants or change in discharge);
- 40 CFR 122.44(j) (Pretreatment Programs for POTWs);
- 40 CFR 403.8 (Pretreatment Program Requirements: Development and Implementation by POTW);
- 40 CFR 403.9 (POTW Pretreatment Program and/or Authorization to revise Pretreatment Standards: Submission for Approval);
- 40 CFR 403.12(i) (Annual POTW Reports); and
- 40 CFR 403.18 (Modification of POTW Pretreatment Program).

The PQR also summarizes the following: program oversight, which includes the number of audits and inspections conducted; number of significant industrial users (SIUs) in approved pretreatment programs; number of categorical industrial users (CIUs) discharging to municipalities that do not have approved pretreatment programs; and the status of implementation of changes to the general pretreatment regulations at 40 CFR part 403 adopted on October 14, 2005 (known as the streamlining rule).

Discussion

Oregon received authorization from the EPA to implement the pretreatment program in March 13, 1981. Oregon laws, ORS 454.020, 468B035 and 468B.101, authorize DEQ to implement the CWA, NPDES program and pretreatment program. Acting on this authority, the Environmental Quality Commission (EQC), adopted rules for implementing the pretreatment program under OAR 340-045-0063.

Upon the promulgation of the federal pretreatment streamlining regulations, DEQ reviewed the regulation. DEQ implements the mandatory program requirements. DEQ noted that generally, the permit amendments were accomplished pursuant to 40 CFR 122.63 and the modifications for the pretreatment program were non-substantive for the purpose of 40 CFR 403.18. DEQ indicated that almost all programs have adopted the streamlining rule during 2006-2012. Compliance with the rule has been a slow process due to the NPDES permit issuance backlog. DEQ has worked with programs in adopting the streamlining rule with the NPDES permit issuance. The one program that has not yet adopted the rule is expected to adopt and implement the streamlining rule during the next permit issuance for the municipality.

DEQDEQ has recently added an NPDES permit requirement for all municipalities to conduct Industrial User Survey and submit results to the Pretreatment Program. Upon identification of an SIU, DEQ works with municipalities to develop an approved program and comply with the federal pretreatment requirements. DEQ Pretreatment staff regularly updates pretreatment requirements in the state's NPDES Permit Template. In addition, the pretreatment staff coordinates with DEQ permit writers in reviewing pretreatment requirements prior to permit issuance.

DEQ oversees 23 approved POTW programs with approximately 294 significant industrial users (SIUs). Out of 294 SIUs, 147 are categorical industrial users (CIUs). DEQ does not have any POTW without an approved pretreatment program that have SIU(s). DEQ requires POTWs with SIU(s) to develop and implement pretreatment program(s).

As part of this PQR, the EPA reviewed the following:

- The streamlining rule implementation status of regulatory requirements from the November 14, 2005 revisions to the pretreatment regulation (40 CFR Part 403).
- Database entry consistency for pretreatment categories.
- Adherence to the Compliance Monitoring Strategy (CMS) program policy for frequency of regional and state reviews of POTW pretreatment programs.

- DEQ's mercury reduction plan and a voluntary dental amalgam program.

The state has conducted seven (7) pretreatment compliance audits (PCAs) and zero (0) pretreatment compliance inspection (PCI) within the past five years. The state has not met its goals for compliance monitoring inspection frequency for the past five years.

Three permits reviewed (City of Gresham, City of Corvallis and City of Portland) for the PQR required pretreatment programs. The permits contain standard pretreatment boilerplate language that meets all federal requirements. The fact sheets adequately describe the programs for each of the permits and municipalities. However, the permits for the City of Gresham and Corvallis lack the same requirement as Special Condition no. 5 in Schedule D in the Portland's permit. The Portland permit requires the following condition:

> "The permittee shall submit a complete proposal of mandatory and voluntary streamlining program modifications to the Department for approval within one year from the date of re-issuance of this NPDES permit. This includes proposed changes to the City of Portland's pretreatment-related municipal ordinance and operating procedures to reflect the revisions to 40 CFR §403 that became effective November 14, 2005, and to attain consistency with Schedule E of this permit. The Department may extend the submission date if requested by the permittee. These proposed modifications will be considered non-substantial pretreatment program modifications under 40 CFR §403.18 unless otherwise determined by the Department to be significant."

Two additional permits reviewed under PQR (City of Florence and City of Canyonville) did not have delegated pretreatment programs. For facilities with design flows greater than 1 million gallons per day (mgd) (e.g. Florence), DEQ required the permittee to complete an Industrial User Survey (IU Survey) every 5 years during the term of the permit. Under the IU Survey, the permit requires the permittee to determine the presence of any industrial users discharging to the POTW. For all permittees, including minor permittees with design flows less than 1 mgd (e.g. Canyonville), the permits' standard conditions include the requirements of 40 CFR 122.42(b) (DEQ Standard Condition under D10) with the permit language taken directly from the federal regulations. Permittees must notify DEQ of the new introduction or substantial change in pollutant into the POTW.

Findings and Recommendations

- The DEQ should ensure adherence to the Compliance Monitoring Strategy (CMS): one PCA every five years and one PCI every approved pretreatment program. 40 CFR 403.8(f)(3) states: "The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in paragraph (f)(1) and (2) of this section."

- The DEQ must require all approved pretreatment programs to modify their pretreatment program to adopt all required provisions of the Streamlining Rule if their program does not currently include the mandatory provisions. Streamlining Rule has

been implemented by all but one program in the state, which will be addressed when the permit is reissued.

4. Stormwater

Background

The NPDES program requires stormwater discharges from certain municipal separate storm sewer systems (MS4s), industrial activities, and construction sites to be permitted. Generally, EPA and NPDES-authorized states issue individual permits for medium and large MS4s and general permits for smaller MS4s, industrial activities, and construction activities.

Discussion

In Oregon, DEQ previously issued individual permits for all Phase II MS4s. In 2015, DEQ began working with a MS4 stakeholder group to discuss the reissuance of the Phase II MS4 permit(s), which will include more prescriptive requirements for mandatory municipal stormwater management control measures, in keeping with recent EPA guidance. DEQ intends to propose a Phase II MS4 General Permit in 2016.

At the time of the PQR, Oregon's storm water permit program included eight (8) individual Phase I MS4 permits; fifteen (15) individual Phase II MS4 Permits; three (3) industrial storm water general permits; and two (2) construction storm water general permits, for a total of 28 stormwater discharge permits. These permits are summarized in the table below.

Table 2: Stormwater NPDES Permits

Permit or Permittee Name/Permit Number		Issued & Expiration Dates	IP or GP	Brief Description
Municipal (Phase I)	Clackamas County Group ORS108016	Issued: 3/16/2012; Exp: 03/01/2017	IP	Phase I MS4 Permit for CC Dept. of Trans.& Devpmt; Cities of Gladstone, Johnson City, Lake Oswego, Milwaukie, Oregon City, West Linn, Wilsonville, Rivergrove and Happy Valley; Oak Lodge Sanitary District; CC Service District #1; and Surface Water Mgmt Agency of CC
	City of Portland & Port of Portland ORS108015	*Issued:* 1/31/2011; Exp: 01/30/2016	IP	Phase I MS4 permit
	Multnomah County ORS120542	Issued 12/30/2010; Exp: 12/29/2015	IP	Phase I MS4 permit
	Cities of Gresham and Fairview ORS108919	Issued 12/30/2010; Exp: 12/29/2015	IP	Phase I MS4 permit
	City of Salem ORS107989	Issued 12/30/2010; Exp: 12/29/2015	IP	Phase I MS4 permit
	City of Eugene ORS120542	Issued 12/30/2010; Exp: 12/29/2015	IP	Phase I MS4 permit
	Clean Water Services (CWS); ORS108014	Issued: 02/27/05; Exp: 01/31/09	IP	Watershed Based Permit for CWS service area & urban growth boundary includes Phase I MS4 Requirements
	OR Dept of Transportation ORS101822	Issued:06/09/2000; Exp: 5/31/2005	IP	Covers ODOT facilities & properties in highway right-of-way (statewide).

Permit or Permittee Name/Permit Number		Issued & Expiration Dates	IP or GP	Brief Description
Municipal (Phase II)	City of Ashland ORS113604	Issued 2/26/2007; Exp: 1/31/2012	IP	Phase II MS4 permit
	City of Bend ORS113602	Issued 2/13/2007; Exp: 1/31/2012	IP	Phase II MS4 permit
	Benton County ORS113609	Issued 05/08/2007; Exp: 04/30/2012	IP	Phase II MS4 permit
	City of Corvallis ORS113605	Issued 05/08/2007; Exp: 1/31/2012	IP	Phase II MS4 permit
	City of Keizer ORS100032	Issued 3/12/2007; Exp: 4/30/2012	IP	Phase II MS4 permit
	Lane County ORS113606	Issued 1/25/2007; Exp: 12/31/2011	IP	Phase II MS4 permit
	Marion County ORS113608	Issued 3/12/2007; Exp: 02/28/2012	IP	Phase II MS4 permit
	City of Medford ORS11-3603	Issued 2/13/2007; Exp: 1/31/2012	IP	Phase II MS4 permit
	City of Philomath ORS112241	Issued: 05/08/2007; Exp: 4/30/2012	IP	Phase II MS4 permit
	Polk County ORS116224	Issued 3/12/2007; Exp: 2/28//2012	IP	Phase II MS4 permit
	Rogue Valley Sewer Services (RVSS) & copermittees;ORS116270	Issued 2/13/2007; Exp: 1/31/2012	IP	Phase II MS4 permit for RVSS, Jackson Co.; Cities of Central Point; Phoenix and Talent
	City of Springfield ORS084048	Issued 1/25/2007; Exp: 12/31/2011	IP	Phase II MS4 permit
	City of Troutdale ORS113604	Issued 05/03/2007; Exp: 04/302012	IP	Phase II MS4 permit
	City of Turner ORS113607	Issued 03/12/2007 Exp:2/28/2012	IP	Phase II MS4 permit
	City of Wood Village ORS098909	Issued 2/13/2007; Exp: 04/30/2012	IP	Phase II MS4 permit
Industrial	Stormwater and Mine Dewatering Discharge Permit; 1200-A	Effective: 12/04/2012; Exp: 12/3/2017	GP	Covers SW discharges from facilities with primary Standard Industrial Classification code 14, mining and quarrying of nonmetallic minerals, except fuels, including fixed and mobile asphalt and concrete batch plant operations.
	Stormwater Discharge Permit for Industrial Facilities that Discharge to Columbia Slough; 1200-COLS	Effective: 10/01/2011 Exp: 09/30/2016	GP	Covers industrial SW discharges from point sources to the Columbia Slough, or to conveyance systems that discharge to the Slough, where the SW is associated with an industrial activity identified in Tables 1 or 2 of the Permit; and/or the facility is notified by the Director that coverage is required
	Stormwater Discharge Permit for Industrial Facilities; 1200-Z	Effective: 07/01/2012 Exp: 06/30/2017	GP	Covers industrial SW discharges from point sources to waters of the State, or to conveyance systems that discharge to waters of the state, where the SW is associated with an industrial activity identified in Table 1 of the Permit; and/or the facility is notified by the Director that coverage is required

Permit or Permittee Name/Permit Number		Issued & Expiration Dates	IP or GP	Brief Description
Construction	Stormwater Discharge Permit for Construction Activities; 1200-C	Effective: 12/01/2010 Exp: 11/30/2015	GP	Covers SW associated with construction activities that will disturb one or more acres (or less than one acre but part of a common plan of development); and/or as designated by the Director
	Stormwater Discharge Permit for Construction Activities; 1200-CN	Effective: 12/01/2010 Exp: 11/30/2015	GP	Covers SW associated with construction activities that will disturb: < 1 acre in regulated MS4 communities of Gresham, Troutdale, & Wood Village; and <5 acres in the regulated MS4 communities of Albany; Corvallis; Eugene; Milwaukie; Springfield; West Linn; Wilsonville; Clackamas County Water Environment Services; RVSS; CWS; Lane Co. (within MS4 Phase II area) & Multnomah Co. (unincorporated portions)

For Oregon, EPA Region 10 selected the following four NPDES stormwater permits to review under PQR:

- ORS120542 – Multnomah County Phase I MS4 Permit
- ORS113604- City of Ashland Phase II MS4 Permit
- 1200-A - Stormwater and Mine Dewatering Discharge Permit
- The draft 2015 1200-C - Stormwater Discharge Permit for Construction Activities, rather than the about to expire 2010 1200-C

Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s)

ORS120542 – Multnomah County Phase I MS4 Permit

Background: During two prior permit terms, Multnomah County was a Phase I MS4 co-permittee with neighboring jurisdictions Portland and Gresham. This 3rd term Phase I MS4 permit was issued to Multnomah County Permit (ORS120542) on 12/30/2010 and it expired on 12/29/2015. (*http://www.deq.state.or.us/wq/wqpermit/docs/individual/npdes/ph1ms4/multco/MultCoMS4Permit20101230.pdf*)

Monitoring provisions of the Multnomah MS4 permit (related to mercury and methylmercury data collection) were modified February 2012. (*http://www.deq.state.or.us/wq/wqpermit/docs/individual/npdes/ph1ms4/multco/MultCoMS4PermitModSuppPER020120201.pdf*)

Program Strengths for the Multnomah County Phase I MS4 Permit:

To address applicable TMDLs for receiving waters, the Phase I MS4 Permit for Multnomah County includes requirements that align well with recent EPA guidance by requiring:

1) A stormwater quality retrofit strategy to implement applicable TMDL WLAs, requiring permittee to initiate/construct/implement at least one project during permit term. See Schedule A.6.
2) A TMDL pollutant load reduction evaluation to be completed during the permit term, using an empirical pollutant load reduction model and other

quantitative/qualitative approaches, to evaluate the effectiveness of selected BMPs; and

3) Monitoring provisions (Instream, macroinvertebrate and pesticide) to address all TMDL and impaired water-related parameters or their indicators [e.g: bacteria, certain pesticides, phosphorus, BOD_5 (for dissolved oxygen); lead; zinc; copper; and TSS as an indicator of organic toxics].

Findings and Recommendations for the Multnomah County Phase I MS4 Permit:

1) **Finding:** No permit effective date is provided on the cover page of the Multnomah MS4 Permit; only permit issuance and expiration dates are indicated.

Recommendation: EPA recommends that all NPDES Permit cover pages should indicate the permit's issuance date, effective date and expiration date.

2) **Finding:** The modified provisions and rationale supporting the modification of the Multnomah MS4 Permit are documented separately in a document entitled Supplemental Permit Evaluation Report, dated February 1, 2012. The original permit text (as posted on DEQ's website) does not inform the reader that specific provisions were subsequently modified after the permit issuance date. Although the Supplemental Permit Evaluation Report is posted on the DEQ website near the originally issued permit document, the final modified permit provisions are not included within the MS4 permit text, and the modified pages are not indicated. It is not clear to the reader that the originally issued 2010 MS4 permit text was subsequently modified.

Recommendation: If a NPDES Permit is modified after its effective date, EPA recommends that the Permit cover page, and all relevant modified pages, be revised to reflect the modified provisions, in order to inform readers of the final enforceable provisions resulting from the permit modification process.

City of Ashland Phase II MS4 Permit; ORS113604

Background: This 1st term MS4 permit was issued to City of Ashland (ORS112604) on 2/13/2007 and it expired on 1/31/2012. (see: *http://www.deq.state.or.us/wq/stormwater/municipalph2.htm*)

Program Strengths for the City of Ashland Phase II MS4 Permit: The permit is a good first term Phase II MS4 Permit which includes an explicit explanation of DEQ's expectations for the adaptive management evaluation to be conducted by the permittee.

Findings and Recommendations:

1. ***Finding:*** No permit effective date is provided on the cover page of the Ashland MS4 Permit, only permit issuance and expiration dates are indicated.

Recommendation: EPA recommends that all NPDES Permit cover pages should indicate the permit's issuance date, effective date and expiration date.

2. ***Finding:*** The Ashland MS4 Permit is a first term MS4 permit that expired in 2012.

Recommendation: DEQ should earnestly continue its efforts to provide current permit coverage for the City of Ashland, and other Phase II MS4 communities in Oregon, under a statewide MS4 General Permit.

Stormwater Discharge Permit for Industrial Facilities; 1200-A

Background, Findings and Recommendations:

The 1200-A permit was reviewed. This permit covers a small sub-set of the industrial categories regulated by the Clean Water Act. The following recommendations are made for this permit:

1. Add explanation of how to terminate permit coverage.
2. Specify how compliance with water quality standards will be determined.
3. Include in the Storm Water Pollution Prevention Plan (SWPPP) requirements that records on training of the storm water pollution prevention team be maintained.
4. Require an Annual Report be submitted to DEQ.

Stormwater Discharges from Construction Activities

General Permit for Stormwater Discharges from Construction Activity; 1200-C
Background, Findings and Recommendations:

At the time of the PQR, Oregon was in the process of re-issuing the primary construction stormwater permit. Therefore, the draft 2015 1200-C was reviewed instead of the permit currently in effect.. This is the main Construction storm water permit for Oregon. Oregon also has the 1200-CN, which covers a limited set of areas and only those projects that do not discharge to waters that have been identified as impaired for sediment or turbidity.

Since the November 2010 1200-C, the EPA has amended the Construction and Development Effluent Guidelines and Standards (40 CFR Part 450) in 2014 and 2015. The draft 2015 1200-C does not appear to have incorporated all of the C&D Rule requirements. Although these deficiencies where address in the final permit, the findings are include in the PQR report in order to document the review under PQR.

C&D Rule provisions that appear to be lacking:

1. Control stormwater volume and velocity within the site to minimize soil erosion (40 CFR 450.21(a)(1)).

2. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion (40 CFR 450.21(a)(2)).

3. Minimize the disturbance of steep slopes (40 CFR 450.21(a)(4)).

4. Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity, and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site (40 CFR 450.21(a)(5)).

5. Stabilization must be completed within a period of time determined by the state (40 CFR 450.21(b)).

6. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the state (40 CFR 450.21(b)).

7. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible (40 CFR 430.21(f)).

8. The 1200-C covers spills but not waste management broadly, so several types of potential pollution from the C&D rule are in the 1200-C and several types are left out: “Design, implement, and maintain pollution prevention measures to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater (40 CFR 450.21(d)(2)).”

9. Wastewater from washout of concrete, unless managed by an appropriate control (40 CFR 450.21(e)(1)) is handled confusingly. It is mentioned in Section A.6.d – not as completely described as the C&D rule. Even more confusingly, there is better language in the “Before Construction” section A.8.c.i.6.(b) which says “Wash concrete trucks and equipment off site or in designated concrete washout areas only” which is sufficient, but apparently only applies before construction. EPA recommends moving or copying all of A.8.ci.6(b) through A.8.c.i.6(g) from the Before Construction section to A.8.c.ii During Construction.

Specific Permit Recommendations (non C&D Rule):

1. Define the person(s) who is required to obtain permit coverage for each construction project, in particular for projects where the land owner is not the construction site

operator. The permit states "An owner or operator of construction activities (as defined on the cover page)" but there is no such definition on the cover page. There are also no relevant definitions in Section E. Definitions.

2. Add requirement that "the NOI be posted on site in view of the public." If there are erosion or sedimentation problems, neighbors should be able to readily know how to complain.

3. Add requirement that termination should include specifically "Transferring responsibility for long-term maintenance of any permanent stormwater controls to the applicable party."

4. Describe how to respond to problems found during inspection.

5. Include in the ESCP requirements a description of "Identification of the types of pollutants that could be found in stormwater and their likely sources" and "Identification of any authorized non-stormwater discharges."

The EPA submitted the above comments and recommendations on the draft permit in November 2015 and will not reiterate them as part of the PQR report.

General Recommendation:

Oregon would benefit from developing a stand-alone BMP manual or similar to augment the permit. Oregon has clearly tried to keep the permit short and simple. The result is simultaneously too specific in suggested BMPs and not comprehensive enough in the suggested assessment approach to inform operators in their selection of BMPs.

IV. REGIONAL TOPIC AREA FINDINGS

A. Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)]

Background

Combined sewer systems are sewers designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe. Most of the time, combined sewer systems transport all of their wastewater to a sewage treatment plant, where it is treated and then discharged to a water body. During periods of heavy rainfall or snowmelt, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, or other water bodies.

EPA's Combined Sewer Overflow Control Policy national framework for control of CSOs through the National Pollutant Discharge Elimination System (NPDES) permitting program.[11] The Policy resulted from negotiations among municipal organizations, environmental groups, and State

[11] EPA Combine Sewer Overflow Homepage, < http://water.epa.gov/polwaste/npdes/cso/>

agencies. It provides guidance to municipalities and State and Federal permitting authorities on how to meet the Clean Water Act's pollution control goals as flexibly and cost-effectively as possible. The CSO Policy was published April 19, 1994, at 59 Fed. Reg. 18688. The Wet Weather Water Quality Act of 2000 codified the policy under the CWA.

The first milestone under the CSO Policy was the January 1, 1997, deadline for implementing minimum technology-based controls (the "nine minimum controls") (NMC). The nine minimum controls are measures that can reduce the prevalence and impacts of CSOs and that are not expected to require significant engineering studies or major construction. Communities with combined sewer systems are also expected to develop long-term CSO control plans (LTCP) that will ultimately provide for full compliance with the Clean Water Act, including attainment of water quality standards.

Discussion

Oregon has three communities with combined sewer systems. The largest is the City of Portland, followed by Astoria and Corvallis. Each of the permits expire in 2016.

Table 3: CSO Permits

Permit No.	Permittee Name	Issue Date	Expiration	No. of CSO Outfalls	Controlled
OR0027561	Astoria, City of	11/16/2011	10/31/2016	38	No
OR0026361	Corvallis, City of	11/30/2011	12/31/2016	3	No
OR0026905	Portland, Columbia Blvd	5/26/2011	6/30/2016	36	No

Each permit was reviewed for the required elements of CSO permits including required compliance with the NMC and the requirement to develop and implement a LTCP. The permit and PER were reviewed for evidence of the permittees' progress toward controlling CSO discharges to the regulatorily required level in accordance with the CSO policy and to EPA's CSO Guidance for Permit Writers.[12] The permit guidance describes phase I (implementation of NMC) and phase II (development and implementation of LTCP) requirements for CSO permits. At this point, all CSO permits should include phase II requirements including water quality based requirements that require a prescribed level on control for CSO discharges. In addition, wet weather CSO treatment facilities must have both technology- and water quality-based effluent limitations consistent with NPDES regulations.

Corvallis – The permit includes a short list of NMCs and an annual reporting requirement. The permit authorizes discharges from Outfall 002, a combined sewage treatment system, but there was no evaluation or application of TBELs or WQBELs, or required monitoring of the discharge.

[12] Combined Sewer Overflows Guidance For Permit Writers, <http://water.epa.gov/polwaste/npdes/cso/Guidance-Documents.cfm>, (Nov. 8, 2015)

There is no apparent event-based reporting requirement. The PER does not document the permittee has meet the performance targets options set out in EPA's CSO Policy.

Astoria – The permit includes a short list of NMCs and an annual reporting requirement. The permittee is under an Amended Stipulation and Final Order (ASFO) WQMW-NWR-92-247 to implement the permittee's CSO Facilities Plan, which is the LTCP. The permit requires reporting of each CSO event, the date, time, duration and volume discharged. The PER does not document the permittee has meet the performance target options set out in EPA's CSO Policy.

Portland Columbia Blvd. – The permit includes more detailed requirements for NMCs than the other CSO permits. The permit contains performance standards for CSO discharges that allow discharges based on the size of storm events. The permit authorizes mixing zones for some CSO outfalls. The permit requires post-construction monitoring (discharge monitoring after CSOs is controlled to a certain level of discharges) for Willamette River discharges. The permittee is under an Amended Stipulation and Final Order (ASFO) WQMW-NWR-91-75 to implement the approved Bacteria Control Management Plan (BCMP) and implement CSO controls. The PER does not document the permittee has meet the performance targets options set out in EPA's CSO Policy.

Each permittee has requirements to maintain and report on the achievement of the NMC.

Findings and Recommendations

- The EPA recommends permits incorporate a compliance schedule to ensure timely implementation of the LTCP where the permittee is not yet under an enforcement mechanism such as a consent decree or state-issued order or where progress to control CSOs is insufficient (e.g Corvallis permit).

- DEQ should strive to keep CSO permits current by minimizing the time permits are administratively extended to ensure permittees are making swift progress toward controlling CSOs discharges.

- DEQ should ensure that the permits require event based reports for each CSO discharge and that these report elements are addressed in terms of the electronic reporting rule requirements.

B. Total Maximum Daily Loads (TMDLs)

Background

Under CWA section 303(d), states are required to develop lists of impaired waters. Impaired waters are those that do not meet applicable water quality standards even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires these jurisdictions establish priority rankings for waters with CWA section 303(d) listings and develop TMDLs for those waters.

Once a TMDL has been completed by the state and approved by EPA, permit writers must implement assigned wasteload allocations (WLAs) to point sources discharges upon re-issuance

of the NPDES permits. Pollutants of concern include those pollutants for which a WLA has been assigned to the discharge through a TMDL.

The NPDES regulations at § 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed that are consistent with the assumptions and requirements of any WLA assigned to the discharge as part of an approved TMDL. Thus, any pollutant for which a WLA has been assigned to the permitted facility through a TMDL is a pollutant of concern.

Discussion

EPA reviewed the following permits that implement TMDL WLAs. Refer to Appendix D: Summary of TMDL Implementation Review for a detailed summary.

Table 4. Summary of TDML Implementation in Permits

PQR ID NO.	NPDES NO	Permit Name	Water Quality Based Effluent Limits from the TMDL	Link to TMDL documents available on the internet.
1	OR0026131	Gresham, City of	No WLA for dioxin given for Gresham the TMDL says paper mills are the source of dioxin. No WLA for total dissolved gas (TDG) given because Gresham not source of TDG.	http://www.deq.state.or.us/WQ/TMDLs/columbia.htm
8	OR0020206	Bandon	Dissolved Oxygen; Temperature. 1991 TMDLs state that Bandon does not contribute to dissolved oxygen (DO) problem; the2006 TMDL temperature problem is a non-point source (NPS) problem so no WLA for Bandon. New TMDL for DO is needed per 2004 303(d) list	http://www.deq.state.or.us/wq/TMDLs/docs/southcoastbasin/usfcoquille/tmdl.pdf
9	OR0020729	Canyonville	Bacteria: 126 /100ml; Temp:36.8 (32.0)C*; Nutrients: flow proportional see ** below; check chlorine limit as TMDL says no need for one for Chlorine so long as WWTP have chlorine limits	http://www.deq.state.or.us/wq/tmdls/umpqua.htm
4	OR0026361	Corvallis	Listed for: T, Fecal, DO, Hg per TMDL: Bacteria WLA = bacteria standard; no TMDL for DO; Mercury WLA = Total mercury must achieve a detection limit of 0.073 ng/L & T Methylmercury must achieve a detection limit of 0.00599 ng/L & have a waste minimization plan; temperature WLA at low flow = May 16 - Oct 14 rearing: 127 Kcal/day & Oct 14 - May 15 spawning: 213kcal/day	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt4temp.pdf
16	OR0000795	Georgia-Pacific-Wauna	Dioxin WLA: 0.21mg/day long term avg.	http://www.deq.state.or.us/wq/tmdls/docs/columbiariver/dioxin/tmdlchp3.pdf

PQR ID NO.	NPDES NO	Permit Name	Water Quality Based Effluent Limits from the TMDL	Link to TMDL documents available on the internet.
20	OR0032107	G-P Chemical LLC (Resin)	No WLA for temperature, DO, Bacteria because facility only discharges in fall, winter, spring. The pollutants of concern are only for summer.	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt10upperwill.pdf
10	OR0020231	Clatskanie	Temperature WLA: 4.77 x105 Kcal/day; allowable effluent temp; 64.7 Year Round: Bacteria WLA: MPN/100 ml E. coli = 126; Allocation Wet Weather Load: Fecal Coliform counts/day = $9.64x10^9$; Allocation Wet Weather Load - growth: 9.64x1010	http://www.deq.state.or.us/wq/tmdls/docs/northcoastbasin/northcoast/tmdl.pdf
14	OR0022306	Umatilla, City of	No WLA for dioxin, TDG. No TMDL for temperature or pH	http://www.deq.state.or.us/wq/tmdls/docs/umatillabasin/umatilla/tmdl.pdf http://www.deq.state.or.us/wq/tmdls/docs/umatillabasin/umatilla/tmdl.pdf
19	OR0022942	Vigor Industrial	T WLA: The TMDL gave a "bubble allocation" to all of the smaller point sources (including Vigor). The TMDL allows the smaller sources to discharge at current permitted levels and the Department tracks the total heat load used under the bubble allocation limit. Hg Interim WLA: 1.1(kg/yr)	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt4temp.pdf
17	OR0002402	H.J. Heinz Company, L.P.	WLA P:83 kg/day; WLA TSS:4,200 lbs/day (monthly average); WLA T: Avg Daily temperature (of):32C (90F) x 3.4MGD design flow=- Allocated Heat Load: 2,557BTU/day	http://www.deq.state.or.us/wq/tmdls/docs/snakeriverbasin/tmdlrev.pdf

* indicates data available in EPA's TMDL database

It appears DEQ has incorporated TMDL WLAs consistent with EPA regulations, which requires consistency with the water quality standards and the WLA, for the relatively small number of permits issued that implement approved TMDLs. Refer to Appendix D for a summary of EPA's review of the permits and associated TMDL documents.

Findings and Recommendations

- The high permit backlog has delayed implementation of TMDLs into permits.
- WLAs in TMDLs are complicated and are carried into permits as equations and calculated limits especially for temperature TMDLs where thermal load is used as a surrogate for temperature. Excess thermal load (ETL) limits in permits provide a variety of options for the permittee to calculate ETL. Permits that provide the option for calculated limits rather than containing final effluent limits or compliance schedules lack transparency and hinder the "due process" requirements for public notice of permit

conditions. DEQ permit writers should avoid including such calculated limits in permits. [13]

- Permit writers must work closely with TMDL staff during development of the TMDL to ensure that the WLA can be adapted into water quality-based effluent limits in the affected permit.

V. ACTION ITEMS

This section provides a summary of the main findings of this review and provides proposed action items to improve Oregon DEQ's NPDES permit programs. This list of proposed action items will serve as the basis for ongoing discussions between EPA Region 10 and Oregon DEQ as well as between EPA Region 10 and EPA HQ. These discussions should focus on eliminating program deficiencies to improve performance by enabling good quality, defensible permits issued in a timely fashion.

The proposed action items are divided into three categories to identify the priority that should be placed on each Item and facilitate discussions between Regions and the State.

- **Critical Findings** (Category One) **-** Most Significant: Proposed action items will address a current deficiency or noncompliance with respect to a federal regulation.
- **Recommended Actions** (Category Two) **-** Recommended: Proposed action items will address a current deficiency with respect to EPA guidance or policy.
- **Suggested Practices** (Category Three) **-** Suggested: Proposed action items are listed as recommendations to increase the effectiveness of the state's or Region's NPDES permit program.

The critical findings and recommended actions proposed should be used to augment the existing list of "follow up actions" currently established as an indicator performance measure and tracked under EPA's Strategic Plan Water Quality Goals or may serve as a roadmap for modifications to the Region's program management.

A. Basic Facility Information and Permit Application

In general, the permits reviewed include descriptive information regarding the respective facilities including the facility address, a good description of the type of activities, waste streams and the wastewater treatment process at each facility, and identification by name of the relevant receiving water including receiving stream and basin information. With regard to permit applications, in general, proper forms were used and these forms were in general compete. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

[13] EPA' Technical Support Document - Responsiveness Summary, <http://www3.epa.gov/npdes/pubs/owm0264.pdf>, Page 21 (page 330 of 335 of .pdf document)

- Address all outfalls from which pollutants are or may be discharged, including emergency outfalls, in the permit. (Category 1).
- Ensure permit applications are submitted in a timely manner. (Category 1).
- Ensure that permit applications are current and complete, including all required data and information. (Category 1).
- Clarify the location of permitted outfalls by including latitude and longitude in the permit or fact sheet. (Category 2).
- Clarify the effective date of NPDES permits or that the effective is upon signature. (Category 3).

B. Technology-based Effluent Limitations

The majority of permits reviewed correctly implement technology-based effluent limitations. There are instances where industrial facilities subject to national effluent limitations guidelines and standards (ELGs) did not properly implement the applicable ELG or did not choose the correct subcategory for that facility. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Ensure a complete understanding of when processes began operation in order to correctly apply the applicable technology basis (BPT, BCT, BAT, or NSPS). (Category 1).
- For facilities subject to multiple subcategories within an ELG, effluent limitations should be derived using all applicable subcategories proportioned based on flow or production. In no circumstance should only the most stringent limitation from multiple subcategories be used as the basis for determining the appropriate effluent limitation to use. (Category 1).
- Understand the processes at a facility resulting in process wastewater discharges and ensure those processes are applicable to the ELG being considered. (Category 3).

C. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations (WQBELs) were developed using EPA approved TMDL requirements or using the DEQ RPA tool. WQBELs appear to be correctly calculated and implemented. However, for the majority of the permits reviewed, it was difficult to determine those parameters determined to be pollutants of concern and ensure the pollutants analyzed are sufficient to cause no exceedance of water quality standards. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Follow the instructions in the RPA IMD to determine pollutants of concern. Update the fact sheet template to include a discussion of pollutants of concern. (Category 2).

- In the fact sheet, provide a comparison of TBELs and WQBELs for each pollutant to ensure the most stringent effluent limitation is contained in the permit. This can be either in a table or narrative discussion. (Category 2).

- Thoroughly describe the data used in the RPA and where it was obtained for both effluent and ambient data. (Category 3)

- Ensure a robust set of ambient water quality data is available for use in permit development or required ambient monitoring as a requirement in permits. (Category 3).

D. Monitoring and Reporting

Overall monitoring requirements appear to be sufficient to determine compliance, although in a few cases potential issues were identified. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Ensure that all limits must be subject to at least annual monitoring. (Category 1).

- Ensure appropriate monitoring type for different parameters (e.g., temperature whether continuous vs. grab is appropriate in given permit). (Category 1)

- Improve consistency in identifying monitoring locations for each outfall from which discharge is authorized under the permit. (Category 2).

- Ensure that permits are clear that quantitation limit must be at or below limit. (Category 2).

- Update permit and PER template to implement requirements of the Electronic Report Rule. (Category 1)

E. Standard and Special Conditions

Standard and special conditions appear to be consistent with applicable requirements although some clarification is needed regarding penalty authority. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Under standard conditions, ensure penalty provisions are consistent with 40 CFR 122.41(a). (Category 1).

F. Administrative Process (including public notice)

Permits appear to be administered in a manner consistent with the notice, comment, and other applicable process requirements. Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Consider explicitly documenting whether public comments are received or whether no comment are received, and where responses to comments are maintained. (Category 3).

- Consider providing a consolidated response to comment document for all permits that is make publicly available upon permit issuance. (Category 3)

G. Documentation (including fact sheet)

The development and use of the permit and PER/fact sheet templates have resulted in improvements since the templates have been adopted and used. A controlled process to implement updates and revisions should ensure changes are made unilaterally not on an ad hoc basis by region or permit writer. The language for sanitary sewer overflows (SSOs) has progressed a great deal in terms of being consistent with Federal expectations. Proposed action items to help Oregon strengthen its NPDES permit program include the following:

- Establish procedures and processes that ensure complete and consistent permit records across regions for all permits. (Category 3)
- Ensure that there is documentation of the public notice process in all permit files. (Category 2).
- Ensure that permit files include all significant documentation of the basis for limits and permit conditions, including the documents referenced in the applicable fact sheet. (Category 2).
- Document in the fact sheet whether and why significant changes have been made to outfalls from the prior permit to the current permit. (Category 3).
- Document when current permit data/ information is used to supplement older permit application data. (Category 3).

H. National Topic Areas

Proposed actions items for core topic areas are provided below.

1. Nutrients

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- Include monitoring requirements for phosphorous and nitrogen in permits for such facilities where the receiving waters are known to have nutrient impairments. (Category 3)
- Conduct reasonable potential analysis for nutrients if the type of facility is known to have discharges that contain nitrogen or phosphorous or the receiving waters are known to have nutrient impairments. (Category 1)

2. Pesticides

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- None. EPA plans to review the draft permits in 2016.

3. Pretreatment

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- The DEQ should ensure adherence to the Compliance Monitoring Strategy (CMS): one PCA every five years and one PCI every approved pretreatment program. 40 CFR 403.8(f)(3) states: "The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in paragraph (f)(1) and (2) of this section." (Category 1)

- DEQ must require all approved pretreatment programs to adopt the mandatory provisions of the Streamlining Rule as soon as possible. (Category 1)

- DEQ should insert the following condition to all the permits of approved pretreatment programs: "*The permittee shall submit a complete proposal of mandatory and voluntary streamlining program modifications to the Department for approval within one year from the date of re-issuance of this NPDES permit. This includes proposed changes to the City of Portland's pretreatment-related municipal ordinance and operating procedures to reflect the revisions to 40 CFR §403 that became effective November 14, 2005, and to attain consistency with Schedule E of this permit. The Department may extend the submission date if requested by the permittee. These proposed modifications will be considered non-substantial pretreatment program modifications under 40 CFR §403.18 unless otherwise determined by the Department to be significant.*" This permit language is from the City of Portland. (Category 3)

4. Stormwater

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- EPA recommends that all NPDES Permit cover pages should indicate the permit's issuance date, effective date and expiration date. (Category 1)

- If a NPDES Permit is modified after its effective date, EPA recommends that the Permit cover page, and all relevant modified pages, be revised to reflect the modified provisions, in order to inform readers of the final enforceable provisions resulting from the permit modification process. (Category 3)

- DEQ should earnestly continue its efforts to provide current permit coverage for the City of Ashland, and other Phase II MS4 communities in Oregon, under a statewide MS4 General Permit. (Category 3)

- Oregon would benefit from developing a stand-alone BMP manual or similar to augment the permit. Oregon has clearly tried to keep the permit short and simple. The result is simultaneously too specific in suggested BMPs and not comprehensive enough in the

suggested assessment approach to inform operators in their selection of BMPs. (Category 3)

I. Regional Topic Areas

Proposed action items for special focus areas are provided below.

1. Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- The EPA recommends that permits incorporate compliance schedule to ensure timely implementation of the LTCP where the permittee is not yet under an enforcement mechanism such as a consent decree or state-issued order or where progress to control CSOs is insufficient. (Category 2)

- DEQ should strive to keep CSO permits current by minimizing the time permits are administratively extended to ensure permittees are making swift progress toward controlling CSOs discharges. (Category 3)

- DEQ should ensure that the permits require event based reports for each CSO discharge and that these report elements are addressed in terms of the electronic reporting rule requirements. (Category 1)

2. Total Maximum Daily Loads (TMDLs)

Proposed action items to help Oregon DEQ strengthen its NPDES permit program include the following:

- The high permit backlog has delayed implementation of TMDLs into permits. (Category 2)

- WLAs in TMDLs are complicated and are carried into permits as equations and calculated limits especially for temperature TMDLs where thermal load is used as a surrogate for temperature. Excess thermal load (ETL) limits in permits provide a variety of options for the permittee to calculate ETL. Permits that provide the option for calculated limits rather than containing final effluent limits or compliance schedules lack transparency and hinder the “due process” requirements for public notice of permit conditions. DEQ permit writers should avoid including such calculated limits in permits. Permit writers must demonstrate limits are consistent with both the WQS and the requirement and assumptions of the WLA for the discharge. (Category 2)

- Permit writers must work closely with TMDL staff during development of the TMDL to ensure that the WLA can be adapted into water quality-based effluent limits in the permit. (Category 3)

Appendix A: Resources and References

EPA Websites	URL
EPA Permit Quality Review Website	http://water.epa.gov/polwaste/npdes/basics/NPDES-Permit-Quality-Review.cfm
EPA Permit Writers' Manual	http://www.epa.gov/npdes/pubs/pwm_2010.pdf
Code of Federal Regulations (40 CFR)	http://www.ecfr.gov/
EPA Administered Permit Programs: The National Pollutant Discharge Elimination System	40 CFR 122
EPA's Approve State TMDLs (AskWATERS)	http://iaspub.epa.gov/apex/waters/f?p=ASKWATERS:MAIN_MENU
State Webpages	**URL**
Oregon Administrative Rules (OAR)	http://www.deq.state.or.us/regulations/rules.htm
Oregon Water Quality Standards – OAR Division 41	http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_041.html
Permit and Permit Evaluation Report Template	http://www.deq.state.or.us/wqpermitsearch/
Permitting Guidance	http://www.deq.state.or.us/pubs/reports.htm#WQ
Permit Document Search	http://www.deq.state.or.us/wqpermitsearch/
References	**URL**
EPA's Permit Writers' Manual	http://water.epa.gov/polwaste/npdes/basics/upload/pwm_2010.pdf
Technical Support Document	http://www.epa.gov/npdes/pubs/owm0264.pdf

Note: URL's active at the time of report issuance. URL's may change or become inactive over time.

Appendix B: Selected Permits

			Permit	File		Core Review[1]			National Topics[2]				Regional Topics		Notes			
PQR ID NO.	NPDES No.	Permit Name	Reviewer	Reviewer	Draft, Modification, Reissue or Final, Reviewed real-time	POTW (issue date)	Non-POTW (issue date)	Major	Minor	Nutrients (Keenan)	Pre-treatment (Le)	Pesticide GP (Helder)	Storm Water IPs or GPs (Vackoc, McCauley)	CSO, SSO (Burgess)	Watershed - TMDL WLA in Permit (Burgess)	Other Permit Features	Oregon Region Office	URL Permit	URL Permit Evaluation Report (aka Fact Sheet)
1	OR0026131	Gresham, City of	Burgess	Flannery-Keith	F, reviewed	6/30/2014		Y			Y				Columbia - Yes	ETL	NW	Permit	PER
2	OR0027561	Astoria, City of	Burgess	Keenan	F	11/16/2011		Y						Y	Columbia - No		NW	Permit	PER
3	OR0023574	Coos Bay STP No. 1	Keenan	Keenan	F	5/22/2013		Y							Coos Bay - No		W	Permit	PER
4	OR0026361	Corvallis, City of	Burgess	Burgess	F	11/30/2011		Y			Y			Y	Willamette - Yes	ETL	W	Permit	PER
5	OR0026905	Portland, Columbia Blvd.	Burgess	Burgess	F	5/26/2011		Y			Y			Y	Columbia - No		NW	Permit	PER
6	OR0020885	The Dalles, City of	Flannery-Keith	Burgess	F, D reviewed	10/31/2007		Y							Columbia - No		E	Permit	PER
7	OR0020877	Warrenton, City of	Eddy	Geil	F, reviewed	6/4/2013			Y						Columbia - No		NW	Permit	PER
8	OR0020206	Bandon, City of	Flannery-Keith	Flannery-Keith	F	8/25/2014			Y						South Coast - Yes		W	Permit	PER
9	OR0020729	Canyonville	Keenan	Keenan	F	1/3/2012			Y	Phosphorus	Y				Umpqua - Yes	ETL	W	Permit	PER
10	OR0020231	Clatskanie	Flannery-Keith	Flannery-Keith	F	6/12/2012			Y						North Coast - Yes	ETL	NW	Permit	PER
11	OR0020745	Florence, City of	Keenan	Eddy	F, reviewed	5/2/2014			Y		Y				Mid Coast - No	MMP	W	Permit	PER
12	OR0020052	Huntington, City of	Flannery-Keith	Flannery-Keith	F, reviewed	9/13/2012			Y						Burnt River - No	CS	E	Permit	PER
13	OR0022551	Lafayette, City of	Keenan	Flannery-Keith	F	10/6/2014			Y	Phosphorus					Yamhill - No	ETL	W	Permit	PER
14	OR0022306	Umatilla, City of	Keenan	Keenan	F	10/11/2013			Y	Y					Columbia - Yes		E	Permit	PER
15	OR0001708	Northwest Aluminum	Geil	Burgess	F, reviewed		12/9/2014	Y							Columbia - No		E	Permit	PER
16	OR0000795	Georgia-Pacific Wauna	Geil	Geil	F		3/31/2009	Y							Columbia - Yes		NW	Permit	PER
17	OR0002402	H.J. Heinz Company, L.P.	Geil	Burgess	F, reviewed		9/3/2014	Y		Phosphorus					Snake/Malheur R. - Yes		E	Permit	PER
18	OR0004465	SPPP, L.P.	Geil	Geil	F, reviewed		12/18/2012		Y						Willamette/Flat Creek - No		W	Permit	PER
19	OR0022942	Vigor Industrial	Geil	Geil	M, reviewed		12/11/2013 mod		Y						Willamette - Yes	ETL	NW	Permit	PER
20	OR0032107	Georgia-Pacific Chemical	Geil	Geil	F		12/19/2012		Y						Willamette - Yes		W	Permit	PER
21	OR0034916	Toyo Tanso USA, Inc.	Geil	Eddy	F		4/1/2013	Y							Columbia - No	ETL	NW	Permit	PER
General Permits																			
		Multi-Sector SW GP	McCauley										Y						
		Construction GP	McCauley										Y						
		MS4 (IP Phase 1 and 2)	Peak										Y						
		Pesticide GP	Vakoc									Y							
Total Permits						**14**	**7**	**10**	**11**	**4**	**5**	**1**	**3**	**3**	**21**	**9**	**21**		
Total Permits Required for PQR (respresenting 5% of permit universe)						**9**	**8**	**4**	**13**	**NA**	**NA**	**NA**	**NA**	**3**	**NA**	**NA**	**NA**		
Total Permits Needed						**-5**	**1**	**-6**	**2**	**NA**	**NA**	**NA**	**NA**	**0**	**NA**	**NA**	**NA**		

NOTES:

[1]Review includes PQR checklist and/or special topic checklists; Review can include final permits issued within 2 years or draft permits for real-time review; draft permits are expected to be final prior to state visit. Number of reviewed

[2]Review includes special topic checklists; 4 permits required per special topic unless general permits are used.

Appendix C: Summary Core Permit Review Checklist

This table summarizes the response for the core permits reviewed using the PQR checklist. The top 20 questions with a negative response are highlighted. The checklist covers all regulatorily required permit elements, but may not be indicative of permit quality especially as relates to the technical analysis provided in the fact sheet.

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
I.	**Draft Permit or Pre-State Visit Review Information**				
II.	**Basic Permit and Facility Information**				
A. Basic Permit Information					
	1. Does the permit contain appropriate issuance, effective, and expiration dates and authorized signatures?	1	14	6	
	a. What was the permit issuance date?				
	b. What was the permit effective date?				
	c. What was the permit expiration date?				
	d. Was the permit effective 5 years or less?	1	20		
	2. Did the permit contain specific authorization-to-discharge information (from where, to where, by whom)?		21		
Section II.a. Comments:					
B. Basic Facility and Receiving Water Information					
	1. Did the record or permit describe the physical location of the facility (e.g., address, lat/long)?	1	20		
	2. Did the record include a description of the type of activities and wastewater treatment process at the facility?		21		
	3. Were all outfalls that the record indicated were present at the facility identified and authorized in the permit (including stormwater and/or combined sewer overflow outfalls, if appropriate)?	2	19		
	a. Did the permit identify the physical location of outfalls?	4	16		
	4. Did the record clearly identify the name of the receiving water(s) (e.g. stream segment, location in receiving water)?		21		
	5. Did the record clearly identify the location within the receiving water(s) where the discharge(s) occur?	4	15	2	
Section II.b. Comments:					
III.	**Permit Application**				
	1. Was the current, appropriate application submitted?		16	3	
	2. Was the complete permit application submitted at least 180 days prior to permit expiration?	7	9	1	1
	a. Date complete application submitted?				
	b. Date of previous permit expiration?				
	3. Was the permit application complete (including all attachments, diagrams, etc.) and signed?	3	15	1	
	4. Did the permit application provide all required analytical data?	3	14	1	

Sec. No.	Question	Response Count No	Response Count Yes	Response Count Maybe	Response Count NA
	a. New Dischargers: (Form 2A or 2D Requirements)	1	1		12
	b. Existing Dischargers:		7		2
	POTW: Have 3 pollutant scans been performed within the existing permit term?	1	9		7
	Did the permit application provide the results of at least 4 quarterly WET tests/4 years of annual data?	4	6		7
	Non-POTW: Based on the industrial category, have the correct Form 2C analytical requirements been met?		5	1	8
	5. For effluent data provided in the permit application, were analytical detection levels sufficiently sensitive to assess compliance with applicable water quality standards?	1	5	6	4
Section III. Comments:					
IV.	**Effluent Limitations**				
A. General Elements					
	1. Did the fact sheet describe the basis (techNology or water quality) for each of the final effluent limits?	2	14	3	
	a. Did the record indicate that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected?	8	12	1	
	2. Were all limits at least as stringent as those in the previous permit? a. If No, specify	5	13		1
	b. If No, did the record discuss whether "anti-backsliding" provisions were met? Specify.	3	4		9
	3. Did permit limits restrict pollutant loadings to levels at or below those in the previous permit?	3	13	2	1
	a. If No, did the record indicate that an "antidegradation" review was performed in accordance with the state's approved antidegradation policy? Specify:	4	3		7
	4. The state did Not grant this facility a water quality standards variance?	1	20		
	a. If No, did the state follow all the required procedures for granting the variance?				12
	5. The permit did Not require a compliance schedule?	2	18	1	
	a. If No, what was the final compliance date?			1	10
	b. If No, was the schedule consistent with 40 CFR 122.47 & EPA's May 2007 memo?			1	10
Section IV.a. Comments:					
B. Technology-Based Effluent Limits					
	POTWs: (For Non-POTWs skip to question 6)				
	1. Did the permit contain numeric limits for ALL of the following: BOD5 (or an alternative; e.g., CBOD5, COD, TOC), TSS, and pH?		14		2
	2. Were technology-based permit limits expressed in appropriate units of measure (i.e., concentration, mass, SU)?		14		2

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
	3. Were permit limits for BOD5 and TSS expressed in terms of both 30-day (monthly) average and 7-day (weekly) average limits?		14		2
	4. Were concentration limitations in the permit at least as stringent as the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day (monthly) average and 45 mg/l BOD5 and TSS for a 7-day (weekly) average)?	3	11		2
	a. If No, did the record provide a detailed justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?		2	1	7
	Specify:				
	5. Were 85 percent removal requirements for BOD5 (or BOD5 alternative) and TSS included?	4	9		2
	a. If No, did the record indicate the application of more stringent requirements than 85% removal (such as WQBELs] or other requirements)? Or an alternative consistent with 40 CFR 133.103 (e.g. waste stabilization pond, trickling filter, etc.) had been approved?		4		6
	Specify:				
	Non-POTWs: (For POTWs skip to Section IV.C)				
	6. Was the facility subject to a national effluent limitations guideline (ELG)?	4	3		3
	a. If Yes, what categories and subcategories applied?		1		3
	i. new source existing source?				
	ii. Did the record explain how the categorization and performance levels (BPT, BCT, BAT, NSPS) were determined?		3	1	2
	iii. Did the record adequately document the calculations used to develop ELG-based effluent limits?		2	1	2
	iv. Were final limits as stringent as required by applicable effluent limitations guidelines?	1	1	1	4
	If No, list parameters:				1
	Specify the basis in the record:				
	b. If the facility was Not subject to an ELG (or if the facility included processes or waste streams that were not subject to ELG), did the permit include techNology-based limitations based on best professional judgment (BPJ) for all conventional, nonconventional, and toxic pollutants in the discharge?	2	3	2	1
	If yes, specify which were based on BPJ:				
	List limits that were Not based on BPJ:				
	c. For limits developed based on BPJ, did the record indicate that the limits were developed considering all of the criteria established at 40 CFR 125.3(d)?		2	2	2
	d. For limits developed based on BPJ, did the record adequately document the calculations used to develop BPJ technology-based effluent limits?	2	2		2
	7. Were techNology-based permit limits expressed in appropriate units of measure (i.e., concentration, mass, SU)?	1	5		1
	8. Were all technology-based limits expressed in terms of both maximum daily and monthly average limits?	1	4	1	1

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
	9. For all limits that were based on production or flow, did the record indicate that the calculations were based on a "reasonable measure of actual production" for the facility (Not design)?		1	1	4
	10. If the permit contained "tiered" limits that reflected projected increases in production or flow, did the permit require the facility to Notify the permitting authority when alternate levels of production or flow were attained?				7
Section IV.b. Comments:					
C. Water Quality-Based Effluent Limits					
	1. Did the record describe how "pollutants of concern" were selected for the limit development process?	10	7	1	
	2. Did the record describe the designated uses of the receiving water(s) to which the facility discharges (e.g., contact recreation, aquatic life use)?	1	19		
	3. Did the fact sheet contain a description of the 303(d) status of the receiving water(s)?	2	19		
	a. If Yes, was the receiving water(s) impaired for any uses?	3	14	1	
	b. If Yes, list impairments:		6		
	4. If the receiving water was impaired (i.e., on 303(d) list), did the facility discharge pollutants that cause or contribute to the impairment?	4	13		2
	5. Had a TMDL been completed for the pollutant(s) causing the impairment(s)?	9	10		1
	a. If yes, did the fact sheet indicate that the TMDL was implemented in the permit?	1	7		5
	6. If a TMDL had been completed for the receiving water, did the facility discharge pollutants that caused or contributed to the impairment?	4	8		6
	a. If yes, did the permit include WQBELs that were consistent with the assumptions and requirements of the WLA portion of the TMDL(s)?		6	1	6
	7. Had the state made a finding that the discharge did or did Not have a reasonable potential to cause, or contribute to an excursion above the applicable numeric water quality criterion for each pollutant of concern at each outfall?	3	17	1	
	8. Did the record include reasonable potential analysis documentation (e.g. summary tables, spreadsheets)?	2	16	3	
	a. If No, list all parameters of concern for which RP was Not identified in record.				4
	9. Did the record indicate that background data for the receiving water was used in limit development calculations?	4	13	4	
	a. If Yes, for which parameters?				
	b. If No, what was the default used in calculations?				2
	10. Where dilution or a mixing zone was provided, did the record describe how the dilution allowance was determined?	2	18		1
	11. Where dilution or a mixing zone was provided, did the analysis account for contributions from other sources (e.g., ambient or background concentration)?	6	8	5	1

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
	12. Based on analyses conducted, did the permit contain numeric effluent limits for all pollutants that had a reasonable potential to cause or contribute to an excursion of applicable WQ standards?	1	18		2
	a. If No, identify all pollutants for which there was RP but No final limit:				2
	13. For all final WQBELs, did the permit contain both long-term (e.g., average monthly) and short-term (e.g., maximum daily, instantaneous) effluent limits?	3	17		1
	14. Were all WQBELS expressed in appropriate units of measure (i.e., concentration, mass, SU)?		21		
	15. Did the record include limit development calculations for each pollutant limited in the permit?	2	15	3	
	a. If No, which pollutants did Not have documentation of calculations?				2
	b. Were all final WQBELs in the permit consistent with the justification and documentation provided in the record?		15	2	2
	16. Did the record indicate the state considered its applicable narrative water quality criteria in developing water quality-based permit conditions?	11	9	1	
	17. Was RP found for WET?	14			4
	a. If Yes, where RP was determined, were WQBELs included in the permit?				12
Section IV.c. Comments:					
V.	**Monitoring and Reporting Requirements**				
	1. Did the permit require at least annual monitoring for all limited parameters?	1	20		
	2. Were monitoring location(s) and frequency(s) identified?	1	17	2	
	3. Were the type, frequency, and location of monitoring adequate to assess compliance with each effluent limitation?	3	15	3	
	4. Did the permit require testing for Whole Effluent Toxicity?	9	12		
	a. Type of testing: Acute Chronic				
	5. Did the permit require use of a sufficiently sensitive 40 CFR Part 136 method capable of quantifying the pollutant at a concentration equal to or less than the limit?	4	15	2	
	6. POTWs:				
	a. Did the permit require influent monitoring for BOD5 (or alternative) and TSS?		14		5
	b. Did the permit require monitoring for CSO/SSOs or blending?	12	1		6
	If Yes, specify				2
	7. Non-POTWs: For monitoring of ELG-based limits, if the monitoring frequency was less frequent than annual, did the record indicate that the facility applied for and was granted a monitoring waiver?				11
	a. If Yes, did the permit specifically incorporate this waiver?				9
Section V. Comments:					

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
VI.	**Standard Conditions**				
	1. Did the permit contain all 40 CFR 122.41 standard conditions?		19	2	
	(a) Duty to comply	1	14	2	
	(b) Duty to reapply		17		
	(c) Need to halt or reduce activity not a defense		17		
	(d) Duty to mitigate		17		
	(e) Proper operation & maintenance		17		
	(f) Permit actions		17		
	(g) Property rights		16		
	(h) Duty to provide information		16		
	(i) Inspections and entry		17		
	(j) Monitoring and records		17		
	(k) Signatory requirement		17		
	(l) Reporting requirements		15		
	(1) Planned change		16		
	(2) Anticipated noncompliance		16		
	(3) Transfers		16		
	(4) Monitoring reports		16		
	(5) Compliance schedules		16		
	(6) Twenty-four hour reporting		16		
	(7) Other non-compliance		16		
	(8) Other information		15		
	(m) Bypass		17		
	(n) Upset		17		
	2. Was the language of all § 122.41 standard conditions at least as stringent as the federal regulations? a. If no, specify:		11	5	
	3. Did the permit or fact sheet indicate that certain bypasses would be “approved” (i.e., No enforcement will be taken when system specific conditions i.e., wet weather flows exceed specified levels, are met)?[1]	15	6		
	a. If Yes, did the record for the permit provide an adequate demonstration that there were “No feasible alternatives” to the bypass under the conditions when bypass is approved?	2	3		8
	4. POTWs: Did the permit contain the additional standard condition for POTWs regarding Notification of new introduction of pollutants and new industrial users?	5	10		5
	5. Non-POTWs: Did the permit contain the additional standard condition for Non-municipals regarding Notification levels?	1	6		5
Section VI. Comments:					
VII.	**Administrative Record**				
A. Technical Requirements					

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
	1. If the draft permit was reviewed, was the file copy of the permit the same as the draft version?	5	10	1	4
	a. Did the file indicate that the permit was revised between the draft and final permit?	5	11		2
	b. If Yes, specify:				
	2. Subsequent to issuance, had the permit been modified?	15	3		1
	a. If Yes, was the modification processed in accordance with §§122.62 & 122.63?		3		10
	3. Did the file include supporting documentation referenced in the fact sheet that was used to develop permit limits and conditions?	6	11	1	1
Section VII.a. Comments:					
B. Public Notice					
	1. Did the record include documentation of public Notice in accordance with §124.10?	1	19		
	2. Did the public Notice include content requirements at 124.10(d)?	1	18	1	
	a. Where a 316(a) variance was requested, did the public Notice include contents required at 124.57?	3			16
	3. Did the record include all comments received, if any?	2	9	3	5
	4. Did the record include a written response to all significant comments?	3	9	1	5
	5. If a public hearing was requested, was one held?	4	1		14
	6. If a public hearing was held, was the recording or transcript part of the administrative record?	1			18
Section VII.b. Comments:					
VIII.	**Other Program Areas**				
	1. Did the permit require development and implementation of a best management practices (BMP) plan or site-specific BMPs?	15	4		
	a. If Yes, did the permit adequately incorporate and require compliance with the BMPs?	1	4		7
	2. Did any of the following program area requirements apply?	3	3		
	Stormwater	9	4		
	Ambient sampling	5	7		
	Mixing studies	10	2		
	Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE)	11			
	Bioassessment	10	1		
	316(a) variances	9			2
	316(b)	9			2
	Concentrated Animal Feeding Operation (CAFO)	6			5
	Offsets/trading	7	1		2
	POTWs:				
	Pretreatment	6	4		3
	Biosolids	1	12		3
	Combined Sewer Overflows (CSOs)	7	2		3

		Response Count	Response Count	Response Count	Response Count
Sec. No.	**Question**	**No**	**Yes**	**Maybe**	**NA**
	Sanitary Sewer Overflows (SSOs)	6	4		3
	301(h) variances	7			4
	Other (specify)		1		

Appendix D: Summary of TMDL Implementation Review

PQR ID NO.	NPDES NO	Permit Name	Watershed-TMDL WLA in Permit	WLA from TMDL…	Permit limit per TMDL pollutant	URL TMDL
1	OR0026131	Gresham, City of	TMDL does not provide WLA to Gresham for Dioxin or TDG because does not contribute to problems.	No WLA for dioxin given for Gresham the tmdl says paper mills are the source of dioxin. No WLA for TDG given because Gresham not source of TDG.	**No E.limit** or monitoring requirement for dioxin	http://www.deq.state.or.us/WQ/TMDLs/columbia.htm
8	OR0020206	Bandon	TMDL does not provide WLA to Bandon for DO or T because POTW does not contribute to the problems.	Dissolved Oxygen; Temperature. 1991 TMDLs state that Bandon does not contribute to DO problem; the2006 TMDL T problem is a NPS problem so no WLA for bandon. New TMDL for DO is needed per 2004 303(d) list	Permit FS states that the waterbody is also listed for fecal, but no TMDL. Permit Limits: seasonal BOD & TSS limits of summer = 20 _30mg/L & winter: 30_45 mg/l ; fecal & Enterococcus of monthly log mean<35orgs/100ml; pH 6.0 - 9.0	http://www.deq.state.or.us/wq/TMDLs/docs/southcoastbasin/usfcoquille/tmdl.pdf
9	OR0020729	Canyonville	WLA are in permit although P incremental limits don't exactly match WLA	**Bacti**: 126 /100ml; **Temp**:36.8 (32.0)C*; **Nurtrient**s:flow proportional see ** below; ck chlorine limit as TMDL says no need for one for Chlorine so long as WWTP have chorine limits	**Temp Limit**: Must not exceed a 7D rolling avg of 8.49million kcals/day or Option b: based on stream flow. **Total P Limit: as of monthly median** 100cfs=1.2lbs/day; 100-909cfs=Qr*0.022; .909cfs=20lbs/day **Bacti:**,126org/100ml monthly geo mean &no single sample,406org/100ml **Chl Limit (seasonal):**30dayavg 0.04mg/l & 7dayavg of .10mg/l	http://www.deq.state.or.us/wq/tmdls/umpqua.htm
4	OR0026361	Corvallis	T limit is incorrect, but close. Mercury limit missing Bacti is correct	Listed for: T, Fecal, DO, Hg per TMDL: Bact WLA = bacteria std; no TMDL for DO; Hg WLA = THg must achieve a detection limit of 0.073ng/L & T Methly Hg must achieve a dectection limit of 0.00599ng/L & have a waste minimization plan; T WLA at low flow = May 16 - Oct 14 rearing: 127 Kcal/day & Oct 14 - May 15 spawning: 213kcal/day	**Bacti limit:** Ecoli = 126org/100ml; no single sample 406org/100ml; **T limit:** May 16 - Oct 14 = 128million kcal/day as 7day rolling avg; apr-may15 & Oct15-30: 129 million mcal/day 7day rolling avg; **or 2 Alternative limits options**: 1)if river flows are known and 2) if flow and river T are known ; **Mercury:** monitoring requirements and re-opener clause if TMDL developed	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt4temp.pdf
16	OR0000795	Geogia-Pacific-Wauna	Consistent with TMDL	Dioxin WLA: 0.21mg/day long term avg.	**EL**: 0.31 daily max; 0.21 mg/day Monthly Avg.	http://www.deq.state.or.us/wq/tmdls/docs/columbiariver/dioxin/tmdlchp3.pdf
20	OR0032107	G-P Chemical LLc (Resin)	Permit is consistent with TMDL as there are no WLA assigned to the facility	No WLA for T, DO,Bacti because facility only dscharges in fall, winter, spring. The pollutants of concern are only for summer.	Only discharges betw/Nov - Mar.so no T limit	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt10upperwill.pdf

PQR ID NO.	NPDES NO	Permit Name	Watershed-TMDL WLA in Permit	WLA from TMDL…	Permit limit per TMDL pollutant	URL TMDL
10	OR0020231	Clatskanie	The T effluent limit is off by an order of magnitude from the TMDL (105 vs 106).	T WLA: 4.77 x105 Kcal/day; allowable effluent temp; 64.7 Year Round: Bacti WLA: MPN/100 ml E. coli = 126; Alloc Wet W Load: Fecal Coliformcounts/day = 9.64x109 ; Alloc Wet Weather Load - growth: 9.64x1010	**Temperature Limits**: The weekly average thermal load discharged during the period of May 1 through October 31 must not exceed 4.2 X 106 kcals/day. **Bacteria Limit**:Must not exceed 126 organisms per 100 mL monthly geometric mean. No single sample must exceed 406 organisms per 100 mL.	http://www.deq.state.or.us/wq/tmdls/docs/northcoastbasin/northcoast/tmdl.pdf
14	OR0022306	Umatilla, City of	Consistent	**No WLA for dioxin, TDG. No TMDL for temperature or pH**	**No EL for temperatur**e; **TBEL for pH**; monitoring req for temperature is a grab sample 3/week	http://www.deq.state.or.us/wq/tmdls/columbia.htm
						http://www.deq.state.or.us/wq/tmdls/docs/umatillabasin/umatilla/tmdl.pdf
19	OR0022942	Vigor Industrial	Can't compare T limits as TMDL allocated 1 limit to all small facilities; Permit is missing interim Hg WLA	T WLA: The TMDL gave a "bubble allocation" to all of the smaller point sources (including Vigor). the TMDL allows the smaller sources to discharge at current permitted levels and the Department tracks the total heat load used under the bubble allocation limit. Hg Interim WLA: 1.1(kg/yr)	**Temp Effluent Limit**: excess thermal load limitation is 37 x 106 Kcal/day. **No Hg interim Effluent limit.**	http://www.deq.state.or.us/wq/tmdls/docs/willamettebasin/willamette/chpt4temp.pdf
17	OR0002402	H.J. Heinz Company, L.P.	Consistent	**WLA P:83 kg/day; WLA TSS:4,200 lbs/day (monthly average); WLA T: Avg Daily T (of):32C (90F) x 3.4MGD design flow=- Allocated Heat Load: 2,557BTU/day**	**TSS:** 4200 Monthly Avg lbs/day, 8400 lbs Daily Max; **May - Sept Total P:** must not exceed monthly avg 83Kg/D **see Heinz footnote 3** ; **May - Sept Temp:7-day rolling average, calculated daily, must not exceed 2,557 million BTU see Heinz footnotes 1 &2 below**	http://www.deq.state.or.us/wq/tmdls/docs/snakeriverbasin/tmdlrev.pdf

Note for Canyonville T WLA:* Under the thermal plume limitations described in 340-041-0053(1)(d), discharge T are limited to 32C to prevent acute impairment or instantaneous lethality to salmonids. Other discharge limitations may apply with OAR340-041-0053.

Note for Canyonville Nutrient WLA for Total P** Flow proportional: @>100cfs=1.2lbs/day; @100-199cfs=2.2lbs/day; @200-399cfs=4.4lbs/day; @400-666cfs=8.9lbs/day; @667-1332cfs=15lbs/day; <1333cfs=20lbs/day

Note for Canyonville N WLA for Inorg P: @>100cfs=0.83lbs/day; @100-199cfs=1.5lbs/day; @200-399cfs=3.0lbs/day; @400-666cfs=5.9lbs/day; @667-1332cfs=10lbs/day; 2<1333cfs=13lbs/day

Appendix E: Summary of PQR Action Items

Report Section	Report Section Heading	Action Items	Category
III.A.	Basic Facility Information and Application	Address all outfalls from which pollutants are or may be discharged, including emergency outfalls, in the permit.	1
III.A.	Basic Facility Information and Application	Ensure permit applications are submitted in a timely manner.	1
III.A.	Basic Facility Information and Application	Ensure that permit applications are current and complete, including all required data and information.	1
III.A.	Basic Facility Information and Application	Clarify the location of permitted outfalls by including latitude and longitude in the permit or fact sheet.	2
III.A.	Basic Facility Information and Application	Clarify the effective date of NPDES permits or that the effective is upon signature.	3
III.B.	Technology-based Effluent Limitations	Ensure a complete understanding of when processes began operation in order to correctly apply the applicable technology basis (BPT, BCT, BAT, or NSPS).	1
III.B.	Technology-based Effluent Limitations	For facilities subject to multiple subcategories within an ELG, effluent limitations should be derived using all applicable subcategories proportioned based on flow or production. In no circumstance should only the most stringent limitation from multiple subcategories be used as the basis for determining the appropriate effluent limitation to use.	1
III.B.	Technology-based Effluent Limitations	Understand the processes at a facility resulting in process wastewater discharges and ensure those processes are applicable to the ELG being considered.	3
III.C.	Water Quality-Based Effluent Limitations	Follow the instructions in the RPA IMD to determine pollutants of concern. Update the fact sheet template to include a discussion of pollutants of concern.	2
III.C.	Water Quality-Based Effluent Limitations	In the fact sheet, provide a comparison of TBELs and WQBELs for each pollutant to ensure the most stringent effluent limitation is contained in the permit. This can be either in a table or narrative discussion.	2
III.C.	Water Quality-Based Effluent Limitations	Thoroughly describe the data used in the RPA and where it was obtained for both effluent and ambient data.	3
III.C.	Water Quality-Based Effluent Limitations	Ensure a robust set of ambient water quality data is available for use in permit development or required ambient monitoring as a requirement in permits.	3
III.D	Monitoring and Reporting	Ensure that all limits must be subject to at least annual monitoring.	1
III.D	Monitoring and Reporting	Ensure appropriate monitoring type for different parameters (e.g., temperature whether continuous vs. grab is appropriate in given permit).	1

III.D	Monitoring and Reporting	Improve consistency in identifying monitoring locations for each outfall from which discharge is authorized under the permit.	2
III.D	Monitoring and Reporting	Ensure that permits are clear that quantitation limit must be at or below limit.	2
III.D	Monitoring and Reporting	Update permit and PER template to implement requirements of the Electronic Report Rule.	1
III.E.	Standard and Special Conditions	Under standard conditions, ensure penalty provisions are consistent with 40 CFR 122.41(a).	1
III.F.	Administrative Process (including public notice)	Consider explicitly documenting whether public comments are received or whether no comment are received, and where responses to comments are maintained.	3
III.F.	Administrative Process (including public notice)	Consider providing a consolidated response to comment document for all permits that is make publicly available upon permit issuance.	3
III.G.	Documentation (including fact sheet)	Establish procedures and processes that ensure complete and consistent permit records across regions for all permits.	3
III.G.	Documentation (including fact sheet)	Ensure that there is documentation of the public notice process in all permit files.	2
III.G.	Documentation (including fact sheet)	Ensure that permit files include all significant documentation of the basis for limits and permit conditions, including the documents referenced in the applicable fact sheet.	2
III.G.	Documentation (including fact sheet)	Document in the fact sheet whether and why significant changes have been made to outfalls from the prior permit to the current permit.	3
III.G.	Documentation (including fact sheet)	Document when current permit data/ information is used to supplement older permit application data.	3
III.H.1	Nutrients	Include monitoring requirements for phosphorous and nitrogen in permits for such facilities where the receiving waters are known to have nutrient impairments.	3
III.H.1	Nutrients	Conduct reasonable potential analysis for nutrients if the type of facility is known to have discharges that contain nitrogen or phosphorous or the receiving waters are known to have nutrient impairments.	1
III.H.3	Pretreatment	The DEQ should ensure adherence to the Compliance Monitoring Strategy (CMS): one PCA every five years and one PCI every approved pretreatment program. 40 CFR 403.8(f)(3) states: “The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in paragraph (f)(1) and (2) of this section.”	1
III.H.3	Pretreatment	DEQ must require all approved pretreatment programs to adopt the mandatory provisions of the Streamlining Rule as soon as possible.	1

III.H.3	Pretreatment	DEQ should insert the following condition to all the permits of all approved pretreatment programs: "*The permittee shall submit a complete proposal of mandatory and voluntary streamlining program modifications to the Department for approval within one year from the date of re-issuance of this NPDES permit. This includes proposed changes to the City of Portland's pretreatment-related municipal ordinance and operating procedures to reflect the revisions to 40 CFR §403 that became effective November 14, 2005, and to attain consistency with Schedule E of this permit. The Department may extend the submission date if requested by the permittee. These proposed modifications will be considered non-substantial pretreatment program modifications under 40 CFR §403.18 unless otherwise determined by the Department to be significant.*" This permit language if from the City of Portland.	3
III.H.4	Stormwater	EPA recommends that all NPDES Permit cover pages should indicate the permit's issuance date, effective date and expiration date.	1
III.H.4	Stormwater	If a NPDES Permit is modified after its effective date, EPA recommends that the Permit cover page, and all relevant modified pages, be revised to reflect the modified provisions, in order to inform readers of the final enforceable provisions resulting from the permit modification process.	3
III.H.4	Stormwater	DEQ should earnestly continue its efforts to provide current permit coverage for the City of Ashland, and other Phase II MS4 communities in Oregon, under a statewide MS4 General Permit.	3
III.H.4	Stormwater	Oregon would benefit from developing a stand-alone BMP manual or similar to augment the permit. Oregon has clearly tried to keep the permit short and simple. The result is simultaneously too specific in suggested BMPs and not comprehensive enough in the assessment approach suggested for operators to use to figure out what BMPs might work.	3
III.I.1	Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)	*The MOA's are a weak enforcement tool that do not ensure that permittees reduce CSO discharges and meet performance targets on a timely schedule.* The EPA recommends that permits incorporate compliance schedule to ensure timely implementation of the LTCP where the permittee is not yet under an enforcement mechanism such as a consent decree or state-issued order or where progress to control CSOs is insufficient.	2
III.I.1	Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)	DEQ should strive to keep CSO permits current by reducing the time permits are administratively extended to a short and possible to ensure that permittees are making swift progress toward controlling CSOs discharges.	3
III.I.1	Combined Sewer Overflows (CSOs)/Sanitary Sewer Overflows (SSOs)	DEQ should ensure that the permits requires event based reports for each CSO discharge and that these report elements are addressed in terms of the electronic reporting rule requirements.	1

III.I.2	Total Maximum Daily Loads (TMDLs)	The high permit backlog has delayed implementation of TMDLs into permits.	2
III.I.3	Total Maximum Daily Loads (TMDLs)	WLAs in TMDLs are complicated and are carried into permits as equations and calculated limits especially for temperature TMDLs where thermal load is used as a surrogate for temperature. Excess thermal load (ETL) limits in permits provide a variety of options for the permittee to calculate ETL. Permits that provide the option for calculated limits rather than containing final effluent limits or compliance schedules lack transparency and hinder the "due process" requirements for public notice of permit conditions. DEQ permit writers should avoid including such calculated limit options in permits.	2
III.I.4	Total Maximum Daily Loads (TMDLs)	Permit writers must work closely with TMDL staff during development of the TMDL to ensure that the WLA can be adapted into water quality-based effluent limits in the permit.	3

Category 1	**14**
Category 2	**10**
Category 3	**16**
Total	**40**

Appendix F: Draft PQR Report Review by DEQ

From: EMER Lydia
To: Lidgard, Michael
Cc: Burgess, Karen; Opalski, Dan; doughten.ron@deq.state.or.us
Subject: Oregon DEQ Comments on Draft PQR Report
Date: Monday, February 22, 2016 4:32:36 PM
Attachments: Oregon Draft PQR Report 01-22-16.docx

Dear Mr. Lidgard:

Thank you for the opportunity to provide comments on the draft report on the Permit Quality Review (PQR) of Oregon's Department of Environmental Quality (DEQ) National Pollutant Discharge Elimination System (NPDES) Program. We appreciate the time you and the PQR team spent reviewing our permit program. Identifying and addressing deficiencies or noncompliance with federal regulations will be a priority for Oregon's NPDES program. Furthermore, we appreciate your identifying additional recommendations and suggestions for program improvement. Our comments on the draft report have been included in the attached document.

DEQ also appreciates EPA's offer of assistance in addressing other areas of significant concern, including permit backlog, permit and permit evaluation report quality and program consistency among DEQ's offices. DEQ and EPA share a common goal to improve Oregon's NPDES permit program and we look forward to working with you to improve the DEQ's program performance in each of these areas.

Specifically with respect to permit backlog, DEQ recognizes value in working closely with you and EPA Region 10 staff to identify opportunities and specific actions to reduce Oregon's NPDES permit backlog. We would appreciate meeting with you to clarify how we can best work together towards our common objective to improve our NPDES program. Ron Doughten or I will contact you to initiate more in depth conversations about reducing permit backlog and related matters.

In addition, DEQ has contracted with a third party consultant, MWH Americas, Inc., to review's DEQ's NPDES program and provide recommendations for issuing environmentally relevant permits in a timely manner, with the goal of reducing permit backlog to EPA's target of ten percent or less.
MWH will reach out to individual stakeholders during Phase I of the project. With your agreement, DEQ intends to recommend MWH contact EPA Region 10 directly for specific information on Oregon's NPDES program. If you agree to work with MWH, please provide DEQ with a primary EPA Region 10 contact and contact information that we can share with the consultant.

If you have questions about DEQ's comments on the draft PQR report, the third party consultant, or other opportunities to improve Oregon's NPDES program, please contact me at 503-229-6411 or you may contact Ron Doughten at 503-229-5589.

Thanks, Lydia Emer

Lydia Emer, MS
Operations Division Administrator
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204
Tel: 503.229.6411