

Industrial Stormwater Program



State of Oregon
Department of
Environmental
Quality

1200-Z Rulemaking Advisory Committee Meeting No. 2

Wednesday, Sept. 4, 2019
DEQ Headquarters, floor 3 conference room
700 NE Multnomah St.
Portland, Or 97232

List of DEQ attendees

- Justin Green
- Christine Svetkovich
- Krista Ratliff
- Courtney Brown
- Michele Martin
- Diane Lloyd (DOJ)
- Becky Anthony
- Connie Dou

List of Committee Members attendees

- Ada Banasik
- Alan Flemming
- Chris Rich
- Jamie Saul
- Jonah Sandford
- Debbie Silva
- Kathryn VanNatta
- Michael Campbell
- Stacy Hibbard (Chair)

Meeting materials

Please refer to the webpage for this rulemaking under 1200-Z Permit Rulemaking Advisory Committee Meetings / [Meeting 2](#)

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

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Agenda

Time	Topic
8:30 am	Welcome and Logistics
8:40 am	Follow-up from Meeting No.1
8:55 am	TMDLs
9:15 am	Numeric Water Quality-based Effluent Limits (WQBELs)
10:00 am	Break
11:30 am	Lunch
12:20 pm	DEQ 2018 Integrated Report and Delistings
1:05 pm	Continue – presentation, discussion, and next steps
2:00 pm	Informal public input
2:30pm	Adjourn

Meeting Summary

Michele Martin (MM):

- Welcome, logistics, ask questions at any time;
- Public comment period will be provided at the end of meeting (currently no one on the phone);
- Phone is having technical difficulties; will start recording as soon as possible
- Review agenda

Christine Svetkovich (CS):

- Thank you to everyone for being here;
- Want to acknowledge the gap in time since last meeting; we expect moving forward to have meetings about every two or two and a half months; summer schedules and securing contractor PG Environmental brought some delay.
- PG Environmental is not able to present today on data associated with impairment pollutants; they will provide data analysis at the meeting on November 13, 2019; they are a Virginia consulting firm; experience with EPA's permit; Dan Connelly is point person, will listen in to today's meeting.
- Justin Green (JG): PG Environmental also helped DEQ write individual National Pollutant Discharge Elimination System, NPDES, permits last year and they know our permit-writing process.
- Amy LeCoq from Recology stepped down from Committee; new member Debbie Deetz Silva from Evraz North America.
- Follow up items from last meeting:
 - Scope of rulemaking:

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- Advisory Committee members asked about changes to the permit that are outside settlement agreement; we re-evaluated schedule committed to in Settlement Agreement and are committed to meeting that timeline (final permit by the end of March 2021.)
- If time allows, we can revisit other issues; we will look at EPA changes to permit and other ideas and we will have that discussion likely during the meetings in early next year.
- DEQ goal is to have the best permit possible; one that is protective, legally defensible, and implementable.
- We want to hear your ideas to ensure we end up with best permit possible.
- We must stick with legally bound timeline set by Multnomah County Circuit Court and the agreement.
- Also we have the dedicated resources to get the current scope of work done during this timeframe.
- Questions? (None.)
- Rulemaking process: How DEQ would deal with changes to permit after permit adopted by rule.
 - Any changes have to go through rulemaking process unless those changes are not substantive;
 - Michael Campbell (MC): if you are going to adopt a permit as a rule, can or should the rule provide for DEQ to have authority to make revisions without going back through rulemaking, if DEQ wants to do that?
 - Diane Lloyd: historically EQC hasn't delegated that authority; we could consider that.
- Questions regarding communication process and would it be different under this rulemaking approach?
 - The answer is: yes. DEQ expects to retain the same authority to have flexibility to implement the permit (e.g. Permit assignment letter with monitoring requirements.)

MM: We are now recording the meeting; there will be a public comment period at the end; contact Michele Martin or Krista Ratliff if you are a member of the public and would like to make a comment at the end.

CS: Any questions? We expect to have a final permit by March 2021. We also expect to provide a high level update to [EQC](#) on November 14 or 15, 2019, and will also provide updates at other times to EQC during 2020.

- TMDLS – Total Daily Maximum Loads
 - High level overview: stands for Total Maximum Daily Loads. It's the amount of any given pollutant that a waterbody can receive without violating a water quality standard.

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- Water Quality Management Plan, WQMP, is the technical, companion document that outlines actions that need to be taken to meet Wasteload allocations, for permitted sources, and Load Allocations, for non-point sources. The WQMP outlines the actions needed to meet wasteload allocations for permit holders.
- When DEQ renews an NPDES permit, we look through new TMDLs and determine which existing TMDLs need to be considered in the new permit; incorporate requirements to meet wasteload allocations in new permit; registrants are required to meet those requirements. Some of this is outlined in the [settlement agreement](#) located on the [webpage](#) under meeting No.1 for this rulemaking.
- We are committed to ensuring that industrial stormwater is adequately assessed and implementation is complete for each TMDL; which can include water quality-based effluent limitation (WQBEL).
- The only EPA-approved TMDL with a wasteload allocations for industrial stormwater is the Columbia Slough, issued in 1998; the wasteload allocations is for biological oxygen demand with intent to deal with dissolved oxygen impairment in Slough back then; there used be a separate industrial stormwater permit the “1200-COLS.” DEQ brought it back into 1200-Z; over 20 years since that TMDL was issued.
- PG Environmental is the contractor who will help determine what actions should be taken regarding the current benchmark, monitoring, best management practices, and other considerations. We will bring this back to the Advisory Committee to discuss at a future meeting. See Appendix A for the EPA contractor work agreement.
- Upcoming Temperature TMDLs
 - Currently DEQ will focus on temperature in TMDLs because of a court-ordered deadline to examine natural thermal potential of waterbody.
 - DEQ has determined that industrial stormwater and construction stormwater do not have a reasonable potential to impact temperature in the state; that said, the temperature TMDLs have wasteload allocations for stormwater permitted sources; the wasteload allocations is equal to existing thermal load; i.e. we will document this, but no changes need to be made.
- Non-temperature TMDLs
 - Willamette Mercury TMDL: draft is out for public comment and ends on Friday, September 6, 2019.
 - Some of the work done to develop the TMDL: DEQ compiled all data of sources that were monitoring for mercury; analyzed mercury data; over 850 facilities, only 11 had detects of mercury and these were not substantive enough to warrant something specific in industrial stormwater sector.



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- There is a WLA for all stormwater registrants: 75 percent reduction in total mercury, along with other requirements.
- Majority of mercury in water comes from atmospheric deposition.
- We can work to reduce sedimentation and erosion; mercury binds to soil and gets into waterway that way. This was the conclusion from industrial stormwater data analysis, and also because in the last permit renewal we tightened up total suspended solids for Portland Harbor and erosion and sedimentat controls for reductions to help with 75 percent reduction goal according to the draft.
- Additionally, court-ordered deadline to finalize the TMDL and give it to EPA is by mid-November 2019.



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Michael Campbell (MC): There is a disconnect – what does DEQ think the 75 percent reduction means? Mercury isn't a problem for industrial stormwater but still is part of the category of 75 percent reduction?

CS: DEQ has determined no additional actions needed in industrial stormwater.

MC: Will the 75 percent come from other sources?

CS: Data shows reduction opportunities from municipal; also since the permit is fairly new, expect that the requirements of new permit will assist with the 75 percent reduction.

Kathryn Van Natta (KVN): Northwest Paper and Pulp supports TMDL approach that the total suspended solids reduction in the prior permit is sufficient to account for intended reduction.

Chris Rich (CR): Inquiry to confirm there will not be a proposed change from prior total suspended solids levels.

CS: Not as it relates to the draft Willamette Mercury TMDL.

CS: Two other TMDLs to highlight: slight chance that Yaquina and Coquille TMDLs will be finalized during this time, also a chance for Siletz and Powder River to be finalized; we have all impairment data for industrial stormwater sources in those basins and will analyze to see what the data shows us, and what might be needed for sources to meet WLA; for any of the pollutants with elevated levels we have different approaches but likely would develop a compliance schedule.

(Break to connect to webinar)

MM: We are now logged back into the webinar (9:07AM); email Michele Martin or Krista Ratliff (KR) with questions.

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Krista Ratliff (KR): Good morning; background paper - reminder that the document went out with the PowerPoint, any questions or comments? It included federal definitions and information on Washington's permit. The intent is to think about a methodology for Oregon for having a water quality-based effluent limitation (WQBEL) for impaired waters.

- WQBEL goal: To meet established water quality standards, WQS, for fishable and swimmable waters – Clean Water Act federal background.
- Compliance point is end of pipe, must be established in permit, for pollutants that will cause or have reasonable potential to cause excursion of state WQS; can be narrative or numeric or combo of both.
- The effluent concentration in the discharge; reasonable potential to cause any excursion of WQ criteria (can be acute, chronic, etc.) – then state permit writer calculates.
- Usually easier to calculate on mass base load - the premise of why more individual permits are expressed that way because mass base load is easier to predict.
- Federal regulations allow for source control to abate discharge if numeric limits are not feasible.
- EPA interim permitting document, slide 8: 1996, due to nature of stormwater and wet water discharges and lack of information on which to base WQBEL, EPA will use interim approach. This approach will use BMPs in first round and then expand upon that in subsequent iterations to attain WQS. This was the initial policy and framework on the federal level which states followed.
- Reasons why state permits may not have WQBELs: phased permits and large number of facilities under general permits. There are 29 sectors in the permit now that started with 11; size and range of facilities are small and large, some paved, some impervious, also diversity of receiving water, and variation of SW duration and intensity. (*Correction: federal regulation requires stormwater discharge permit for 11 specific categories which translates to 29 separate sectors.*)
- Effluent limit means “any restriction on a pollutant concentration in a permit...”
- To derive WQBEL: intended to provide a degree of confidence that the discharge won't cause, a reasonable potential to cause, or contribute to, an exceedance of WQS.
- The numeric WQBEL are closely tied to state WQS, but generally not expressed in same standards; criteria can be expressed as numeric or narrative, can affect nature of impairment listing and development of TMDLs.
- Applicant provides characteristics of discharge to permit writer.
- First step in permit development: review TBELs, then derive WQBEL to make sure permit is protective; then the permit sets monitoring for whichever is most stringent. Sometimes WQBEL is not a target if TBELs are adequately protective of water quality.

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- Permit writer must accurately characterize the effluent – sometimes use modelling – with impaired waters assumption is there is no more assimilative capacity.
- TBELs: set at federal levels, based on BMPs, few established TBELs for stormwater, what they are in the permit now; challenge is lack of a clear federal model.
- We currently have 851 facilities under the 1200-Z permit; both 1200-Z and EPA’s permit contain the narrative limit: “discharge must be controlled ... and not cause or contribute” if so, then corrective action is required.
- National Academy of Sciences Report states that a narrative water quality-based effluent limit in federal permit created ambiguity and raised enforceability and liability issues – this is why we are looking into this – recommendation in report was to follow municipal goals: encourage volume reduction, look at retention standards, and reduce pollutant mass loads, specifies reductions with less emphasis on specific pollutants; EPA could encourage infiltration to address uncertainties with bypass. If retention systems are relied on then a wet-weather consideration the report suggested EPA could allow for a bypass without monitoring; report did not recommend any new TBELs or QBELs.
- How should QBELs be set? WQSs serve as the overarching “benchmark” to protect aquatic health and environment.
- Aquatic life criteria based on one-hour exposure.
- Chronic based on 4-day exposure.
- Human health based on consumption measured at point of exposure in fish tissue.
- Beneficial uses: drinking water, domestic water supply, shellfish consumption, among others.
- Complexities: macroinvertebrate, level of exposure to pollutants over a lifetime; the amount of pollutants can be present and still assimilate.
- Usually designed around low-flow condition when aquatic life is most stressed, where concentration is highest. Wet weather discharges mostly occur in high flow conditions.
- Anti-backsliding – important but premature – once we set a numeric limit anti-backsliding plays into subsequent permits; only a few conditions where we can make it less stringent.
- Washington State (WA) used compliance schedules and allowed two years for permit holders to come into compliance with new QBELs: federal regulations governs compliance schedules and says if you set a compliance limit, schedule must be met ASAP; fact sheet has to record the basis for determining compliance schedule, for example, if new or a more stringent QBEL, can use a compliance schedule.



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- Flow is a key component in developing TMDLs, quantity and variation – discharge of stormwater causing different types of effects, episodic disturbance with stormwater is less defined. Studies on aquatic ecology and the toxicity of SW show the affect single stressors and a wide variety of species, e.g., Coho are more sensitive (if looking at aquatic life) a lot of factors that play into the stressors. This topic is poorly understood and complicated; attributes of each stormwater event based on land use, humidity, etc. – point is putting WQBELs on a large amount of general permit registrants with all the variation is pretty complicated; also consider EPA’s 1991 four-tier permitting strategy, (see Appendix B) for stormwater and using individuals permits for most complicated sites.
- Questions?
 - MC: process question: we are talking about the complications of setting a WQBEL then we are done; we need a proposal on the table to discuss – when will this happen? Settlement Agreement requires DEQ to develop this.
 - CS: Point of this in-depth overview is so that everyone has same understanding of the work that needs to happen. In November we hope to have discussion about what data shows us; then we will come up with recommendations for future discussion. Our intent for this meeting is for a common understanding.
 - MC: Only 2 more meetings and this isn’t the most complicated issue.
 - CS: We will have 2-3 meetings in first half of 2020; this meeting is to build a general understanding.
 - KVN: Same question, comment – want to ensure we are knowledge-building for future conversations right now?
- KR: Scope of contractor’s presentation overview. The contractor will provide the analysis to support re-issuance; the contractor will look at data and present to the Advisory Committee on what it shows on receiving water basis, sector basis and pollutant basis. Contractor was selected because of expertize and comprehensive understanding of Clean Water Act.
- Jamie Saul (Jamie): Do you anticipate the contractors will support development of which type of “WQBELs and TBELs”? Answer: Yes, and benchmarks.
- Jamie: Can you share the scope of work DEQ has with the contractor?
- CS: Yes, we will follow up with EPA and get back to you.
- Debbie Silva (DS): How is data collected to give to consultants?
- CS: A DEQ employee did data entry into a spreadsheet from multiple years, then gave that data to the consultant.
- MC: DEQ is directing scope, but contract is with EPA and consultant?
- JG: Yes, EPA is holding back some of our Water Pollution Control Section 106 grant money. Background: EPA has offered multi-purpose grant, DEQ has asked for that to backfill the CWA section 106 grant money.



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- Ada Banasik (AB): In November will we talk about data analysis? Or will we talk about proposals?
- CS: It will depend on what the data tells us.
- KR: In 2009, we had a long Advisory Committee process: 16 meetings, discussed QBEL and a lot of other issues, a lot of recommendations and suggestions. I am happy to share the notes from that process. See Appendix C. Those recommendations played into the permit's impairment monitoring requirements. We have 7 years of impairment monitoring since the facilities that had coverage since 2012; I hesitate to make clear recommendations because should be a group effort. Because of the nature of federal permit to come, I would prefer to stay course but we can accommodate the group and provide recommendations.
- MC: I was involved in last process; key takeaway: it was the only time DEQ's permit was not challenged. A lot of work and meetings but everyone was satisfied enough; a lot of great ideas, but not a lot of data. Impairment pollutant monitoring will lend to a more informed discussion this time; we could make progress this time if we dig into it
- MM: Do you want KR to do a re-cap of 2009 meetings? Historical perspective?
- KVN: Not on that topic; I was an alternate for that process; no comment on if whole group wants to relive it.
- Chris Rich (CR): Recommend make notes available to Advisory Committee for review off-line.
- Jonah Sandford (Jonah S.): I'd be interested in the historical perspective but don't need to use Advisory Committee meeting time.
- KR: Approach here is different, willing to do anything; lots of good ideas but keep them so that folks can brainstorm; history is embedded in the current permit.

[Break]

KR: In the Settlement Agreement DEQ agreed to look at Washington's permit:

- Washington's requires numeric pollutants for 303(d) listed – waters without a TMDL.
- Assessment methodology is a little different from Oregon; Washington impairments assignments do not apply outside of listed segment or grid or any discharges to receiving water that is a tributary of the listed segment.
- QBELs are limited to certain pollutants; WA has a sediment water quality criteria standard.
- Washington used compliance schedules, most about 2 years once permit issued to be in compliance with limit.
- Used maximum daily, so highest allowable of daily discharge.
- Sampling frequency is 4 times per year and once per quarter (similar to DEQ's benchmark).



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- Department of Ecology made an assumption that water quality-based numeric limits would only be applied to facilities discharging to impaired waterbodies that were “listed” for pollutants that are typically present in industrial stormwater discharges.
- Washington has 1,150 permit registrants.
- More Specifics:
 - Washington sets the numeric number for four parameters, the rest are assigned at time Ecology provides coverage.
 - Washington registrant will monitor for turbidity, TSS, total mercury, pH (marine and fresh);
 - Discharge to impaired waterbody either directly or indirectly shall do sampling;
 - For total suspended solids: 2015 permit said those not subject to numeric water quality-based effluent limit in previous permit, then the numeric effluent limit would not be effective until 2017 – Allowed compliance schedule for new discharges; turbidity daily max is 25 NTU ... pH range depends on if fresh or marine.
- Parameters derived from specific waterbodies.
- Characteristics of specific receiving waterbodies that would impact derived daily max: pH, hardness, ecoregion, total to dissolve translator factor, etc. Example: phosphorous. See [Presentation slide 15](#).
- Can access all this through publicly accessible database.
- Bacteria excluded based on legislative direction.

Jonah S. Question: For these parameters is there a publicly available methodology?

KR: The methodology is outlined in Ecology’s fact sheet as required by the Clean Water Act; however, there is no specific calculation or precise analyses to replicate.

KR: (cont’d)

- Bacteria is “report-only” – have to sample for and have a narrative limit but by direction of the legislature and WA code they did exclude bacteria; draft 2019 added e. coli and enterococci due to WQ criteria change in WA, pentachlorophenol used to have a defined target but in the 2019 draft is now assigned at coverage.
- Washington’s electronic reporting database, PARIS, provided the total number of facilities with actual WQBELs (excludes total suspended solids), see [Presentation slide 16](#).
- Also found the values aligned with other values in the permit – e.g. Copper value aligns between western and eastern Washington benchmarks; (*see correction from AB below*) e.g. lead was same as any sector-specific benchmark; showed one zinc effluent but couldn’t find the facility.



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- Ecology benchmarks: Narrative for sheen; some of the site-specific calculations didn't bring a lot of variation, not sure why. Maybe all in same waterbody? Wanted to point out the small number of facilities with WQBELs – exceedance of a limit is a permit violation.

AB: *Correction:* Copper value (WQBEL) is an order of magnitude more stringent than the benchmark (see [Presentation slide 16](#)) – the benchmarks in Washington for total copper are: Western Washington, 14 ug/L; and Eastern Washington, 32 ug/L, while the limit referenced 2.7 ug/L.

Stacy Hibbard (SH): Based on few number of facilities might be hard for OR to compare.

CR: Question - How does Ecology FTE compare to Oregon's?

KR: WA has exponentially more staff than Oregon.

CR: That's an important factor to keep in mind.

KVN: 24 years of experience in both states; they are different; you didn't cover some of the stormwater requirements for large facilities that are in their individual NPDES permits – did you look at the individual permits in the industrial sector? They have stormwater requirements incorporated into NPDES so you have to look through it.

SH: But you did say there are 1150 registered under the general?

AB: Copper and the zinc are the water quality standard so it's really a dissolved concentration.

MC: I would guess the reason there's a small number of facilities is because the 303(d) list is just small segments so not a lot of dischargers; if the State of Washington had same approach in their assessment methodology as Oregon then numbers would be higher.

Jamie: seems like further work can be done in understanding Washington's methodology. I would like to learn about the steps they take to go from numeric criteria to the limit – to the extent DEQ thinks elements can be duplicated let's discuss, if DEQ thinks steps don't apply in Oregon we should discuss. We want a methodology that works for our state and that can be replicated throughout the state.

KR: Difficult to get there. I tried to get the steps in their methodology from the publically available information, including the permit fact sheet.

AB: They have a permit writer's manual; most just calculate the water quality criteria for the waterbody so most of the limits are set at the water quality standard, except for phosphorous – metal are the water quality standard.

KR: (cont'd)



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- Total suspended solids– how derived and difference with OR – 30 mg/l; in fact sheet states it’s “professional judgement” that it would not cause or contribute to sediment standard ([see Presentation slide 17](#)).
- Oregon doesn’t have numeric standard for toxic substances in sediment – Oregon Health Authority hasn’t issued any advisory for toxic substance in sediment that pose a risk to aquatic life or health; standards align with the Washington toxic control act;
- The cleanup sites are the drivers for the sediment standards.
- Excluded from Washington’s permit (see [Presentation slide 18](#)): Temperature, because it’s a seasonal problem, low dissolved oxygen because it’s a seasonal, summer problem, dissolved oxygen has a far-field affect, downstream so makes it difficult to show the connection between oxygen-demanding discharges and the effect.
- Bacteria – replaced a numeric fecal coliform with a narrative limit, in draft permit recently closed for comment proposed to continue to impose the narrative and monitoring for all bacteria as ‘report only.’”
- No limits for fish tissue and bioassessment due to difficulty showing direct connection of stormwater discharge to fish.
- [Presentation slide 19](#) – bacteria sampling report only: “prevent rodents and birds from roosting ... do one dry season inspection ... best management practices to prevent bacteria cross-contamination”
- [Presentation slide 20](#): preface to impairment data work – Oregon’s top major group sectors are: 1) Timber; 2) land transportation and warehousing; 3) transportation; 4) food and kindred products; 5) fabricated metal products; 6) chemicals and allied products; 7) scrap recycling facilities; and 8) primary metals.



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KNV: Was this by major SIC code?

KR: Yes – 149 timber facilities included all the 4-digit timber products sectors under the major group 24: Lumber and Wood Products, Except Furniture

SH: Question about Washington state assessment: do they assess for everything that has water quality standard? What about pesticides? Does that get pulled into the fish tissue assessment?

KR: They do a wide-range of assessment and break out impairments by media (water, sediment, fish tissue) more than Oregon does.

SH: Should we assume all the rest impairment pollutants were excluded from Ecology’s permit?

KR: Yes.

MC: Arsenic on the Columbia – used to be only spots on the Washington side listed as impaired while the Oregon side the Columbia River impairment included all.

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KR: Hard to make direct correlations between Washington and Oregon; the history, background, staffing is all different – hoped to get a better picture; states are different in many ways.

MC: To that point, Washington has a fairly crude approach to numeric effluent limits both to where they exclude and where they assign limits; their 303(d) list is so narrow; once they expand their list there will maybe be more efforts to get more sophisticated; where it's an issue they will just pull the numeric water quality criteria for end of pipe analysis.

KR: Oregon adopted sector-specific benchmarks from national level; Washington did their own analysis to set sector-specific benchmarks.

[BREAK]

Becky Anthony (BA), DEQ: WQ Assessment Lead – responsible for putting out the integrated report

- Federal requirements: assess state waters every 2 years; for every water body not meeting water quality standards (on 303(d) list), a TMDL is required; new list will be done using ATAINS, new system for tracking.
- State requirements: this will be the first list where new requirements go into place; required to conduct peer-review for methods that have scientific or technically defensible approaches – did this for biocriteria threshold and listing methodology.
- Methodology became final in fall of 2018.
- Workgroup to change the methods.
- How waters are assessed:
 - Water quality standards are adopted in statute, numeric and narrative – statewide data-call – apply the standards.
 - What qualifies as “impaired”? What is the assessment? Apply categorical determination: Category designation – of the uses assessed determine whether or not meeting standards.
 - We do not use Category 1 (means all beneficial uses are supported; not enough data).
 - Category 2 – data assessed show uses are supported
 - Category 3 – not enough data
 - Category 4 – TMDL developed and approved
 - Category 5 – water body impaired, TMDL needed
- Revisions to listing methods: This year we removed seasonal listings; except for dissolved oxygen and temperature (spawning and non-spawning).
- Changed toxics: 2 exceedances gets listed on 303(d) list – changed this to binomial method, scales to sample size – required to have more exceedances of criteria to get in 303(d) list
- [Presentation slide 30](#) listing method.

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- This results in a look-up table showing number of samples and how many exceedances.

KVN: Question - On the list until enough data is collected to go off the list, correct?

BA: Yes

BA: Here we did a 10 year data window, in future we will do a five year data window so within five year record would need number of samples (conventional is 15) within five year data window for the next 303(d) list.

KVN: The list will not change unless during look-back times there is data; in future it will not change unless there are a proper number of samples; so it's harder to get on the list and harder to get off the list.

BA: (cont'd)

- 2018 methodology finalized, hoping to have 2018 Integrated Report approved by EPA early 2020.
- To do this: had to bring 2012 303(d) list forward into the 2018 assessment – and examine the data the 2012 listings were based on; if no stations in existence, look for location information, if no location information, bring in spatial extent of listing.
- In 2012 sometimes DEQ would list mouth to headwaters, moving forward will only list where we have data – in some cases impaired segments will get bigger, in some, it gets smaller, if that happens we are not delisting it just putting it in unassessed category.

KVN: Estimate for how much segmentation approach changed the number of impairments?

BA: Not all, but next slide ([presentation](#)) shows the ones impacted by stormwater.

- Draft results for pH: 2018 total of 42 impairments for pH; in 2012 was 96; proposing to delist almost 60 assessment units for pH.
- One of the biggest changes is for hardness-based metals; copper assessed using biotic-ligan model, copper listings went down to 18; for zinc changes based on new methodology, 4 delistings for zinc.
- Biggest change is with lead, previously total lead used against dissolved, in this case used actual hardness so it went from 41 to 4, no new dissolved lead listings.
- Wrap-up: will be on public notice by end of September, 60 day public comment period; hoping to have it approved and final in early 2020.

KVN: It would be helpful to understand how the segment sizes have changed – segments don't equal stream miles, DEQ made segments smaller, right?



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BA: Yes, in general. An assessment unit is where we consider the WQ to be homogeneous. Assessment units were based on environmentally relevant breaks such as change in designated use, stream order or HUC, Hydrologic Unit Code, boundary; we used HUC-12, the smallest HUC boundary in OR to delineate watershed assessment units; we will have maps that show units that will go out with public notice.

CS: We will be using this list for the current permit renewal we are working on. The final 303(d) list will likely change the impairment pollutants we will need to consider.

SH: Seems like the reason the metals changed was due to changes of methodologies – was there much of a change on the toxics/human health side of things?

BA: Not sure, not my focus.

[Break]

MM: This is being recorded, will have public comment at 2:00 pm; we are on [Presentation slide 45](#).

KR: We are ahead of schedule; encourage comments and questions from the group.

Jonah S.: Nothing from me.

Jamie: Regarding methodology: I don't have expertise on methodology, thinking about how Columbia Riverkeeper can contribute; don't have a lot of base knowledge to contribute.

SH: Big part of this is potential impact of these decisions including changes to the 303(d) list, too early to assess what the impact will be.

KR: Becky has offered to do that cross-walk to get a better understanding of what it all means; they've been working closely with EPA on integrated report.

MM: Introduce Connie Dou (C. Dou), DEQ manager for water quality standards and assessments. Connie started at DEQ last year, Jennifer Wigal's old position.

C. Dou: Information about the revisions to the assessment methodology and 2018 Integrated Report is available on [website](#), we will be having statewide meetings in different locations around the state and webinars as well as a public notice period.

Diane: Any updates from EPA on their draft permit?

KR: None yet.

MC: We would like to look at the numeric water quality standard as a whole look at all the standard; look first at where we land on the numeric standard and see where we are for the narrative standards.

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KVN: Quick review of the new methodology and new proposed 303(d) list highlights that not all water quality standards are the same; different ways to calculate, different things that affect them; geo-regions, e.g. Copper biotic ligand model that looks at the effects on fish is moving to a more complicated approach; a simplistic stormwater approach if we are picking a number is almost too simplistic when you look at the sophistication that goes into the next 303(d) list; not persuasive to do what Washington did in Oregon; After 2018, 303(d) list Oregon will have the sharpest and most comprehensive look at water quality in Oregon – temporal variations and seasonality now being taken into consideration is important – purpose of methodology review is more clear now.

CS: Because there will be changes to the 303(d) list; we want this group to have a solid understanding, so we are all at the same place with information when we talk about recommendations associated with the impairment pollutants for this permit renewal.

KR: When we started impairment monitoring in 2012, the majority of impairment data from 2012-2017, was based on the 2004/2006 Integrated Report, any new facilities that came on board after December 2012, impairments were assigned based on the 2010 Integrated Report. During the 2017 renewal, we based impairments on the list which was approved in May 2017 which was the 2012 partial EPA-approved list; Point is: when we go forward the new listing will have a big impact on the impairment data; a lot of data may become irrelevant.

KVN: Could you write down which stormwater permit renewal was using which 303(d) list?

KR: Yes.

Follow-up: All assignments prior to Dec. 14, 2012, were assigned impairments based on the 2004/2006 Integrated Report.

All assignments on or after Dec. 14, 2012, to Dec. 21, 2016, were assigned impairments based on the 2010 Integrated Report.

All assignments on or after Dec. 21, 2016, including the Aug. 1, 2017 renewal, were assigned impairments based on the Partial Approval/Partial Disapproval on 2012 Integrated Report.

All new assignments to the end of this permit cycle, including the reissuance dated Oct. 22, 2018, will continue to assign impairments based on the the Partial Approval/Partial Disapproval on 2012 Integrated Report.

C. Dou: EPA approved the 2012 Integrated Report, in 2018.

KR: Yes, but we assigned impairment pollutants based on the EPA partial approval/partial disapproval 2012 303(d) list.

DS: Regarding data; I wonder if, how will folks be able to access data used by consultants and 303(d) listing to check or make sure that their data is correct? Second, any methodology used for 303(d) or TMDLs, I will be looking for transparency.

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KR: I would hope that any WQBEL that we set, ideally we would set a numeric value in the permit and no one has to do any calculations; how we get there would be documented in fact sheet; as for methodology and data call Becky Anthony talked about, there was a robust review of data– did quality check on it all, and there's a methodology to show what data they took, over 6.5 million data rows.

C. Dou: The online database is the link to the information about assessment. DEQ's AWQMS database will house all of the raw data. <https://orwater.deq.state.or.us/Login.aspx>

AB: Will there be an on-line mapping tool – similar to Washington where you can punch in coordinates?

KR: Somewhat, we are moving away from DEQ's Stream Location Identification Tool, LLID, and river mile; actual listing won't have either but is in the same GIS layer so yes, if you tag a point in the stream it will come up: give impairment data, methodology; same tool as the GIS mapping we already have.

AB: Will integrated report address quantitatively, how the de-listings impacted stormwater facilities?

KR: We are making this request of DEQ staff so we will have that information.

CS: This will happen when everything is final.

C. Dou: Mapping tool will be showcased; it's the best tool we've created; you click one point and it gives you the listing status and the water quality standards.

MM: Meeting summary will include contact info for Becky Anthony and links to the integrated report on DEQ's website, below.

Becky Anthony
WQ Assessment Program Lead, DEQ
Anthony.Becky@deq.state.or.us
503-378-5319

Integrated Report: <https://www.oregon.gov/deq/wq/Pages/2018-Integrated-Report.aspx>

KR: The project team for the integrated report will do a webinar and presentations in Bend, southern Oregon, and Portland.

CR: Observations: Looked at National Academy of Sciences report, also the EPA's industrial permit reconsideration, but we will not have the benefit of the integration of those big ideas by the time the litigation schedule requires us to do the rulemaking; today we talked about State of Washington's approach, but we may not have a nuanced understanding of it to compare; we also learned today that there is a substantial change in the 303(d) list both in terms of methodology and the resulting listings, we won't have benefit of public review and EPA-approved 303(d) list by the time litigation schedule requires; one thing that's a concern

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to me is the adaptive management approach: is that something that we are prepared to throw out in light of all this uncertainty or would we benefit from getting some of these big picture answers; we should aspire to have a permit that is implementable and won't be appealed; also staff resources: if each permit decision is so complex, what about the permit backlog? Want to avoid creating that scenario on the general permit side which is supposed to be one-sized fits all permit. This committee won't have the benefit of these really big considerations before you have to meet your court-mandated deadlines.

KR: (cont'd)

- Larger considerations for setting WQBELs: toxicity – our goal is not to set a limit that isn't protective and making a difference; we need to make sure that if we set the limits its defensible and implementable.
- Next meeting we will discuss TBELs; generally permit writers look to see if standards can be met with technology – keep in mind that those parameters may be protected with technology; without data analysis and other moving parts we will keep plugging along.
- Toxicity: Metals are expressed as a function of hardness; best to not use defaults; we want to look at the relationship between of metals in the water to same model as WA, characterizing the receiving water as best we can to really know how toxic it is, not using defaults.
- Except for mercury most toxics have numeric criteria, since 2017 registrants have monitored for dissolved instead of total – so we will have both total and dissolved metals data, will have to decide what that means.

AB: When consultant calculates effluent limits they will do it in dissolved metals and use a translator value?

KR: Haven't decided yet.

AB: Translator value is important.

KR: Dissolved form is more available to impact aquatic life (sticks to gills); total and total recoverable are synonymous; seasonality is mostly going away in the listing methodology.

MC: Seasonality – we won't know if the discharge is causing or contributing when the waterbody is impaired; getting rid of the seasonality will make it more difficult; that's what makes this process difficult, DEQ decided to ignore temperature because it's a seasonal problem but to get at this we need to know the basis for the listing; also pH, so many pH listings tempting to put end of pipe standard but likely a nutrient issue; 303(d) listing is starting point for looking at impairments but what we do with that is an entirely different question.

KR: pH goes up exponentially; Nat'l Academy of Science report recommends pH be one of the baseline pollutants for which all facilities monitor. An indicator pollutant.

MC: But you need to understand what is causing the impairment.

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C. Dou: The TMDL process provides those answers.

KR: When looking at the true impact of stormwater, will be hard to do that for every impairment.

MC: last time we confronted this, there was no data, it may be that biting off the whole issue if there are areas where we think industrial stormwater is an issue that we use that as a pilot and address things in the right way; if we take this on for the whole state and every impaired waterway will be too much for DEQ to cope with; so maybe look at a specific area and what the impairment is and what industrial discharge is contributing to and base standard off of that, then next time, build off of that.

KR: example of possible guidance is [EPA's Combined Sewer Overflow Control Policy](#); there are some approaches out there that we may look at for discussion for ideas; 620 facilities are in the Willamette Basin (out of 800+); EPA previously mentioned watershed permit.

MM: We will provide documents referenced in this meeting in the meeting summary.

KR: (cont'd)

- One more complication: acid rain, can mobilize dissolved metals more readily, lots of additional considerations.
- 2009-2011, process discussed watershed-based permits, also WQBEL discussions/considerations.
- In 2017, decided to roll the 1200-COLS back into the 1200-Z (COLS was the only watershed-based permits).
- Looked at geo-regions in 2017, with 282 new listings between 2010-2012 list – we can get any of the numbers for you; when we look at the impairment data analyses we will be also disregarding any exceedances where the 2018 Integrated Report will be delisting.
- We could document performance and source control best management practices to get a better idea of what's on the ground; other outputs from the contractor's work, tier II, etc.
- Parameter-specific WQBEL involve site-specific evaluation of proposed discharge and the potential effect on water quality.
- Nature of wet weather/episodic complicates things;
- Representative samples. How can we make sure the samples are representative of discharge?
- Co-mingling with groundwater, now we allow 12 hours for a sample, EPA gives 30 minutes for first flush.
- Want to get all these considerations out so we know what we are dealing with.
- Water quality standard – we used to assess if water quality standards are adequate to protect beneficial uses; acute vs. chronic; human health; now the impairments are assigned based on acute aquatic life criteria and then based on chronic if there

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is no acute; and finally the human health criteria is used for about ten toxic pollutants which do not have acute or chronic criteria.

AB: Iron standard - is DEQ is planning on reconsidering? It's based on secondary drinking water standard.

KR: Iron still has a criteria so difficult for us to not use it. On east side there are a lot of naturally-occurring pollutants in soil and groundwater; would be nice to alleviate costs on facilities, not sure how to do that.

KR: Permit-specific considerations: settlement agreement

- There are options for us to either set an actual number for a permit limit.
- We could establish something outside of the framework of the permit, EDMS system is another factor that affects the transparency and timing; if we don't have a publicly accessible database the facility gets an assignment letter and not easily publicly accessible.
- Clear and measurable permit conditions – necessary to ensure compliance with permit limits – this is big goal in the Clean Water Act framework, make sure that permits have enough specificity to ensure good data is received and protective.
- Reporting exceedances: in Washington permittees have to phone in and follow-up with a written report; in our permit you do follow-up monitoring – we should consider follow-up reporting and notification; should discharges of impairment pollutants to impairment waters be subject to some kind of follow up reporting?

KR: Mixing zones are not an option because we are talking about impaired waters; lots of dilution during a wet weather discharge; daily average equates to a chronic criteria; daily max equates to acute criteria.

CR: If impairment is seasonal would there be flexibility in the mixing zone realm?

MC: Broader question – is it impaired? We'd have to look at how the discharge is causing or contributing because that is the legal standard.

KR: Initial thought is that mixing zones are not available to us. Another nuance when the integrated report comes out and a pollutant is a category 5 impairment, once a TMDL is approved it goes to category 4A list; in permitting we don't assess any new TMDLs to end of 5-year cycle but we will be assigning impairments based on the category 5 list even if there had been a TMDL addressing that. It could happen that we assign WQBEL to facilities for parameter that has a TMDL.

KR: Wrap up: closing thoughts? (None from the Advisory Committee). Charter said 5-6 meetings; this is #2, next meeting is November 13th, next one in January; November meeting: TBELs and contractor presentation.

MM: Doodle Poll for meetings 4, 5, and 6 will be emailed after this meeting.

Jonah: The same contractor will assess other non-impairment assessment (TBELs for copper, lead, zinc and total suspended solids?).



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CS: Yes, don't know what that looks like yet.

AB: Is the DMR data or receiving water data?

KR: The spreadsheet includes, receiving water, SIC code, reported stormwater discharge, and if a facility is in or out of Tier II.

AB: Other than sharing PowerPoint can we see the datasets before the meeting?

KR: Possibly.

MM: Thank you for coming and doing so in person. Please contact Chair, Stacy Hibbard directly for any additional input about the topics covered in this meeting.

2:30 PM, ADJOURN

[No public comments]

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Appendix A

Advisory Committee Meeting No. 2

Wednesday, Sept. 4, 2019

EPA Contractor Work Agreement



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United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number
3-75

Other Amendment Number:

Contract Number
EP-C-16-003

Contract Period 07/01/2016 To 06/30/2021
Base Option Period Number 3

Title of Work Assignment/SF Site Name
Oregon ODEQ

Contractor
EASTERN RESEARCH GROUP, INC.

Specify Section and paragraph of Contract SOW
3.4, 3.5, 3.7, 3.8, 3.9, 4.3, 5.0, 6.0, 7.0, 8.0

Purpose: Work Assignment Work Assignment Close-Out
 Work Assignment Amendment Incremental Funding
 Work Plan Approval

Period of Performance
From 08/12/2019 To 06/30/2020

Comments:
In accordance with clause B.2 of the contract, immediate start is hereby approved for this work assignment.
If the work plan is not approved within 30 calendar days after receipt of the work plan, the contractor shall stop work.

Superfund Accounting and Appropriations Data Non-Superfund

SFO (Max 2)

Note: To report additional accounting and appropriations data use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period: 07/01/2016 To 06/30/2021 Cost/Fee: LOE: 0
This Action: 1,824
Total: 1,824

Work Plan / Cost Estimate Approvals

Contractor WP Dated: Cost/Fee LOE:

Cumulative Approved: Cost/Fee LOE:

Work Assignment Manager Name Jamey Stoddard

(Signature) (Date)

Branch/Mail Code:
Phone Number: 206-553-6110
FAX Number:

Project Officer Name Tangela Cooper

(Signature) (Date)

Branch/Mail Code:
Phone Number: 202-566-0369
FAX Number:

Other Agency Official Name

(Signature) (Date)

Branch/Mail Code:
Phone Number:
FAX Number:

Contracting Official Name Tammy Adams

(Signature) (Date)

Branch/Mail Code:
Phone Number: 513-487-2030
FAX Number:

PERFORMANCE WORK STATEMENT
CONTRACT EP-C-16-003
WORK ASSIGNMENT 3-75
ANTICIPATED LEVEL OF EFFORT (LOE) HOURS: 1,824

1. TITLE: Technical Support for Oregon's National Pollutant Discharge Elimination System Permit (NPDES) Program

2. WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):

Name: Jamey Stoddard
USEPA Region 10
1200 6th Avenue, Suite 155, M/S: WD 19-C04
Seattle, Washington 98101-3188
206.553.6110

**ALTERNATE WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE
(ALTERNATE WACOR):**

Name: Jayne Carlin
USEPA Region 10
1200 6th Avenue, Suite 155, M/S: 19-C09
Seattle, Washington 98101-3188
206.553.8512

3. PERIOD OF PERFORMANCE: Date of Issuance through June 30, 2020

4. BACKGROUND

The Clean Water Act (CWA) authorized efforts to restore and maintain the Nation's waters. Section 402 of the CWA created the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of point source pollution to waters of the United States. Point sources must obtain a discharge permit from the proper NPDES permitting authority, including delegated states, tribes, and territories. Environmental Protection Agency (EPA) Regions are responsible for implementing the NPDES permit program for non-delegated states and for all Federal dischargers and non-delegated tribal dischargers in authorized states.

Under CWA Section 106, EPA provides a water pollution control grant to the State of Oregon to help build and sustain effective water quality programs that ensure the health of its coastal and

inland waters. The Section 106 grant supports a wide variety of water pollution prevention and control programs and activities, including NPDES permits.

Oregon's Department of Environmental Quality (DEQ) is authorized to implement the NPDES program in Oregon. DEQ has requested EPA Region 10 (R10) utilize a portion of Oregon's CWA Section 106 funds to provide associated program support assistance for several NPDES permit writing tasks and eReporting training for industrial stormwater permit registrants. Contractor support to be performed under this Work Assignment (WA) represents part of EPA's technical support to Oregon's NPDES program and will assist in the protection of receiving water quality.

On August 17, 2018, DEQ entered into a Consent Judgement with Northwest Environmental Defense Center, Columbia Riverkeeper, and Oregon Industrial Stormwater Group as an intervener regarding the 1200-Z industrial stormwater general permit renewal. In summary, DEQ committed to:

- By October 31, 2018, DEQ will issue a final revised 1200-Z permit in accordance with ORS 183.484(4) that affirms or modifies the 1200-Z issued on August 1, 2017;
- By October 30, 2020, DEQ will release for public review and comment a revised draft 1200-Z permit and;
- By March 30, 2021, DEQ will issue a final revised 1200-Z permit along with written responses to public comments received on the draft revised 1200-Z permit.

On October 22, 2018, DEQ reissued the 1200-Z incorporating several short-term changes from a Settlement Agreement by the parties signed in August 2018. The remaining terms of Settlement Agreement will be considered as DEQ works on the permit renewal. The Settlement Agreement also defines the scope for the rulemaking advisory committee meetings. In summary, DEQ committed to the following:

- A process for considering proposed numeric technology-based effluent limitations (TBELs), or, alternatively, proposed numeric technology-based benchmarks for the pollutants copper, lead, zinc, and total suspended solids;
- A process to consider one or more proposed site-specific, Total Maximum Daily Load (TMDL) -specific, or state-wide numeric water quality-based effluent limitations, Water Quality-Based Effluent Limitations (WQBELs) related to impaired waters; and
- Development of appropriate monitoring and reporting requirements to ensure and verify compliance at discharge point(s) identified in each permit registrant's stormwater pollution control plan, with numeric TBELs, WQBELs, or benchmarks included in the permit revision.

The terms of the Settlement Agreement require extensive data analyses and technical work to determine the appropriate discharge requirements in the permit. The data analyses and technical work associated with the permit renewal will be presented to the advisory committee

that is providing input to DEQ as the agency works through the permit renewal process. Since the general permit will be adopted by rule instead of a Department Order, the advisory committee process and permit recommendations will be presented to the Environmental Quality Commission, which is responsible for adopting the final permit.

Like many states Oregon faces numerous challenges implementing the CWA, including addressing a backlog of administratively extended NPDES permits and meeting the federal eReporting requirements and timelines for all NPDES permits. To date, Oregon is successfully meeting the requirements to submit the Discharge Monitoring Reports for all of the individual NPDES permits but not any of the general NPDES permit registrants. Oregon has over 1,000 permit registrants under the industrial stormwater general permits. All permit registrants need assistance and tools to set up profiles in EPA's electronic reporting system to be able to submit the required Discharge Monitoring Reports quarterly.

5. PURPOSE AND OBJECTIVE

The purpose of this WA is to provide technical support and assistance to DEQ's NPDES Permit Program in the development of the industrial stormwater general permits and implementing eReporting and Net Discharge Monitoring Report (NetDMR) requirements. DEQ seeks assistance from contractors with extensive NPDES industrial stormwater expertise to assist with the renewal of the 1200-Z industrial stormwater general permit and assistance with eReporting training and outreach to the 1,000 + industrial stormwater permit registrants across Oregon.

The work performed will use DEQ permit development and communication tools and templates. The work described may be extended beyond the Period of Performance only if: (1) EPA exercises Option Period IV of the contract and extends the Period of Performance for this work assignment; (2) DEQ has a need for continued contractor support; (3) the contractor has achieved acceptable quality levels for products and deliverables; and (4) the contractor receives notice of the availability of funding.

6. GENERAL WORK ASSIGNMENT REQUIREMENTS

The contractor shall comply with the following requirements in completing the tasks described in this WA.

Deliverable Formatting – Throughout this WA, the contractor shall provide both EPA and DEQ draft deliverables in electronic format (.doc and .pdf) and final deliverables in both electronic (.doc and .pdf) and hard copy formats. All deliverables shall be provided to both the WACOR and alternate WACOR designated in this WA, as well as the designated DEQ contact identified after work initiation.

Confidential Business Information (CBI) – This work assignment does not require the use of confidential business information. The contractor shall not have access to CBI.

Identification as Contracting Staff – To avoid the perception that contractor personnel are EPA or DEQ employees, contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and visiting field sites. When speaking with the public, the contractor should refer all interpretations of policy to the WACOR and DEQ.

Management of the Work Assignment – The contractor shall develop a work plan describing the necessary steps and estimated hours to complete each of the tasks included in this WA. The work plan shall also include a list of the key personnel to participate in the WA. The contractor shall also estimate direct costs such as travel, computer costs, typing, etc. The work plan is due per the contract requirements.

The contractor shall provide electronic copies of a monthly progress reports to the WACORs. Each progress report shall describe the work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties. Finally, the monthly report should include a discussion of quality assurance progress. In addition, the contractor shall provide brief, bi-weekly status updates to DEQ and the WACOR on the status and progress of Task 1.

Assumptions and Constraints – The contractor shall possess and exercise a comprehensive, expert-level understanding of the CWA and all other relevant Federal water quality laws and regulations as well as possess the experience, technical expertise, and resources necessary for NPDES permit renewals.

The contractor is authorized to contact DEQ directly to obtain additional information but shall copy the WACORs on all information requests and document all requests and responses. The contractor shall inform the WACORs of any such information requirements. In consultation with DEQ, the contractor shall follow technical direction received from the WACOR and/or alternate WACOR.

Within 10 business days of the WA initiation, DEQ will provide the contractor with all available documents and information necessary to draft two NPDES permits.

Enforcement Sensitive Information – The contractor recognizes that contractor employees in performing tasks specified in this WA may have access to data/information of enforcement sensitive nature which should not be released to the public without DEQ approval. Enforcement sensitive refers to records or information compiled for law enforcement purposes (whether

administrative, civil or criminal), the disclosure of which could reasonably be expected to interfere with the enforcement action. It is imperative that all contractor personnel, including but not limited to, subcontractor and consultant personnel assigned to work on this contract and/or task order, or with access to materials developed pursuant to such efforts, understand that this information is confidential and any disclosure or misuse of the information may result in prosecution to the fullest extent of the law. All contractor personnel are expected to exercise due diligence in safeguarding, handling or disposing of any such information.

Project Employee Confidentiality Agreement – The contractor agrees that the contractor employee shall not disclose, either in whole or in part, to any entity external to DEQ, the EPA, the Department of Justice, or the contractor, any information or data (as defined in FAR Section 27.401) provided by the government or first generated by the contractor under the work described in the PWS, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the WACOR. If a contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the contractor must provide immediate advance notification to the EPA so that the EPA can take action to prevent such disclosure. Such agreements shall be effective for the life and for a period of five (5) years after completion of all work described in this WA.

7. TASKS

The tasks in this WA fall under Tasks 3.4 (Technical and Administrative Program Support), 3.5 (NPDES Permits Support), 3.7 (Information Management—Outreach), 3.8 (Technical Writing and Editing), 3.9 (Support for Meetings, Workshops, Conferences, and Webcasts), 4.3 (Quality Assurance Project Plans), 5.0 (Technical Support for Revisions and Administration of NPDES Permits), 6.0 (Outreach and Stakeholder Engagement Support), 7.0 (Logistical Support), 8.0 (Data Collection) of the Contract No. EP-C-16-003 Performance Work Statement (PWS).

Task 1: NPDES Industrial Stormwater General Permit—Technical Analyses [PWS Tasks 3.4, 3.5, 3.8, 4.3, 5.0, 8.0]

Task 1-A: Develop Supplemental Quality Assurance Project Plan (s-QAPP)

A QAPP is required whenever tasks involve the generation, distribution or use of environmental data which will be used, or has the potential to be used, in environmental decision making. Environmental data is information that describes environmental processes, locations or conditions, and health effects or consequences. It can be collected directly from measurements (primary data), produced from models, or compiled from other sources (existing or secondary data). A contract level QAPP has been developed to describe the contractor's plan for assuring

the quality of these data over their life cycle. All data-related activities shall be conducted in accordance with the Office of Water Quality Management Plan (QMP).

A supplemental-QAPP is required for this work assignment as the work involves obtaining and using existing (secondary) water quality data (from benchmarks, Oregon's Integrated Report, etc.) for calculations. The s-QAPP will be based on the contract-level programmatic QAPP developed for EP-C-16-003. The s-QAPP should document the source of the data used to calculate and consider proposed numeric technology-based effluent limitations or, alternatively, proposed numeric technology-based benchmarks for the pollutants copper, lead, zinc, and total suspended solids and consider one or more proposed site-specific, TMDL-specific, or state-wide numeric water quality-based effluent limitations, related to impaired waters as well as any quality requirements for this data (i.e. participation in the Discharge Monitoring Report Quality Assurance (DMR-QA) Study Program).

Task 1-B: Project Management and Administration

The contractor's responsibilities shall include regular coordination with the EPA's WACOR and technical expert(s) and DEQ staff to ensure preparation all work is compliant with state and Federal laws and regulations, and on a schedule, which meets the needs of Oregon DEQ and the period of performance for this contract. All support must be provided prior to November 30, 2020.

- a. **Kick-off Meeting:** An initial kick-off meeting for the contractor to meet with DEQ and the WACOR. The objective of the kickoff is to provide a review of the scope of permit writing tasks assigned to the contractor and discuss any preliminary issues. This meeting may take place in person or via video- or teleconference. The contractor shall prepare the agenda and meeting notes, and the agenda shall identify any information the contractor will need to receive from DEQ to begin work. The contractor shall submit the draft agenda to DEQ and the WACORs at least three business days prior to the meeting.
- b. **Coordination and Planning:** The contractor shall be available for routine communication, planning and coordination with DEQ and the WACORs. The contractor shall confirm in writing any significant decisions or agreements made during these interactions. The WACOR shall be copied on any communications between the contractor and DEQ. These interactions shall take place at least once a month (possibly as part of the Monthly Update Calls, see next), or as needed during normal business hours, via telephone, email, skype, video conferencing or in person.
- c. **Project Schedule:** Within 10 business days of the kick off meeting, the contractor shall develop a detailed project schedule for meeting task and WA deadlines for DEQ and WACOR review.
- d. **Bi-Weekly Status Emails:** The contractor shall provide brief, bi-weekly status updates to DEQ and the WACORs via email.

- e. **Monthly Update Calls:** The contractor shall participate in monthly update calls with DEQ and the WACOR(s) to detail progress on each active work project (permit), identify and correct problems, and provide feedback on permitting issues in individual areas. These calls shall be structured as an item-by-item review of the Progress Report.
- f. **Submission Requirements:** Other significant communications or submissions of work assignment deliverables shall be sent by e-mail to DEQ and the WACORs. Documents shall be in both .doc and .pdf file formats (for text) and shall be accessible, functional and free from computer viruses or other technology problems.

Task 1-C: 1200-Z Technical Support—Draft and Final Documents and Administrative Records

The contractor shall provide direct technical support to DEQ for the reissuance of the industrial stormwater general permit 1200-Z. In accordance with technical direction provided by the WACOR in consultation with DEQ, the contractor may be asked to provide the following services:

- technical services and analyses in support of 1200-Z reissuance including, but not limited to: water quality and TMDL evaluations, permit limit and benchmark analysis and/or development, development and/or analysis of monitoring and reporting requirements;
- develop draft and final technical document in support of 1200-Z reissuance;
- lead technical discussions, provide technical input, and document the proceedings at advisory committee meetings;
- assist DEQ staff develop responses to comments received during public comment period on all technical work completed by the contractor and used to support the draft 1200-Z industrial stormwater general permit;
- assist DEQ in the development of the fiscal impact statement required for 1200-Z reissuance

Preliminary work products shall primarily be in electronic and format. All documents shall be consistent with applicable Federal and State Oregon laws, regulations, and guidance, and conform to Oregon's style and formatting practices as directed in the permit and presentation templates supplied by Oregon DEQ. The contractor's technical support shall be in multiple forms including PowerPoint presentations, white papers, data summaries and other formats as needed and outlined in technical directives.

The contractor is expected to participate in the advisory committee meetings via phone and webinar and may be requested to attend one or two meetings in person such as the public hearing associated with the permit renewal and/or a presentation to the Environmental Quality

Commission. DEQ will analyze and consider all the input provided throughout the advisory committee process.

The schedule, order, and specific details of Task 1-B, 1-C, and their respective subtasks will be provided via written technical direction from the WACOR in consultation with DEQ.

Task 2: Training and Outreach—eReporting for Industrial Stormwater Permit Registrants

The Contractor shall provide training and outreach support to DEQ for implementing the federal eReporting/NetDMR requirements. Services and tasks may include, but are not limited to:

- Develop materials, plan logistics, and deliver five electronic reporting training workshops for permittees in various locations across Oregon, as determined by DEQ and in accordance with the EPA WACOR. The trainings shall be computer-lab-based and include hands-on assistance. Topics to be covered include how to create a Central Data Exchange (CDX) account and access DMRs; enter DMR data; sign, submit, and correct DMRs; and prepare DMR attachments.
- Develop a web-based presentation that DEQ can post to its electronic reporting website for as-needed training on stormwater permit electronic reporting.
- Provide a help desk service to augment DEQ's NetDMR Support Desk that can specifically address the needs of stormwater permit registrants. Support would include answering phone calls and emails to assist registrants with registering for CDX accounts, accessing DMRs in NetDMR, entering and submitting DMR data and attachments, and as-needed troubleshooting.

Correspondence with DEQ and the WACOR shall primarily be in electronic format. All documents shall be consistent with applicable Federal and State Oregon laws, regulations, and guidance, and conform to Oregon's style and formatting practices as directed in the permit and presentation templates supplied by Oregon DEQ.

The schedule, order, and specific details of Task 2 and its subtasks will be provided via written technical direction from the WACOR in consultation with DEQ.

8. QUALITY ASSURANCE

This work assignment will involve the use of environmental data. The contractor shall follow the s-QAPP and contract-level QAPP as well as EPA QAPP guidance R-5 and G-5 for the use of environmental data necessary for permit development and/or revisions or response to comments.

9. REPORTING REQUIREMENTS

The contractor shall inform the WACOR and DEQ of progress as needed, and immediately inform the WACOR and DEQ of any problems that may adversely affect the progress and completion of this WA. The monthly report shall include Quality Assurance progress.

The contractor shall notify the WACOR and the CO when expenditures of 75% of the WA LOE or funding are reached. Monthly expenditures by task shall be reported to the WACOR in the invoice.

All final publications must be 508 compliant and adhere to EPA's Information Quality Guidelines.

Industrial Stormwater Program

Appendix B

Advisory Committee Meeting No. 2

Wednesday, Sept. 4, 2019

EPA's 1991 Four-Tier Permitting Strategy



State of Oregon
Department of
Environmental
Quality

Industrial Stormwater

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*DEQ is a leader in
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enhancing the quality of
Oregon's air, land, and
water.*

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STORM WATER IMPLEMENTATION PACKAGE

PROPOSED RULE AND DRAFT GENERAL PERMITS

A SUMMARY

United States Environmental Protection Agency

July, 1991

I. BACKGROUND

The 1972 amendments to the Federal Water Pollution Control Act (FWPCA, also referred to as the Clean Water Act or CWA), prohibited the discharge of any pollutant to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Efforts to improve water quality under the NPDES program have focused traditionally on reducing pollutants in discharges of industrial process waste water and from municipal sewage treatment plants. Efforts to address storm water discharges under the NPDES program have focussed primarily on discharges from ten industry categories with effluent limitations for storm water.

In response to the lack of comprehensive NPDES requirements for storm water discharges via point sources, Congress amended the CWA in 1987 to require the Environmental Protection Agency (EPA) to establish phased NPDES requirements for storm water discharges. In response to these requirements, EPA published initial permit application requirements for storm water discharges associated with industrial activity, and discharges from municipal separate storm sewer systems serving a population of 100,000 or more on November 16, 1990 (55 FR 47990).

The rulemaking defined the term "storm water discharge associated with industrial activity" in a comprehensive manner to address storm water discharges from eleven classes of facilities. In addition, the rulemaking established individual and group application requirements for these discharges.

Addressing storm water discharges associated with industrial activity under the NPDES program significantly expanded the scope of the NPDES program. EPA has developed the NPDES storm water implementation package to address a number of issues associated with the implementation of the NPDES requirements for storm water discharges associated with industrial activity.

II. ENVIRONMENTAL IMPACTS

Pollutants in storm water discharges from many sources are largely uncontrolled. The "National Water Quality Inventory, 1988 Report to Congress" provides a general assessment of water quality based on biennial reports submitted by the States under Section 305(b) of the Clean Water Act. The Report indicates that of the rivers, lakes, and estuaries that were assessed by States (approximately one-fifth of stream miles, one-third of lake acres and one-half of estuarine waters), roughly 70 to 75% are supporting the uses for which they are designated. The Assessment concludes that diffuse sources of pollution appear to be increasingly important contributors of use impairment as discharges of industrial process wastewaters and municipal sewage plants come increasingly under control and intensified data collection efforts provide additional information.

In developing the National Water Quality Inventory, the States identified a number of major sources of pollution, including, separate storm sewers, construction, waste disposal, and resource extraction, which correlate well with categories of facilities addressed by the regulatory definition of "storm water discharge associated with industrial activity".

III. SUMMARY OF THE PROPOSAL

The NPDES storm water implementation notice addresses a number of issues associated with the implementation of permit requirements for storm water discharges associated with industrial activity. The implementation notice requests public comment on four major areas:

- 1) Guidelines for a preliminary permitting strategy for storm water discharges associated with industrial activity;
- 2) Proposed regulatory modifications addressing annual monitoring requirements for storm water discharges associated with industrial activity;
- 3) Proposed regulatory modifications addressing notice of intent requirements for general permits; and
- 4) Draft baseline general permits for storm water discharges associated with industrial activity in the 12 States and 6 territories which do not have authorized State NPDES programs and 20 additional States for storm water discharges from Indian Tribes or Federal facilities.

IV. STRATEGY FOR PERMIT ISSUANCE

EPA is developing a flexible strategy for issuing permits for storm water discharges associated with industrial activity. The Strategy establishes two major components, a framework for developing permitting priorities and a framework for the development of State Storm Water Permitting Plans.

The Agency believes that most permitting activities for storm water discharges associated with industrial activity can be described in terms of the following four classes of activities:

- o Tier I - Baseline Permitting: One or more general permits will be developed to initially cover the majority of storm water discharges associated with industrial activity;
- o Tier II - Watershed Permitting: Facilities within watersheds shown to be adversely impacted by storm water discharges associated with industrial activity will be targeted for

individual or watershed-specific general permits.

- o Tier III - Industry-Specific Permitting: Specific industry categories will be targeted for individual or industry-specific general permits; and
- o Tier IV - Facility-Specific Permitting: A variety of factors will be used to target specific facilities for individual permits.

These four classes of activities will be implemented over time and will reflect priorities within given States. In most States, Tier I activities, issuance of baseline permits, will be the initial starting point. As priorities and risks within the State are evaluated, classes of storm water discharges or individual storm water discharges will be identified for Tier II, III or IV permitting activities.

The long-term permitting strategy also provides guidance for the development of State storm water permitting plans. These plans will serve as a mechanism to provide public participation and ensure appropriate implementation of storm water permitting activities within the various States.

Relationship Between Municipalities and Permit Issuing Agencies

EPA anticipates that a large percentage of storm water discharges associated with industrial activity discharge through municipal separate storm sewer systems. The Agency is in the process of initiating permit issuance efforts for discharges from municipal separate storm sewer systems serving a population of 100,000 or more. These permit issuance efforts will ensure municipal cooperation in efforts to control pollutants discharged through these municipal separate storm sewer systems.

The implementation notice clarifies EPA policy on the development of complementary control strategies for storm water discharges associated with industrial activity between operators of municipal separate storm sewer systems and permit issuing Agencies. The Agency intends to coordinate requirements in permits for storm water discharges associated with industrial activity with efforts to develop municipal storm water management programs in permits for discharges from municipal separate storm sewer systems serving a population of 100,000 or more. Under this coordinated effort, municipal permittees will have a major role in implementing programs to control pollutants from storm water associated with industrial activity which discharges through their municipal separate storm sewer.

V. DISCHARGE MONITORING REPORTS

The existing NPDES regulations at 40 CFR 122.44(i)(2)

provide that requirements in permits to report monitoring results are to be established on a case-by-case basis to ensure compliance with permit limitations, but that the requirements to report monitoring results should in no case be less than once a year.

The draft proposal requests comments on six options for addressing this issue ranging from retaining the minimum requirement of annual submittal of discharge monitoring reports to providing for case-by-case monitoring conditions with no minimum requirement to monitor or report. The draft proposal favors amending the regulation to provide, at a minimum, that permits for storm water discharges require annual sampling (without reporting) which would be retained by the discharger unless the information was requested in a permit or by the Director. Under the option favored in proposal, permits for storm water discharges from oil and gas operations must either require annual sampling (without reporting) or, in lieu of sampling, a Professional Engineer's certification attesting that good engineering practices were being employed to meet appropriate permit conditions.

VI. NOTICE OF INTENT REQUIREMENTS

EPA anticipates that general permits will play an important role in efforts to issue permits for storm water discharges associated with industrial activity. In addition, general permits provide a valuable tool for permitting many other classes of non-storm water discharges.

The NPDES regulations exclude persons covered by general permits from requirements to submit individual permit applications. Currently, conditions for notification of intent (NOI) to be covered by a general permit are established in permits on a case-by-case basis. To encourage the use of general permits and to ensure that general permits provide the appropriate programmatic framework, the Agency is proposing to modify the regulatory framework for general permits to provide minimum requirements for notices of intent to be covered by general permits. The notice also requests comments on whether it would be appropriate to exclude certain classes of storm water discharges from NOI requirements, such as those from oil and gas operations.

Under the proposed regulatory change, the minimum requirements for notice of intent include: the legal name and address of the owner or operator; the facility name and address; type of facilities or discharges; the receiving stream(s); and such other information as is reasonably necessary to ascertain whether the discharger (or treatment works treating domestic sewage) should be included under the terms of the general permit as specified in the final general permit.

VII. DRAFT GENERAL PERMITS

The storm water implementation package also provides notice for draft general permits for storm water discharges associated with industrial activity in 12 States (MA, ME, NH, FL, LA, TX, OK, NM, SD, AZ, AK, ID), and six Territories (District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands) without authorized NPDES State programs; on Indian lands in AL, CA, GA, KY, MI, MN, MS, MT, NC, ND, NY, NV, SC, TN, UT, WI, and WY; located within federal facilities and Indian lands in CO and WA; and located within federal facilities in Delaware.

Major components of the draft general permits for storm water discharges associated with industrial activity include:

- o Notice of Intent (NOI) requirements
- o Prohibitions;
- o Requirements to develop and implement storm water pollution prevention plans;
- o Effluent limitations for two classes of discharges; and
- o Monitoring requirements.

Dischargers which submit an NOI to be covered by the general permit are generally not required to submit an individual permit application or participate in a group application. The burdens to dischargers of submitting an NOI are significantly less than the burdens associated with submitting an individual application or participating in a group application. The NOI requirements of the general permit only address general information and do not require the collection of monitoring data. EPA intends to have NOIs associated with permits in a number of Regions and authorized NPDES States sent to a centralized address. Optical character readers will be used to process the NOIs. Lists of facilities covered under a general permit will then be provided to each Region and State for tracking and enforcement purposes. This will greatly reduce the administrative burdens on Regions and States.

The general permit prohibits the discharge of storm water which is mixed with a source of non-storm water where the non-storm water discharge is not otherwise authorized by a different NPDES permit. The draft general permit also prohibits discharges that contain a hazardous substance in excess of reporting quantities established at 40 CFR 117.3 or 40 CFR 302.4. Both

classes of discharges which are not authorized by this general permit are more appropriately covered by individual permits or other general permits.

The draft general permit contains effluent limitations for two classes of discharges, coal pile runoff and for storm water associated with industrial activity that comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals; and for truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals at SARA Title III, Section 313 facilities.

All facilities covered by the general permit must prepare and implement a storm water pollution prevention plan. The permit addresses tiered sets of pollution prevention plan requirements for a number of categories of industries: construction activities; baseline requirements for all industries except construction activities; special requirements for storm water discharges associated with industrial activity to large and medium municipal separate storm sewer systems; and special requirements for facilities with outdoor salt storage piles. In addition, comments are requested on two options for special requirements for certain facilities subject to SARA Title III, Section 313. Under Option A, SARA Title III, Section 313 facilities with storm water associated with industrial activity that comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals; and for truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals at SARA Title III, Section 313 facilities would be subject to special spill prevention and containment requirements and an effluent limitation. Under Option B, such facilities would remain subject to the effluent limitation, but would not be subject to special spill prevention and containment requirements.

Most dischargers covered by the permit must conduct annual monitoring of eight conventional parameters. Facilities subject to these 'baseline' monitoring requirements are subject to record keeping requirements, but generally are not required to report monitoring data to EPA. Industry specific semi-annual monitoring and reporting requirements are established for storm water discharges associated with industrial activity from six classes of industries: SARA Title III, Section 313 facilities; primary metal facilities; land disposal units; wood treatment facilities (wood preservers) using chlorophenolic/creosote formulations; wood treatment facilities (wood preservers) using arsenic/chromium preservatives; and coal pile runoff. Operators of contaminated storm water discharges associated with industrial activity from oil and gas exploration and production operations and from inactive mining operations where a past or present mine operator cannot be identified have the option of either monitoring their storm water discharges associated with

industrial activity annually or, in lieu of the monitoring, a facility may have a Registered Professional Engineer certify that a storm water pollution plan has been prepared and is being implemented in accordance with the requirements of the permit.

Industrial Stormwater Program

Appendix C

Advisory Committee Meeting No. 2

Wednesday, Sept. 4, 2019

2009-2011 Advisory Committee Process, Notes



State of Oregon
Department of
Environmental
Quality

Industrial Stormwater

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State of Oregon
Department of Environmental Quality

**Industrial Stormwater Advisory Committee
Meeting 8- April 20, 2010**

**Jenine Camilleri, Stormwater Coordinator
Surface Water Management, Water Quality Division**

Subject: Discharges to Impaired Waterbodies needing TMDLs

Background:

At the February Industrial Stormwater advisory committee meeting, we discussed options/considerations for developing new requirements for discharges to impaired waterbodies needing TMDLs. DEQ presented the following options for facilities that have impairment pollutants present in their discharge:

- Meet numeric effluent limits in the new general permits at the end of the pipe.
- Conduct more rigorous monitoring such as collecting composite grab samples on a quarterly basis.
- Install more rigorous BMPs such as treatment BMPs to address the pollutant(s) of concern.

DEQ received a wide variety of feedback from the advisory committee on these options. Overall, the committee thought that facilities should conduct more monitoring, but had additional questions about whether the agency should develop numeric effluent limits. In regards to developing numeric effluent limits, some committee members expressed that the agency should use the acute criteria rather than the human health criteria.

Based on that feedback, DEQ further evaluated whether the agency should require facilities to meet numeric effluent limits and if so, what water quality criteria the agency would use to develop the limits. To assist with this evaluation, DEQ researched the water quality criteria that are used in Oregon, Washington and EPA's permits to develop stormwater benchmarks or numeric effluent limits.

EPA's permit:

Under EPA's permit, typically the acute, aquatic life, freshwater criteria are used as the basis for the stormwater benchmark concentrations in the permit, if a water quality standard exists for the specific pollutant parameter.¹ EPA states that the acute criteria are more appropriate than the chronic criteria given the intermittent nature of these discharges and typical high ambient flows associated with storm events. Where no acute criteria are established for pollutant benchmarks, EPA uses the chronic, aquatic life, freshwater criteria.

EPA does not have water quality based numeric effluent limits in the permit. EPA states that numeric effluent limits are not always feasible for stormwater discharges given these discharges are highly intermittent, usually characterized by high flows occurring over short time intervals and carry a wide variety of pollutants whose source, nature and extent varies. Certain facilities

¹ Where EPA established benchmarks based on water quality standards, the agency applied the acute criteria ten times, the chronic criteria four times (arsenic, selenium, iron, lead), and the human health criteria once (antimony).

are required to meet technology based numeric effluent limits due to stormwater Effluent Limit Guidelines promulgated by EPA.

Washington's permit:

Under the Department of Ecology's permit, typically the acute water quality criteria are used as well for the basis of the stormwater benchmark concentrations. Ecology also requires certain facilities that are discharging to impaired waterbodies needing TMDLs to meet water quality based numeric effluent limits.² These limits are based on the acute criteria. Ecology states that because most human health-based criteria are based on lifetime exposures, direct comparisons of receiving water criteria with pollutant concentrations in intermittent stormwater discharges may not be appropriate. Also given the high variation in stormwater pollutant concentrations, both between storms and during a single storm, it makes the application of human health criteria to stormwater problematic. Certain facilities are required to meet technology based numeric effluent limits due to stormwater Effluent Limit Guidelines promulgated by EPA.

Oregon's permit:

In Oregon's permits, DEQ typically applies the acute, aquatic life, freshwater criteria as the basis of the stormwater benchmark concentrations. Under the new permits, DEQ is developing water quality based benchmarks for copper, lead and zinc that will be based on the acute criteria as well. We currently do not have water quality based numeric effluent limits in our permit. Certain facilities are required to meet technology based numeric effluent limits due to stormwater Effluent Limit Guidelines promulgated by EPA.

Recommendation: Apply the Aquatic Life, Freshwater Criteria

DEQ is recommending that the agency apply the aquatic life, freshwater criteria (acute or chronic) to industrial stormwater discharges rather than the human health criteria. DEQ is basing this decision on the following reasons:

- This approach is consistent with the methodology that EPA used to establish the benchmarks in the Multi-Sector General Permit.
- Storm events vary in intensity and duration (i.e., can be isolated or part of a storm event pattern). Typically, stormwater discharges are intermittent and result in short term exposures. The human health criteria are based on lifetime exposures. As a result, it is difficult to apply the human health criteria to a limited duration stormwater discharge.

Impairment Pollutants:

DEQ evaluated the 2004/2006 Integrated Report for 303(d) listed parameters that need TMDLs. Please see the chart below that identifies the impairment pollutants and applicable water quality standards or toxic criteria on Tables 20 or 33(a). DEQ has aquatic life criteria for the majority of the toxic pollutants. However, there are approximately 10 toxic pollutants without aquatic life criteria and DEQ will use the human health criteria for these pollutants. DEQ did not include temperature or biological criteria in the chart because EPA has exempted these parameters for the impairment pollutant monitoring requirements. DEQ included the quantitation limits for toxic pollutants in the chart. In instances where the quantitation limit is above the water quality criteria, the quantitation limit will be used to analyze the stormwater monitoring results.

² Facilities must meet numeric effluent limits if they discharge to waterbodies listed for the following pollutants: turbidity, TSS, pH, phosphorus, ammonia, copper, zinc, lead, fecal coliform bacteria, pentachlorophenol and mercury.

Recommended Approach: Additional monitoring and Effective BMPs

DEQ recognizes that there are many challenges with developing water quality based numeric effluent limits in a general permit. Rather than requiring facilities to meet numeric effluent limits, DEQ is recommending that facilities that have impairment pollutants present in their discharge in concentrations about the water quality standards/criteria (please see chart below) will conduct additional monitoring and implement BMPs to reduce the impairment pollutants in their discharge below these standards/criteria. Facilities will be required to install the most effective BMPs to control the pollutants of concern in their discharge, which will result in additional protection and improvement of these impaired waterbodies.

DEQ is proposing that following requirements for discharges to impaired waterbodies needing TMDLs:

- ***Step 1: Initial Screening:***
 - During the first year of the permit, facilities will screen for the impairment pollutants at each outfall that discharges to the impaired waterbody. Facilities must collect 4 composite grab samples.
 - Are the impairment pollutants present in the discharge in concentrations above the standards/criteria?
 - *No:* Maintain current BMPs and continue monitoring (collect 4 composite grab samples each year). If subsequent monitoring in years 2 through 4 of the permit establishes that impairment pollutants are present in the discharge above the standards/criteria, follow Step 2 below.
 - *Yes:* Follow Step 2 below if any of the sample results are above the standards/criteria.
- ***Step 2: Implement Most Effective BMP***
 - Conduct a comprehensive review of BMPs to address the pollutant(s) of concern. Select the most effective BMP proven to reduce the impairment pollutants in their discharge below the standards/criteria. Facilities may not consider economic constraints as a basis for selecting a less effective BMP.
 - Within 90 days of completing the screening monitoring in Step 1 above, facilities must submit an updated Stormwater Pollution Control Plan. Facilities must identify in the plan the specific BMPs that will be implemented, the anticipated BMP effluent concentrations, and the implementation schedule that includes the date the BMPs will be initiated and completed. DEQ will review this information for completeness, but will not verify the efficacy of the BMPs. DEQ is considering requiring facilities to have this portion of the plan stamped by a licensed professional engineer, certified engineering geologist, hydrogeologist, or certified professional in stormwater quality.
- ***Step 3: Monitoring***
 - Conduct composite grab samples 4 times per year to ensure that the BMPs are working effectively. If monitoring results are above the standards/criteria, within 14 days of receiving monitoring data, facilities must investigate the cause of the elevated pollutant levels, the reason the BMPs are not reducing the pollutant concentrations in the discharge and determine the appropriate corrective actions. Facilities must document in their annual report the corrective actions taken. If after taking these corrective actions, subsequent monitoring results establish that the BMPs are not effective at reducing the pollutants concentrations in the discharge (i.e., spikes of high pollutant concentrations or a pattern of concentrations above standard/criteria), DEQ can require facilities to obtain an individual permit.

Toxic Impairment Pollutant	Toxics Criteria (µg/L)	Criteria Source	Quantitation Limit (µg/L)	Note
Aldrin	3	acute	0.01	
Ammonia _a	see note	aquatic	1000	pH and temperature dependent aquatic life criteria
Arsenic (tri)	360	acute	50	
Arsenic _a	0.0022, 0.0175	HH	0.05	
Beryllium _a	0.0068, 0.117	HH	0.1	
Cadmium _a	3.9 _b	acute	0.1	
Chlordane	2.4	acute	0.1	
Chlorpyrifos	0.083	acute	0.01	
Chromium (hex) _a	16	acute	10	
Copper _a	18 _b	acute	10	
DDT	1.1	acute	0.01	
DDT Metabolite (DDE)	0.00022, 0.00022	HH	0.01	
Dichloroethylenes	330, 7100	HH	0.5	
Dieldrin	0.24	acute	0.01	
Guthion	0.01	chronic	1	
Heptachlor	0.52	acute	0.01	
Iron _a	1000	chronic	100	
Lead _a	82 _b	acute	5	
Manganese _c	50, 100	HH	2	DEQ is proposing to withdraw HH criteria for consumption of water and aquatic organisms. HH criteria for fish consumption will apply to marine waters. DEQ is proposing that facilities will not be required to monitor for this pollutant under new permits unless they discharge to marine waters.
Mercury _a	2.4	acute	0.01	Specific quantitation limits for sources in the Willamette Basin based in the Willamette TMDL.
Nickel _a	1400 _b	acute	10	
PCB	2	acute	0.5	
Pentachlorophenol	0.27, 3	HH	2	

Toxic Impairment Pollutant	Toxics Criteria (ug/L)	Criteria Source	Quantitation Limit (ug/L)	Note
Polynuclear Aromatic Hydrocarbons	see note	HH	1	Different values of human health criteria associated with the various PAH chemicals.
Silver _a	4.1 _b	acute	1	
Tetrachloroethylene	0.69, 3.3	HH	0.5	
Trichloroethylene	2.5, 30	HH	0.5	
Zinc _a	120 _b	acute	5	
Other Impairment Pollutants	Water Quality Standard/Criteria			
Aquatic weeds/algae	No water quality standard. Phosphorus and nitrogen as surrogate. MSGP phosphorus benchmark is 30 mg/L. Additional discussion is needed on nitrogen analysis and concentration.			
Dissolved oxygen	No water quality standard. BOD as surrogate. MSGP BOD benchmark is 30 mg/L.			
E. coli _a	Bacteria standard is 406 organisms per 100 mL.			
Fecal coliform	E.coli is indicator. Bacteria standard of 406 organisms per 100 mL.			
Nitrates	Human health criteria for water and organism consumption: 10 mg/L; quantitation limit is 0.1 mg/L			
pH _a	Basin specific standards: Willamette Basin 6.5 to 8.5 s.u.			
Phosphorus	Basin specific standards based on loading.			
Sedimentation	Narrative water quality standard. TSS as surrogate. MSGP TSS benchmark is 100 mg/L.			
Turbidity	TSS as surrogate. MSGP TSS benchmark is 100 mg/L.			

a - MSGP benchmark parameters.

b - Toxicity is hardness dependent. The value shown is based on a hardness of 100 mg/L.

µg/L = ug/L = microgram per liter; 1 µg/L = 0.001 mg/L

Shaded values - quantitation limit is greater than criteria

Criteria Source:

- **acute** - acute exposure criteria for the protection of fresh water aquatic life
- **chronic** - chronic exposure criteria for the protection of fresh water aquatic life
- **HH** - human health criteria based on consumption of water and aquatic organisms (first value) and consumption of fish only (second value)

Quantitation Limits:

- The quantitation limit is the method reporting limit (MRL), the lowest concentration associated with a certain degree of accuracy and precision.
- Quantitation limit values are based on DEQ's survey of laboratories and represent readily achievable quantitation limits by most state laboratories.

State of Oregon
Department of Environmental Quality

**Industrial Stormwater Advisory Committee
Meeting 9- June 15, 2010**

**Jenine Camilleri, Stormwater Coordinator
Surface Water Management, Water Quality Division**

Subject: Discharges to Impaired Waterbodies needing TMDLs

Background:

At the April 2010 Industrial Stormwater Advisory Committee meeting, we discussed recommendations for developing new requirements for discharges to impaired waterbodies needing TMDLs. DEQ presented the following approach:

- During the first year of the permit, facilities will screen for the impairment pollutants on the 303(d) list at each outfall (except substantially similar outfalls) that discharges to the impaired waterbody. The screening levels will be based on the aquatic life, freshwater criteria (acute or chronic). Where there is no aquatic life criterion for an impairment pollutant, DEQ will use the human health criterion. Facilities must monitor 4 storm events using a grab composite sampling method. Facilities can obtain a monitoring after the first monitoring year if the pollutant(s) is not detected above background natural levels or is not expected to be present above background levels.
- Facilities that have impairment pollutants present in their discharge in concentrations about the water quality standards/criteria will implement the most effective BMPs to reduce the impairment pollutants in their discharge below these standards/criteria. Within 90 days of receiving the results from the first year of monitoring, these facilities must submit an updated Stormwater Pollution Control Plan (plan) that describes the specific BMPs that will be implemented, the anticipated BMP effluent concentrations, and the implementation schedule that includes the date the BMPs will be initiated and completed. The plan must be stamped by a licensed professional engineer, certified engineering geologist, hydrogeologist, or certified professional in stormwater quality.
- Facilities will monitor their discharge by collecting 4 grab composite samples each year for the remainder of the permit term, unless they have obtained a waiver (pollutant was not present or detected above background natural conditions).

DEQ received a wide variety of feedback from the committee. Overall, the committee thought DEQ was going in a good direction, but the approach was very stringent considering facilities have not monitored for these pollutants before and in comparison to the benchmark approach (where facilities have previously been monitoring and adjusting their BMPs). Specifically, the committee raised the following concerns:

- Monitoring should be waived after some time if the facility can show that the impairment pollutant is not present in the discharge.
- DEQ should take the geometric mean of four samples for triggering the requirement to implement more effective BMPs rather than basing this decision on one sampling event.
- If there is not an acute criterion for a specific pollutant then DEQ should not apply a different criterion (chronic or human health).
- There should be a deadline for BMP installation because there is an economic advantage to defer costs.

Recommended Changes to approach:

Based on the committee's feedback, we consulted with the DEQ regional stormwater managers and the TMDL program about potential changes to the recommended approach related to the monitoring requirements and the trigger for implementing additional BMPs to address impairment pollutants that are present in a facility's discharge. As a result, DEQ is proposing the following requirements for discharges to impaired waterbodies needing TMDLs:

- **Step 1:** During first year or two under the new permits, facilities will determine if impairment pollutants are present in their stormwater discharge.¹ If pollutants are present, facilities will evaluate data to see if there are trends and investigate the potential sources of the pollutants. Facilities should focus on eliminating pollutant sources first, if possible, and then evaluate other control measures.
 - Facilities will screen for the impairment pollutants at each outfall that discharges to the impaired waterbody (except substantially similar outfalls). The screening levels will be based on the aquatic life, freshwater criteria (acute or chronic). If a pollutant does not have an aquatic life criterion, DEQ will use the human health criterion.
 - Facilities must monitor 4 storm events per year using the grab composite method.
 - Facilities may discontinue this monitoring after the first year if:
 - A pollutant is not present in 4 consecutive sampling events above the water quality standard/criteria or quantitation level; OR
 - A pollutant is not detected above background natural levels or is not expected to be present above background levels.² Provide documentation with the DMR, including data and/or studies, supporting why the presence of the pollutant is caused solely by natural background sources.
- **Step 2:** At the end of the 2nd monitoring year, determine if impairment pollutants are present in discharge in concentrations above the water quality criteria/standards. This evaluation is based on the geometric mean average of the monitoring data collected over the last 2 years.
 - *No:* Maintain current BMPs and monitor impairment pollutants at each outfall that discharges to the impaired waterbody (except substantially similar outfalls) once per year for the remainder of the permit term using the grab sampling method.³
 - *Yes:* Follow Step 3.
- **Step 3:** Implement BMPs to control impairment pollutant(s)
 - Facilities will have 2 years to evaluate the appropriate BMPs to address the pollutant(s) of concerns, submit an updated plan and implement the new BMPs.
 - First, conduct a comprehensive review of BMPs available to address the impairment pollutant(s) present in their discharge and select the most effective BMP proven to control or eliminate the presence of the pollutant(s).
 - Second, submit an updated plan within 6 months of the end of the monitoring year (by December 31st) that includes a description of the specific BMPs that will be implemented, the anticipated BMP effluent concentrations, and the implementation schedule that includes the date the BMPs will be initiated and

¹ Facilities are not required to monitor for certain impairment pollutants (e.g., temperature, hydrologic modifications, pollutant for which no standard analytical method exists).

² EPA's permit does not include legacy pollutants from an earlier activity on the site, or pollutants in run-on from neighboring sources, which are not naturally occurring, as natural background pollutants.

³ Facilities may not have to monitor all the impairment pollutants on the 303(d) list if they obtain a monitoring waiver for some pollutants.

completed. The plan must be stamped by a registered/licensed professional engineer. DEQ will review this information for completeness, but will not verify the efficacy of the BMPs.

- Third, implement the BMPs within two years (i.e., no later than the end of the 4th monitoring year).
- Fourth, monitor impairment pollutants at each outfall that discharges to the impaired waterbody (except substantially similar outfalls) four times per year (years 3 through 5) using the grab sampling method.

Reasoning behind Changes:

Monitoring waiver

DEQ evaluated whether to allow certain facilities to obtain a monitoring waiver after the first monitoring year if the pollutants are not present in their discharge or at levels that are below water quality criteria/standards. To be consistent with EPA's permit, facilities will be required to monitor their discharge for impairment pollutants during the first year of the permit. EPA allows facilities to stop monitoring for impairment pollutant(s) after the first monitoring year, if they are not detected above background natural levels or are not expected to be present above background levels. DEQ is proposing the same language in the new permits. Also, facilities may obtain a monitoring waiver after the first monitoring year if the impairment pollutant(s) are not present in 4 consecutive sampling events above the water quality criteria/standards or quantitation level. This language is the same as the monitoring waiver requirements in DEQ's current permits that apply to benchmark monitoring.

TMDL development:

DEQ's intention with developing these requirements is to ensure that industrial facilities that are discharging impairment pollutants into a waterbody that is not meeting water quality standards are effectively controlling these pollutants. However, given that DEQ has not developed a Total Daily Maximum Loads (TMDLs) for these impaired waters, the agency has not assessed industrial stormwater's contribution to the impairment of a given waterbody. At the last committee meeting, DEQ proposed that facilities monitor their discharge frequently to gather data that can be used to develop future TMDLs (i.e., monitor 4 storm events per year using the grab composite method).

After the meeting, we discussed with the TMDL program whether the proposed monitoring would assist with evaluating industrial stormwater when future TMDLs are developed. Given the spectrum of impairment pollutants and potential pollutant pathways, it is difficult for the agency to know at this time whether this data could be used to develop TMDL Waste Load Allocations. DEQ would likely use this data to characterize whether industrial stormwater facilities discharging to a specific waterbody are contributing as a group to the impairment. DEQ does not need a robust data set to conduct this evaluation (e.g., if facilities monitored their discharge once per year that may be enough data for TMDL source characterization purposes). As a result, DEQ is proposing that facilities monitor their discharge less frequently. For example, some facilities will be allowed to reduce the amount of monitoring after the second monitoring year from 4 grab composite samples per year to one grab sample per year. In addition, some facilities may obtain a monitoring waiver after the first year of monitoring.

Trigger for Implementing Additional BMPs

Given that these are new requirements and facilities have not monitored for impairment pollutants in the past, DEQ modified its approach for when facilities will be required to implement additional BMPs if impairment pollutants are present in their discharge in

concentrations above water quality criteria/standards. Facilities will need time to evaluate whether the impairment pollutants are present in their discharge and determine the source of the pollutants. This data will assist facilities in determining the appropriate BMPs to control or eliminate the presence of the pollutants in their discharge.

DEQ is proposing that facilities collect up to two years of monitoring data to evaluate whether these pollutants are present in their discharge.⁴ DEQ is also proposing that facilities collect grab composite samples of their discharge to get a better representation of the pollutants in their discharge during a storm event. At the end of the second monitoring year, facilities will determine if the impairment pollutants are present in concentrations above the water quality criteria/standards based on a geometric mean calculation of the data. Using the geometric mean average allows DEQ to focus on those facilities that consistently have impairment pollutants present in their discharge in concentrations above water quality criteria/standards.

DEQ is proposing that facilities that have impairment pollutants present in their discharge below water quality criteria/standards based on the geometric mean evaluation monitor their discharge once per year for the remainder of the permit term. This amount of monitoring will assist DEQ in developing future TMDLs and is consistent with the requirements in EPA's permit.

BMP Requirements

For those facilities that have impairment pollutants present in their discharge in concentrations above water quality criteria/standards based on the geometric mean evaluation, DEQ is proposing that these facilities implement the most effective BMPs to control or eliminate the presence of the pollutant.

Given that these are new requirements and DEQ has not evaluated whether industrial stormwater is contributing to the impairment of the waterbody, DEQ is not requiring these facilities to ensure that the BMPs will reduce the presence of the pollutants to concentrations below water quality criteria/standards. These facilities will be required to conduct a comprehensive review of BMPs available to address the impairment pollutant(s), estimate the anticipated BMP effluent concentrations in their plan and hire a registered/licensed professional engineer to stamp their plan.⁵ DEQ believes that these requirements will ensure that facilities will control or eliminate the impairment pollutant present in their discharge.

DEQ is evaluating options/considerations for situations where the most effective BMP is not economically achievable for certain facilities. DEQ has evaluated the following options:

- Facilities apply for an individual permit and may need to request a variance.
- Facilities continue to operate under the general permit and DEQ conducts an economic feasibility analysis. However, given the current budget concerns, DEQ does not believe the agency has the expertise or resources in the general permit program to conduct this evaluation.

⁴ Some facilities may not be required to collect two years of monitoring data if they obtain a monitoring waiver (i.e., pollutant is not present in 4 consecutive sampling events above the water quality criteria/standard or quantitation level, pollutant is not detected above background natural levels or is not expected to be present above natural background levels).

⁵ There are Oregon rules and regulations regarding Professional Engineers, including Board of Examiners; code of professional conduct, and grounds for suspension, reprimand, and revocation. The requirements for certified professionals in stormwater quality are focused on pre/post construction runoff and do not address industrial stormwater issues/BMPs.

DEQ is proposing a deadline for facilities to implement the additional BMPs. Facilities must implement the BMPs within two years. This will provide the facilities will adequate time to evaluate the BMPs on the market, conduct additional monitoring if necessary to determine the source of the pollutants and install the new BMPs.

DEQ is also proposing that these facilities continue to monitor for impairment pollutants four times per year (Years 3 through 5) using the grab sampling method to ensure the BMPs they choose will effectively control the impairment pollutants present in their discharge.

Revising Oregon's Industrial Stormwater General Permits Advisory Committee Meeting Notes

Meeting: Meeting 9- Benchmarks and Discharges to Impaired Waterbodies

Date: June 15, 2010

Location: DEQ-Headquarters, Portland

Attendees: Committee:

- Calvin Noling- StormwaterRx
- Eric Strecker- GeoSyntec
- Michael Campbell- Stoel Rives LLP on behalf of Oregon Industrial Stormwater Group
- Dorothy Sperry- Port of Portland
- Doug Pennington- Oregon Metals Industry Council
- Rick Fischl- Clean Water Services on behalf of OR Association of Clean Water Agencies
- Michael Pronold- City of Portland, Bureau of Environmental Services
- Jay Waldron- Glenwood Auto Parts
- Dan Mensher- Pacific Environmental Advocacy Center, on behalf of NEDC and Columbia Riverkeeper

DEQ: Jenine Camilleri, Paula Calvert, Rodney Weick and Annette Liebe

Benchmarks:

Paula Calvert discussed the dilution study DEQ conducted to evaluate whether the current dilution rate of five in the 1200-Z permit is appropriate.

The committee members provided the following comments:

- Michael Pronold asked why the presentation said DEQ evaluated 48 facilities and the memo stated 50 facilities. Paula responded that the memo had the wrong number. DEQ ultimately did not include 2 facilities in the study due to unique site specific issues.
- Eric Strecker questioned whether the streamflow was based on an average and if so, that does not account for situations when the stream flow may be elevated. Paula responded that the agency looked at streamflow for the entire rainy season (October through June).
- Eric Strecker commented that DEQ should plot the dilution versus the ratio of industrial sites, which may provide additional information about the facilities that discharge to watersheds that are less than five square miles.
- Michael Campbell questioned whether DEQ was proposing to use a flat rate of dilution (e.g., dilution rate of 5) or if the agency could use the results from the study on the various dilution rates and plug that information into the model. Erich Brandstetter explained that DEQ had not planned to plug the results into the model. Annette Liebe responded that DEQ will consider that suggestion.
- Michael Pronold questioned whether DEQ could have watershed specific benchmarks that take into consideration specific watershed issues. Annette Liebe responded that this a general permit approach so assumptions will have to be made. Michael also commented that the study was eye opening and appreciated the effort that DEQ made.
- Eric Strecker recommended that TMDL program should look at dilution for industrial stormwater when TMDLs are developed.

Discharges to Impaired Waterbodies: Jenine Camilleri provided the changes to recommended approach for facilities discharging to impaired waterbodies needing TMDLs based on feedback from the past committee meeting and additional DEQ discussions.

The committee members provided the following comments on the monitoring requirements:

- Calvin Noling commented that there should be an allowance for grab composite sampling requirements for facilities that cannot collect 3 subsamples. It could stop raining after 2 subsamples have been collected. More complicated sampling requirements lead to less sampling by the facilities. DEQ could propose that facilities collect one to four subsamples or encourage grab composite samples but don't require it.
- Michael Pronold commented that some facilities will use consultants or labs to collect grab composite samples which require more time and therefore greater cost.
- Eric Strecker recommended that DEQ make sure the facilities record how many subsamples that are collected.
- Rick Fischl asked why DEQ would require the samples to be collected 30 minutes apart instead of 15 minutes apart. A shorter time increment will cut down on the total amount of time required to collect samples and would make it more likely that facilities will submit the monitoring data.
- Dorothy Sperry commented that some facilities have more than one outfall to monitor.
- Calvin Noling commented that potential complications may arise in proportioning subsample volumes. What if one subsample has more volume than the others?
- Calvin Noling questioned whether DEQ will publish information/guidance on evaluating natural background conditions? Dorothy Sperry also commented that the committee needs to talk about background conditions at a future meeting. JC – Will discuss internally.
- Calvin Noling suggested that DEQ use a rolling geometric mean average. Some facilities may be so far above the standard that using a rolling calculation may push them into implementing additional BMPs before the 3rd year of the permit. This would also even out the workload and DEQ could address these facilities throughout the year rather at the end of the 2nd year of the permit.

The committee members provided the following comments on the BMP requirements:

- Rodney Weick recommended that DEQ allow Certified Engineering Geologist (CEG) along with Registered Professional Engineers to stamp the stormwater plans for facilities that are required to implement additional BMPs to address impairment pollutants. CEGs have the necessary expertise to review the plans.
- Calvin Noling questioned why a facility would start implementing additional BMPs in year 1 if they have 2 years to implement? Erick Strecker noted that some facilities in Washington have started after collecting 1 sample because they know the requirements will apply to them. Jenine Camilleri noted that if facilities have an indication that they are going to have to implement additional BMPs they can begin planning and implementing BMPs earlier than the 3rd year so that they will meet the 2 year deadline.
- Erick Strecker recommended that DEQ define most effective or most appropriate BMP standard. The most effective BMP would be getting a big tank and flash evaporate the stormwater so DEQ should use another word like most appropriate.
 - Calvin Noling commented that DEQ should be careful with wording because there is a risk of facilities selecting a BMP that does not have a proven track record.
 - Annette Liebe commented that it is difficult to articulate what is meant by the most effective BMP and requested suggestions. The goal of this requirement is to ensure that facilities are moving forward in improving water quality.

- Jessica Kruczek from Landau Associates recommended looking at scoring approach that the cleanup program uses to evaluate technologies. DEQ could develop guidance on scoring BMPs.
- Walt Cook from Water Environment Resources commented that EPA has guidance on analyzing BMPs that gets the bias out. DEQ should provide general guidance on expectation of how BMPs should be evaluated.
- Erick Strecker asked whether the most effective BMP could consider source control versus treatment. Jenine Camilleri responded that source control measures would be considered as most effective BMPs.
- Rick Fischl asked whether there are BMPs available to target the impairment pollutants. Jenine Camilleri responded that DEQ will be looking at BMP effectiveness and gathering information about a variety of BMPs that may address pollutants in industrial stormwater.

The committee members provided the following comments on the economic feasibility analysis:

- Michael Campbell commented that the economic analysis could apply to two different scenarios (1) facility that could spend \$1M to get to a certain result and (2) what is economically feasible for a mom and pop facility versus a big business.
- Michael Campbell commented that given the uncertainty of the listings and the fact that a TMDL has not been developed yet, could DEQ consider economic feasibility of implementing additional BMPs? Annette Liebe responded that DEQ could consider requesting the facilities conduct ambient monitoring to determine the relevance of the listing. Dan Mensher agreed that if a listing is based on one sample that additional samples should be collected.
- Dan Mensher commented that DEQ should ask "has a facility done enough", which requires an individual assessment of the facility. Annette Liebe commented that small businesses could spend over \$10,000 to obtain an individual permit where DEQ could conduct an individual assessment of their facility, but wouldn't this money be better spent on implementing BMPs to reduce pollution.
- Dan Mensher commented that could DEQ conduct an asset evaluation? Annette Liebe responded that this assessment would occur under an individual permit if the facility requested a variance.
- Dan Mensher commented that he is uncomfortable with the stormwater program conducting the analysis given its limited resources, which will undermine the program. Could DEQ develop a less expensive individual permit to analyze these issues, since it may take a lot of time and resources to evaluate what are the most effective BMPs for a given facility.
- Eric Strecker suggested that DEQ define mom and pop facilities. Dorothy Sperry commented that a business could be big and broke.
- Michael Campbell commented that this evaluation should be a simplified approach since TMDL is not developed and meeting water quality standards should be a target and the BMP could be aimed at that target.

The committee members provided the following comments on the overall approach:

- Jay Waldron supports the waiver requirements because money is spent to test stormwater and on pollution prevention so with a waiver that money can go back into the facility and the water is cleaner.
- Michael Pronold supports monitoring approach but also recommends guidance for facilities on collecting grab composite samples.
- Erick Strecker asked whether facilities will have to conduct same amount of monitoring in the next permit. Jenine Camilleri responded that it is difficult to anticipate what requirements

will be in the next permit. Rick Fischl commented that with the monitoring waiver facilities have to resample their discharge each permit cycle and that is a good approach.

- Erick Streckers commented that once BMPs are in place that facilities should reduce sampling to one time per year. Dan Mensher responded that facilities should continue to monitor discharge after the 2nd year of monitoring, may not need 4 samples but should be robust monitoring, since they know they have a problem and will need to confirm that the BMPs are working once they are in place.
- Walt Cook commented that it is difficult to recommend course of action given only 1 or 4 samples per year.
- Erick Strecker commented that facilities should be given a year to implement the BMPs unless they have permitting issues. Rodney Weick suggested the following language: implement the BMPs in one year and provide documentation as to why more time is needed. Doug Pennington commented that they may need more than one year due to financial planning/constraints. Dan Mensher suggested creating incentives to get BMPs implemented in one year

Follow-Up items:

- DEQ will evaluate how to define “most effective/appropriate BMPs”.
- DEQ will evaluate issues related to determining if pollutants are present due to background natural conditions.