Formal Draft Workshop Presentation

Sand & Gravel General Draft Permit Language

Carrie Graul
Sand & Gravel General Permit Writer
Water Quality Program
October 2015

DEPARTMENT OF
ECOLOGY
State of Washington

Permit History

National Pollution Discharge Elimination System (NPDES)

The Sand & Gravel Permit is both a NPDES and State Waste Discharge Permit.

Ecology first issued the Sand & Gravel General Permit in 1994.

Reasons to Revise the Permit

- Permit has been revised 5 times by 5 different permit writers
- The Permit is hard to read and understand
- Sampling requirements, inspection, and site map requirements are spread through multiple permit sections

NPDES Principles

- Every 5 years permits have to be reissued and at least as stringent as the permit before.
- The goal is to eliminate the discharge of pollutants into navigable waters.
- Ecology is required by law to evaluate the permit conditions to determine if additional or more stringent requirements need to be incorporated.

Clean Water Act Principles

- Discharge of pollutants to navigable waters is not a right. A permit is required to use public resources for wastewater disposal.
- Discharge permits limit the amount of pollutants to be discharged.
- Wastewater must be treated with the best treatment technology which is economically achievable – regardless of the condition of the receiving water.
- Effluent limits are based on treatment technology but more stringent limits must be imposed if the technology-based limits do not prevent violations of water quality standards in the receiving water.

State Waste Discharge Permit

- Chapter 90.48 RCW requires a permit to regulate discharges of pollutants or waste materials to waters of the state
- Designed to protect existing water quality and preserve beneficial uses of waters of the state
- Ensure that regulated discharges will not violate standards
  - Chapter 173-200 WAC Ground Water Quality
  - Chapter 173-201A WAC Water Quality for Surface Waters
  - Chapter 173-204 WAC Sediment Management Standards
- Provide all known, available and reasonable methods of prevention, control and treatment (AKART)

Public Process

Required by Law

- Public Notice of the Draft Permit
- 1 Public Hearing
- 30 Day Public Comment Period

Current Reissuance Period

- 8 Stakeholder Meetings
- Administrative Burden Reduction Project
- Preliminary Comment Period
  - All changes explained in comments
- Concrete Recycling Preliminary Comment Period
- Public Notice of Formal Draft
- 2 Public Hearings
- 45 Day Public Comment Period

S1. Permit Coverage

1st Paragraph of the 2010 Permit

"The coverage provided in this general permit is limited to the specific facilities identified in listed below and within the following *Standard Industrial Classification (SIC)* and *NAICS* Codes, and the cited Subparts of *40 CFR* Part 443, Effluent Limitations Guidelines for Existing Sources and Standards of Performance and Pretreatment Standards for New Sources for The Paving and Roofing Materials (Tars and Asphalt) *Point Source* Category, *40 CFR* Part 436, Mineral Mining and Processing *Point Source* Category and *40 CFR* Part 41, Cement manufacturing."

1st Paragraph of the Formal Draft Permit

"This general permit covers discharges from facilities in Washington State that conduct activities designated by one or more of the North American Industry Classification (NAICS) Codes or activities listed in Table 1."

S1. Permit Coverage

Revised Table 1 to only list the NAICS Codes

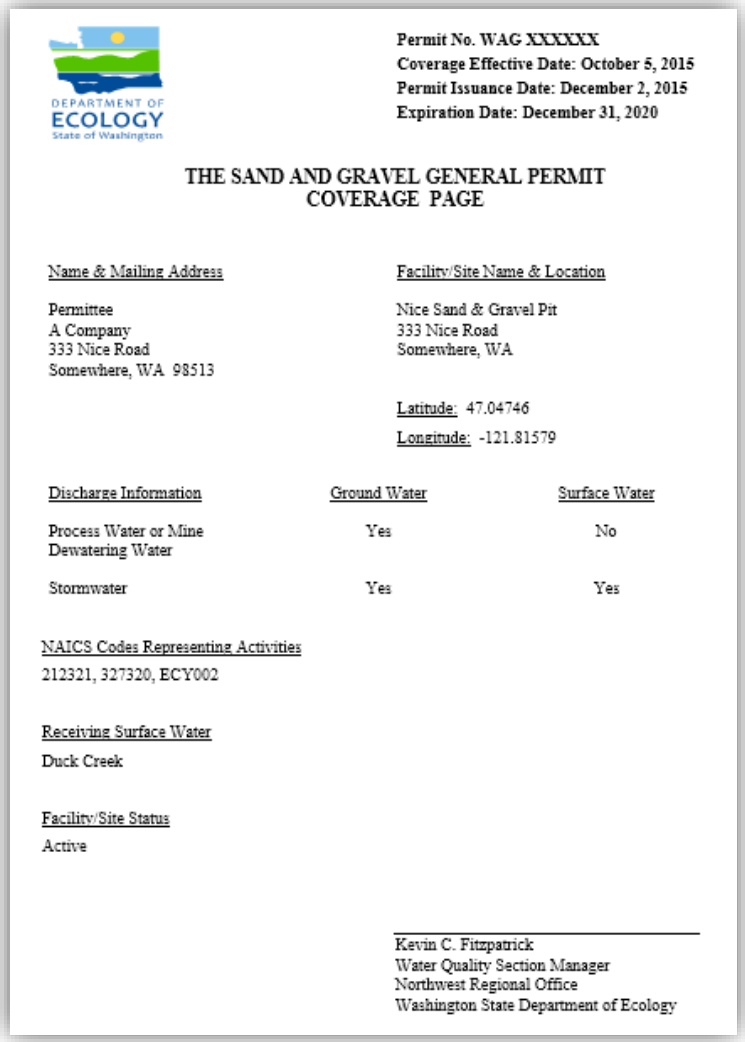
Revisions to include Ecology codes for concrete and asphalt recycling

Updated language regarding facilities in Indian Country

S1. E Authorization

Only authorized for the specific activities (NAICS / ECY codes) and discharge type (surface water or groundwater or both) that you apply for

Contact your permit manager if you want to modify your coverage



DEPARTMENT OF ECOLOGY
State of Washington

Permit No. WAG XXXXXX
Coverage Effective Date: October 5, 2015
Permit Issuance Date: December 2, 2015
Expiration Date: December 31, 2020

THE SAND AND GRAVEL GENERAL PERMIT
COVERAGE PAGE

Name & Mailing Address

Permittee
A Company
333 Nice Road
Somewhere, WA 98513

Facility/Site Name & Location

Nice Sand & Gravel Pit
333 Nice Road
Somewhere, WA

Latitude: 47.04746
Longitude: -121.81579

Discharge Information	Ground Water	Surface Water
Process Water or Mine Dewatering Water	Yes	No
Stormwater	Yes	Yes

NAICS Codes Representing Activities
212321, 327320, ECY002

Receiving Surface Water
Duck Creek

Facility/Site Status
Active

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

New Ecology Codes

Concrete recycling currently included under NAICS 327999	New code ECY002 for concrete recycling
Asphalt recycling currently included under 324121	New code ECY001 for asphalt recycling

New Ecology Codes

- NAICS doesn't have a specific code for concrete or asphalt recycling
- Focus on a specific industry segment instead of all related NAICS codes
- Allows gathering of compliance data
  - Shows consistent compliance of industry
  - Helps inform future permit decisions

Adding New Ecology Codes

- If adding recycling activities will result in a significant process change you need to go through SEPA and Public Notice
  - Significant process change: A change in the nature of discharge with respect to increase volume and type of concentrations of pollutants

Table 2: Effluent Limits

Type	NAICS Code (see Appendix A)	Discharge to:	pH Min	pH Max	Turbidity (NTU) Average Monthly	Turbidity (NTU) Maximum Daily	Total Suspended Solids (TSS) Average Quarterly	Oil Sheen [3]	Discharge Flow (gpm)	Total Dissolved Solids (TDS)
Process Water, Mine Dewatering Water	113110, 212312, 212313, 212319[4] 212399	Surface	Quarterly[1]		Two/Month[2]		Quarterly[1]	Daily when runoff occurs	see S12.A.6 and S12.A.7	----
			6.5	8.5	50	50	40 mg/l	No Discharge	----	----
		Ground	Quarterly[1]		----		----	Daily when runoff occurs	----	----
			6.5	8.5	----		----	Visible Sheen	----	----
	212321	Surface	----		Two/Month[2]		Quarterly[1]	Daily when runoff occurs	see S12.A.6 and S12.A.7	----
			----		50	50	25 mg/l	No Discharge	----	----
		Ground	----					Daily when runoff occurs		----
			----		----		----	No Discharge	----	----
	212311, 212324, 212325,	Surface	----Surface Water Discharge Not Permitted----							
		Ground	Quarterly[1]		----		----	Daily when runoff occurs	----	----
			6.5	8.5	----		----	No Discharge	----	----
	212322	Surface	----		Two/Month[2]		Quarterly[1]	Daily when runoff occurs	see S12.A.6 and S12.A.7	----
			----	----	50	50	25 mg/l	No Discharge	----	----
		Ground	----		----		----	Daily when runoff occurs	----	----
			----	----	----		----	No Discharge	----	----
	327320, 327331 327332, 327390, 327999, ECY001, ECY002	Surface	One/Month		Two/Month[2]		Quarterly[1]	Daily when runoff occurs	see S12.A.6 and S12.A.7	
			6.5	8.5	50	50	40 mg/l	Visible Sheen	----	
		Ground	One/Month		----		----	Daily when runoff occurs	----	Monthly
			6.5	8.5[5]	----		----	Visible Sheen	----	500 mg/l
	324121	Surface	----Surface Water Discharge Not Permitted----							
		Ground	----*Groundwater* Discharge Not Permitted----							

SEPA & Public Notice May Be Required

SEPA & Public Notice Probably **Not** Required

S2. Effluent Limits

Changes to Table 2

Added Footnote for NAICS 212319 prohibit the surface water discharges from process water associated with

- Bitumens (native mining)
- Bituminous limestone quarrying
- Bituminous sandstone quarrying

Clarify that process water discharges for hot mix asphalt are prohibited (previously prohibited by section S3.G.1 in 2010)

What About Dust Control?

- Minimize ponding & pooling which may be considered a groundwater discharge

- Spraying with non-process water or treated process water is permitted
- Do not allow untreated discharges of dust control water to run off-site or to surface water

Changes to Both Tables 2 & 3

Added Ecology codes for recycling activities

Maintained the monitoring requirements for concrete recycling

Added footnote to refer to Appendix C for concrete recycling discharges that exceed a pH of 8.5

Authorize process water discharges for asphalt recycling

Effluent Limits for Asphalt & Concrete Recycling

Table 2: Effluent Limits & Monitoring Requirements for Process Water & Mine Dewatering Water

NAICS Code (see Appendix A)	Discharge to:	*pH*		*Turbidity (NTU)*		*Total Suspended Solids (TSS)*	Oil Sheen [3]	Discharge Flow (*gpm*)	*Total Dissolved Solids (TDS)*
		Min	Max	*Average Monthly*	Maximum Daily	*Average Quarterly*			
327320, 327331 327332, 327390, 327999, ECY001, ECY002	Surface	One/Month		Two/Month[2]		Quarterly[1]	Daily when runoff occurs	see S12.A.6 and S12.A.7	
		6.5	8.5	50	50	40 mg/l	Visible Sheen	----	
	Ground	One/Month		----		----	Daily when runoff occurs	----	Monthly
		6.5	8.5[5]	----		----	Visible Sheen	----	500 mg/l

Table 3: Effluent Limits & Monitoring Requirements for Type 2 and Type 3 Stormwater

NAICS Code (see Appendix A)	Discharge to:	*pH*		*Turbidity (NTU)*		Oil Sheen	Discharge Flow (*gpm*)
		Min	Max	*Average Monthly*	Maximum Daily		
327320, 327331, 327332, 327390, 327999, ECY001, ECY002	Surface	One/Month		Two/Month[2]		Daily when runoff occurs	see S12.A.6 and S12.A.7
		6.5	8.5	50	50	No Discharge	----
	Ground	One/Month		----		Daily when runoff occurs	----
		6.5	8.5[5]	----		No Discharge[3]	----

Changes to Both Tables 2 & 3

Revised Footnote 3

- The presence of sheen is **not** a violation if you note the observation within Discharge Monitoring Reports, explain the cause, and the solution

Changes to Table 3

Removed Nitrate + Nitrite Monitoring Requirements

- Ecology made an error when applying the benchmark from the 1983 National Urban Runoff Program
- In 1999, Ecology determined nitrates were not a concern

S3. Additional Discharge Limits

S3.A Best Management Practices (BMPs)

The 2010 Permit does not state that the installation of BMPs is necessary

Implement BMPs as necessary to meet AKART to comply with state water quality standards

State the obvious and relocate BMP implementation language from S5.C.1 & S5.C.4 to S3.A

No change for existing permittees

Clarifies expectations for new permittees and new staff

Other Changes in S3. Additional Discharge Limits

C-TAPE instead of chemical technology review committee

Removed S3.G.1 because information is now covered in Tables 2 & 3

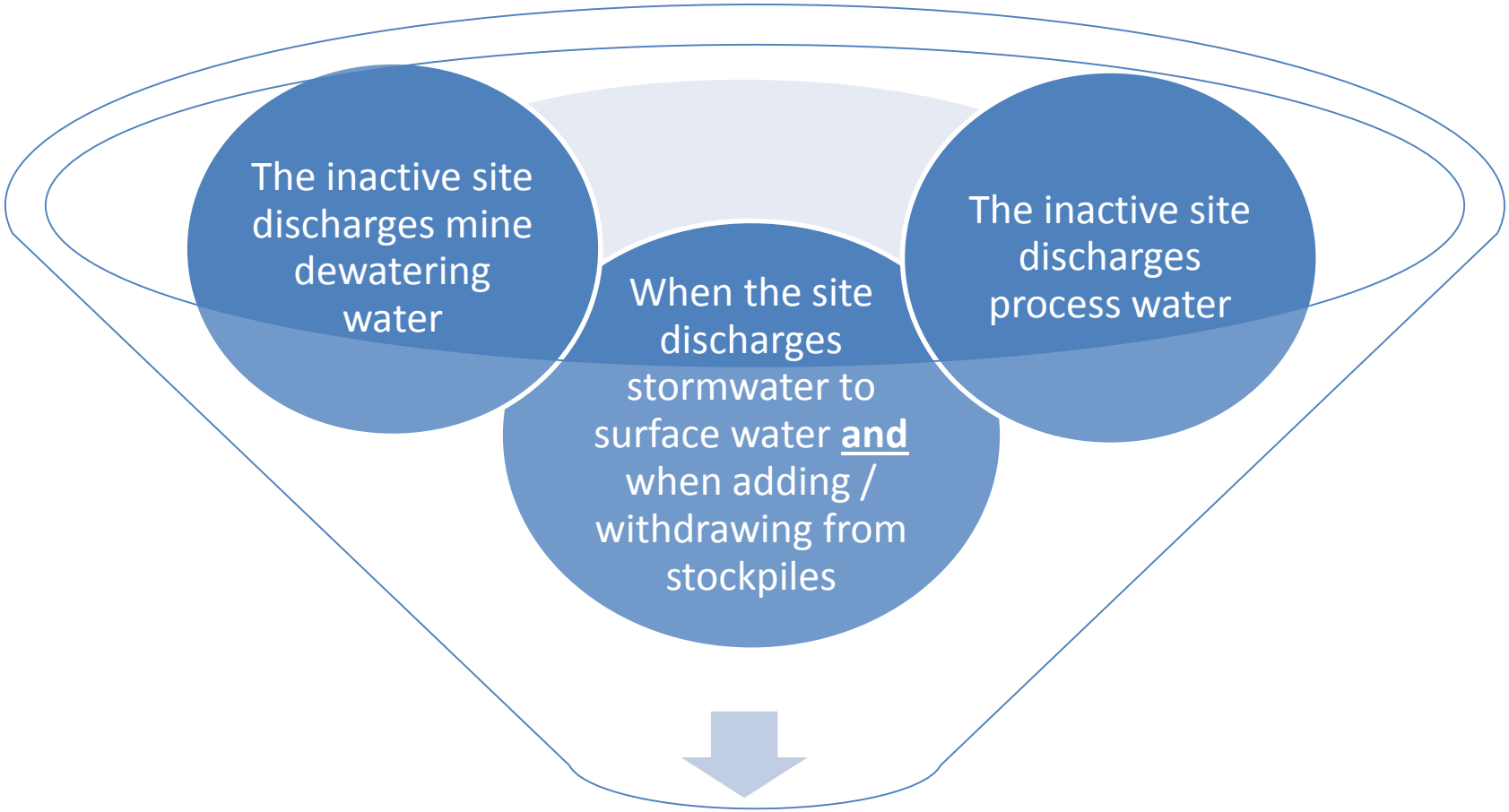
Removed S3.J because the same language appears in S3.E.6

Inactive Sites

- Excavation allowed for BMP maintenance
- Relocated the certification language for inactive sites to S3
  - Keeps inactive site requirements together
- Discharge limits for process water and mine dewatering water apply

S4. Monitoring Requirements

Stormwater Monitoring at Inactive Sites Not Required Unless…



Proposed Organization of S4 Monitoring Requirements

- Put the monitoring, sampling & analytical procedures sections first
- Grouped sampling & analytical procedures requirements in S4.D
- Grouped the inspection requirements in S4.F
- Relocated requirements addressing new facilities to the permit application section (S12)

New Table 4

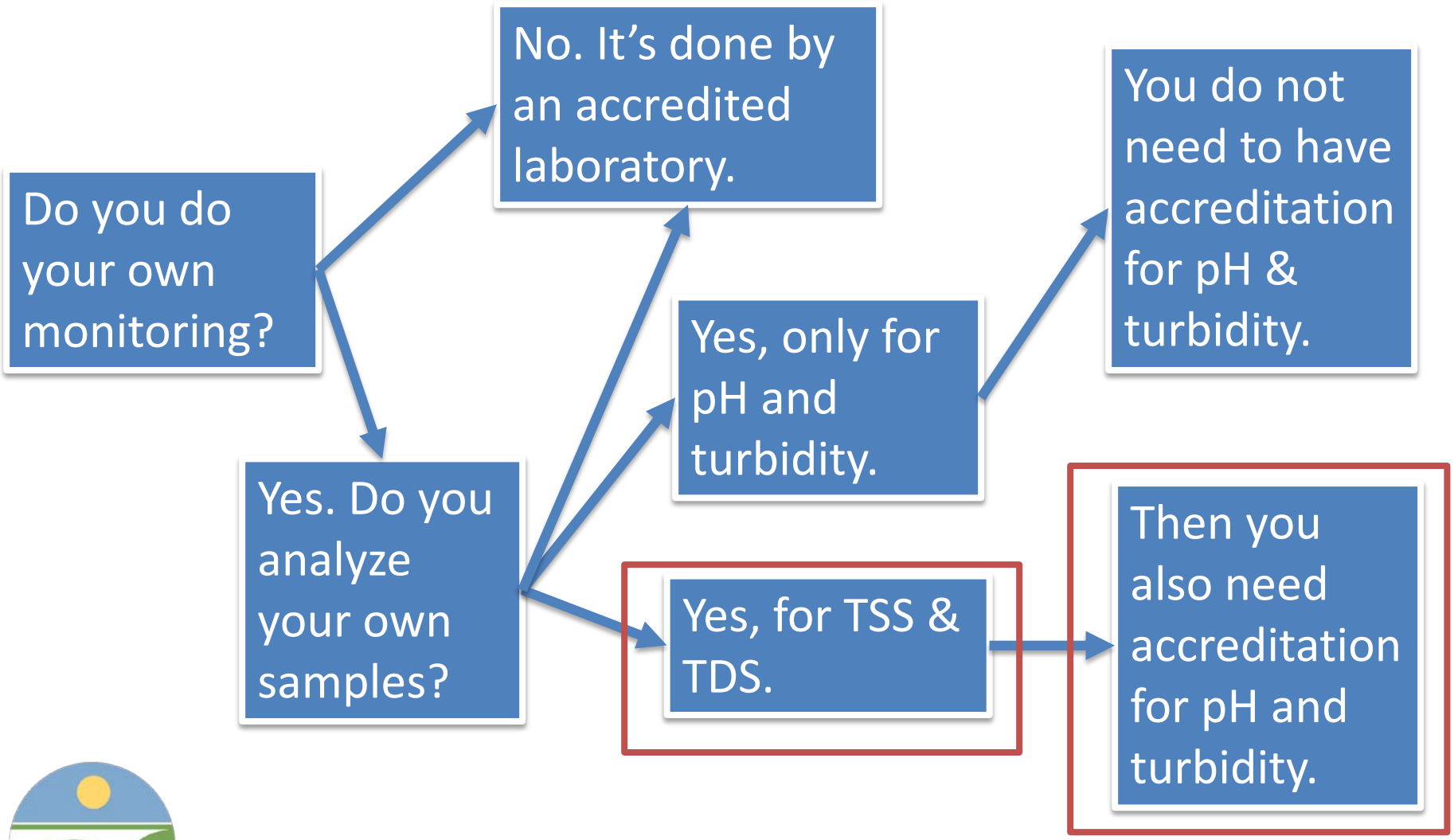
Table 4 Recommended Analytical Methods and Laboratory Quantitation Levels for Monitoring Parameters

Parameter	Units	Analytical Method	Laboratory Quantitation Level	Laboratory Accreditation Required	Preservation[3]	Maximum Holding Time	Description
pH	SU	SM4500-H⁺B	N/A	No / Yes, if testing is performed by an accredited laboratory	None required	Analyze within 15 minutes	Use a calibrated *pH* meter.
Turbidity	NTU	SM2130-B-2001	0.1	No / Yes, if testing is performed by an accredited laboratory	Cool, ≤ 4 °C	48 hours	Use a calibrated turbidimeter.
Total Suspended Solids (TSS)	mg/l	SM2540-D	5	Yes	Cool, ≤ 6 °C	7 days	The sample is filtered and the residue retained on the filter is dried. The increase in weight of the filter represents the *total suspended solids*.
Oil Sheen	Yes / No	Observation	N/A	N/A	N/A	N/A	Look for visible sheen
Discharge Flow[4]	*gpm*	Calibrated Device	N/A	No	N/A	N/A	Use a calibrated flow meter.
Total Dissolved Solids (TDS)	mg/l	SM2540-C	20	Yes	Cool, ≤ 6 °C	7 days	The sample is filtered and the filtrate is evaporated to dryness and dried. The increase in dish weight represents the *total dissolved solids*.

40 CFR 136 & 40 CFR 122.44

Laboratory Accreditation

WAC 173-226-090(5)



Other Changes

- Use the term monitoring points consistently
- Provide the latitude and longitude for points exempt from visual monitoring

S4. Monitoring Requirements

INSPECTION REQUIREMENTS

S4.F Inspections

Ecology proposes to leave the existing inspection requirements unchanged

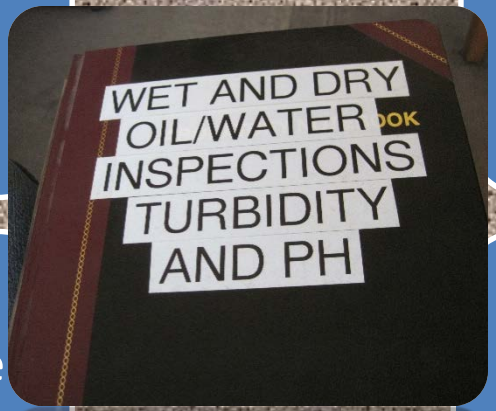
When equipment operates:

- Inspect oil / water separators
- Inspect operationally related equipment & vehicles
- Conduct daily visual monitoring for oil sheen at discharge points

Inspection Reports

Inspection reports can be in the form of:

- Logbooks
- Checklists
- WSDOT Records
- MSHA Records



S4.G.1.e identify maintenance tasks completed during the inspection

No longer required to maintain maintenance and servicing records for oil/water separators and operationally related equipment and vehicles

S4.G.1.f identify any maintenance tasks that to be completed after the inspection

Questions

E-mail comments to
carrie.graul@ecy.wa.gov
by October 23

http://www.ecy.wa.gov/programs/wq/sand/index.html

S5. Site Management Plan (SMP)

Table of Contents Comparison

Section in Current (2010) Permit	Section in Draft Permit
S1. Permit Coverage	S1. Permit Coverage
S2. Effluent Limits	S2. Effluent Limits
S3. Additional Discharge Limits	S3. Additional Discharge Limits
S4. Monitoring Requirements	S4. Monitoring Requirements
S5. Site Management Plan (SMP)	S5. Site Management Plan (SMP)
	S6. SMP Section 1: Erosion & Sediment Control Plan
	S7. SMP Section 2: Monitoring Plan
	S8. SMP Section 3: SWPPP
	S9. SMP Section 4: Spill Control Plan
S6. Reporting & Record Keeping Requirements	S10. Reporting & Record Keeping Requirements
S7. Solid Waste Disposal	S11. Solid Waste Disposal
S8. Other/Unpermitted Uses of the Site	<Moved to subsection in S1>
S9. Permit Application	S12. Permit Application
General Conditions	General Conditions

Site Management Plan (SMP)

Have and fully implement a site specific SMP

Note the date of review and the names of the personnel that conducted the yearly review in the SMP

Relocated requirements to the reporting and record keeping section

When Does my SMP Need to be Updated for the New Permit?

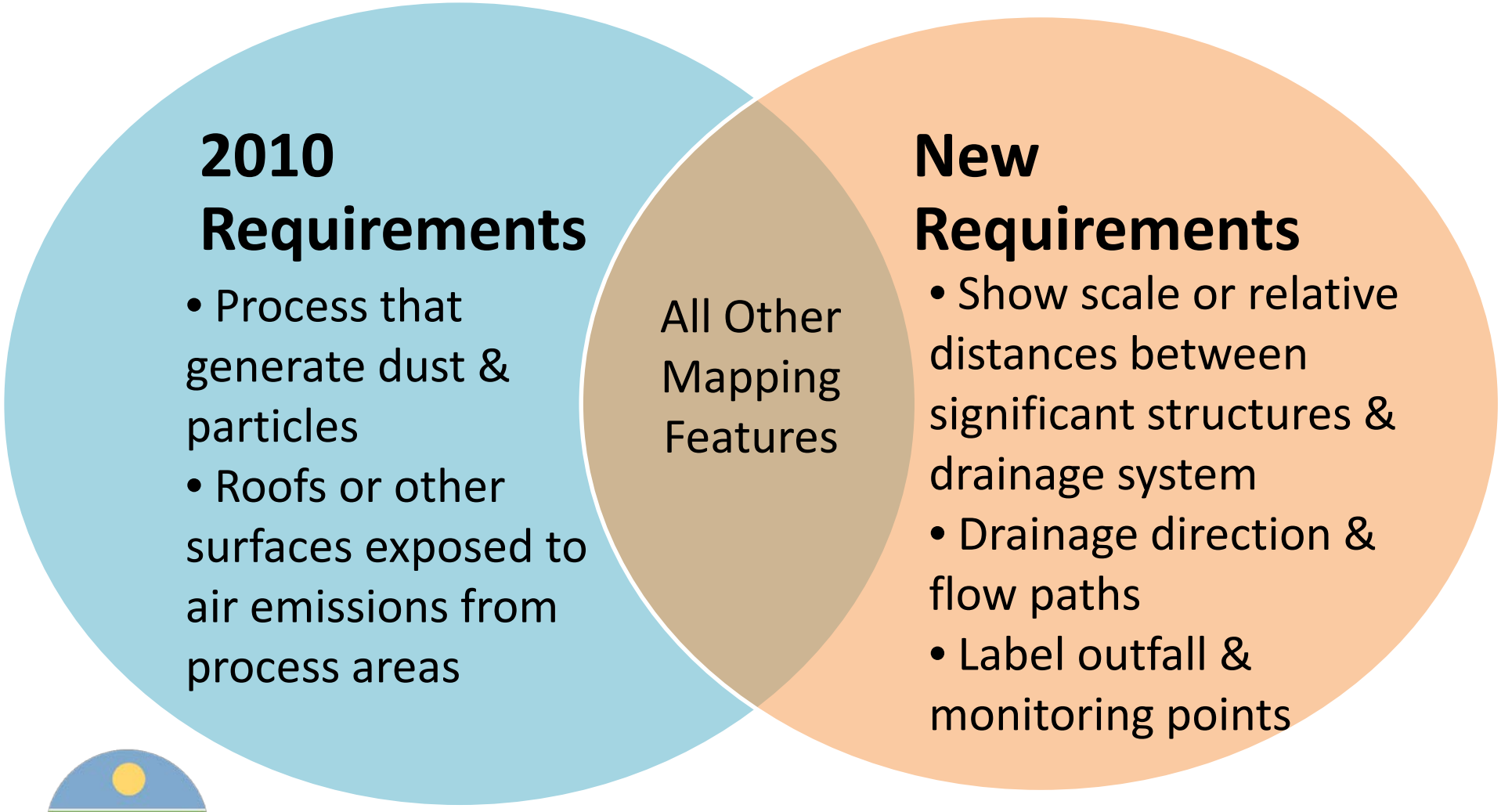
During your annual SMP review (January 2017 at the latest)

Most permittees will not need to make significant changes

Release Agents

Recycled Concrete BMPs

Site Mapping Requirements



Example Site Map

S6. SMP Section 1: Erosion and Sediment Control Plan

Stabilization BMPs

Also, use stabilization BMPs if you have temporarily or permanently ceased your reclamation activities

S7. SMP Section 2: Monitoring Plan

S7. SMP Section 2: Monitoring Plan

Include in the Monitoring Plan the NAICS / Ecology codes associated with each monitoring point

Edit monitoring points location changes, modifications, additions, and deletions in WQWebDMR

- Unless you have an electronic reporting waiver

Create monitoring plan for inactive sites with process water or mine dewatering water discharges

S8. SMP Section 3: Stormwater Pollution Prevention Plan

Combined “Inventory of Materials and Pollutant Sources” with the “Other Materials”

Measures to Prevent Commingling

2010 Permit Language	Formal Draft Permit Language
Unless the facility is designed for reuse of process water, the SWPPP must include measures to prevent the addition of process water or mine dewatering water into stormwater and **measures to verify that non-stormwater discharges do not enter the stormwater treatment system.**	The SWPPP must contain, at a minimum… Measures to prevent the commingling of stormwater with process water or mine dewatering water, unless the facility is designed to reuse process water.

Source Control BMPs

Added

- Label containers

Removed

- Use drip pans and absorbents under leaky vehicles and equipment or store indoors where feasible

Source Control for Release Agents

Do not allow the discharge of release agent directly to ground

Oil water separators should meet the design criteria in the Stormwater Management Manuals

Non-petroleum based release agents aren’t an equivalent BMP by themselves

Source Control BMPs

Revised

- Double- walled tanks acceptable for secondary containment
- Spill kits at used oil storage / transfer stations
- Manage sediment track out to **off-site** roads
- Wheel wash water and tire bath wastewater may be treated and discharged per the conditions in the permit

Source Control BMPs

Revised

- Store these material on a bermed impervious surface and treat stormwater that comes into contact with them in a lined impoundment:
  - Uncured concrete
  - Any type of concrete solids (does not include fully cured or recycled concrete)
  - Cold mix asphalt

S8. Stormwater Pollution Prevention Plan

S8.F CONCRETE RECYCLING BMPS

Stormwater Pollution Prevention Plan BMPs

- Do not place **new** concrete recycling stockpiles:
  - Within 100 feet or less from the ordinary high water mark of surface water bodies
  - Within 100 feet or less from drinking water and irrigation well(s)
  - Within a Wellhead Protection Area
  - Where there is a discharge to ground and there is not a minimum of 10 feet of separation between the bottom of the recycled concrete stockpile and groundwater

Stormwater Pollution Prevention Plan BMPs

- Establish materials acceptance procedures to ensure that inbound recycled concrete materials are not a source of:
  - Dangerous waste
  - Lead paint
  - Asbestos
  - Joint sealants which contain Polychlorinated Biphenyls (PCBs)

S9. SMP Section 4: Spill control plan

S9. SM

No Changes

Questions

E-mail comments to
carrie.graul@ecy.wa.gov
by October 23

http://www.ecy.wa.gov/programs/wq/sand/index.html

S10. Reporting and Record Keeping Requirements

Electronic Reporting

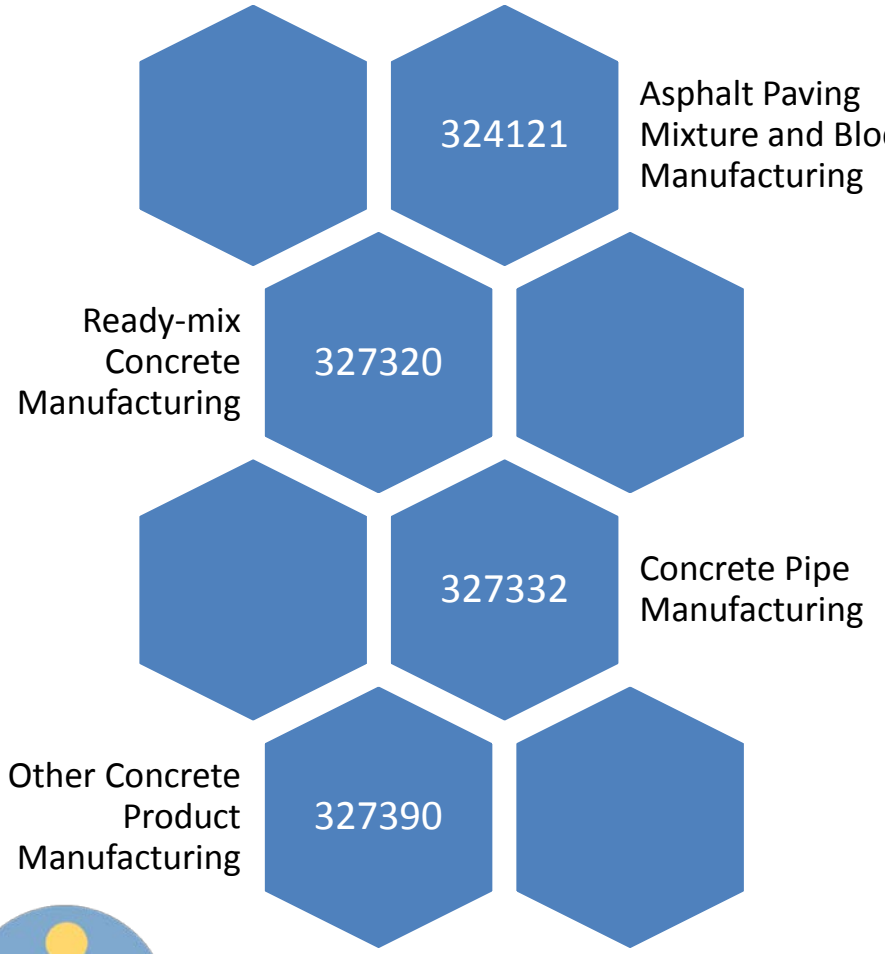
By March 1, 2016 Submit an "Electronic Signature Account Form" or
"Electronic Reporting Waiver Request Form"

- Permittees that have an existing electronic signature account do not need to submit anything

By April 30, 2016 begin submitting DMRs electronically through Ecology's Water Quality Permitting Portal

- Meets 40 CFR Parts 122, 123, 127, 403, 501 & 503
- RCW 43.17.095 – must provide an electronic reporting option

Production Reporting



- Starting in January 30, 2017 report your concrete and / or asphalt range for the previous year
- Ecology uses the information to calculate permit fees
- This will replace the additional forms that the fee unit sends out

Reporting Requirements

Inactive sites that have to monitor must submit DMRs

For new permittees the first monitoring period is the first full quarter following permit coverage

- Provides time to set up Electronic Signature Account
- Allows more time to prepare for monitoring

Records Retention

Keep for five years

- Copies of DMRs
- All calibration & maintenance records
- All original recordings for continuous monitoring instrumentation

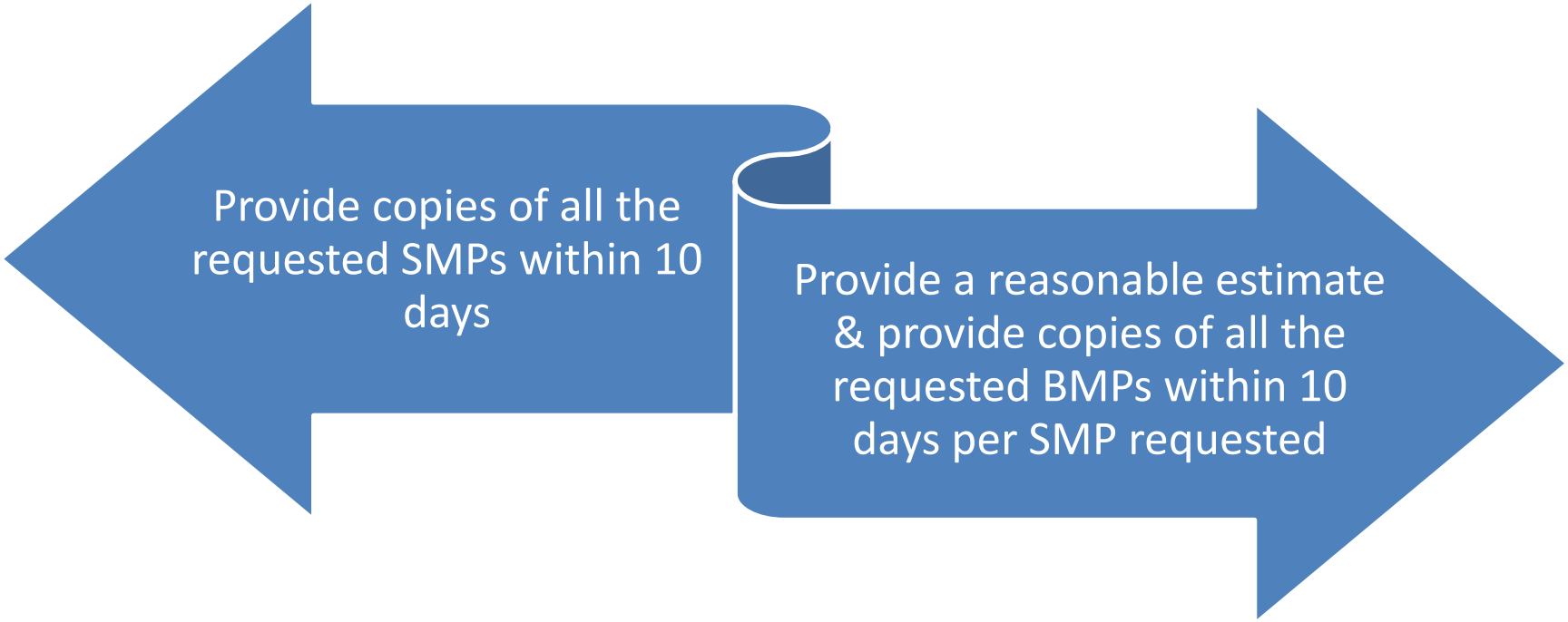
Keep for three years

- Copies of all reports required by the permit
- Records of all data used to complete the application for this permit

- Keep your coverage page

Records Requests

For permittees that receive a public records request for more than one facility that the permittee owns or operates under the Sand & Gravel General Permit:



Permit Violations

- Notify Ecology within 24 hours of any violation
- Submit a detailed written report within 5 days for:
  - Upsets
  - Spills
  - Bypasses
  - Any noncompliance which may endanger health or the environment
- If you notified us within 24 hours of the violation we can waive the detailed written report requirement
- Language to address 40 CFR 122.41(l)(6)

Spill Reporting

- Language in 2010 permit not adequate to address spills
- Added phone numbers for the Washington Emergency Management Division and National Response Center provided

S11. Solid Waste Disposal

S11 S[illegible]osal

No Changes

S12. Permit Application

Permit Application

Apply and reapply electronically or submit an electronic reporting waiver request

Receiving water monitoring requirements for new permittees

Clarified non-operating vs. inactive

Portables

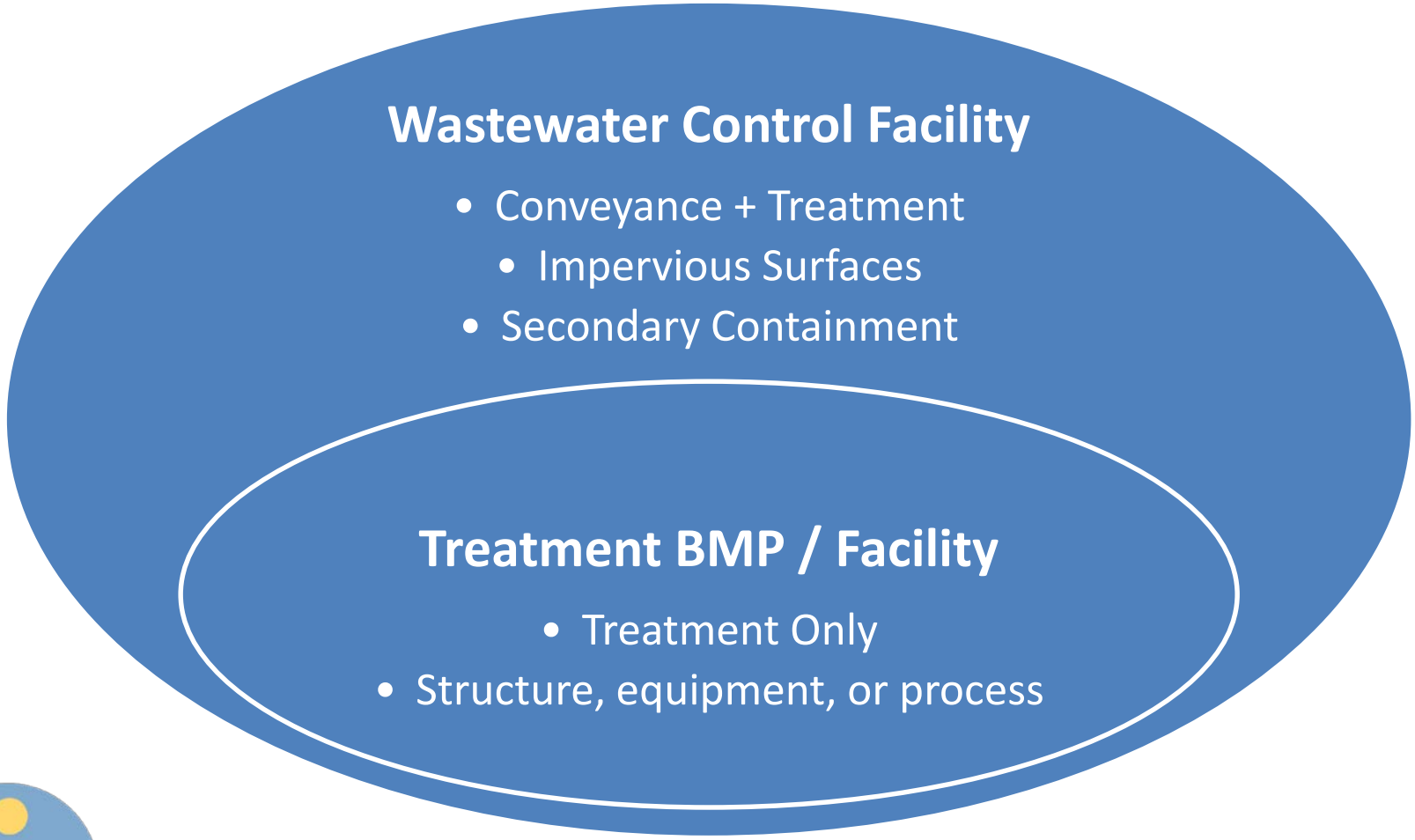
- Removed the on site time limit
- Portables may only operate at one site at a time
- Do not begin operations at a new site until submitting a completion form

General Conditions

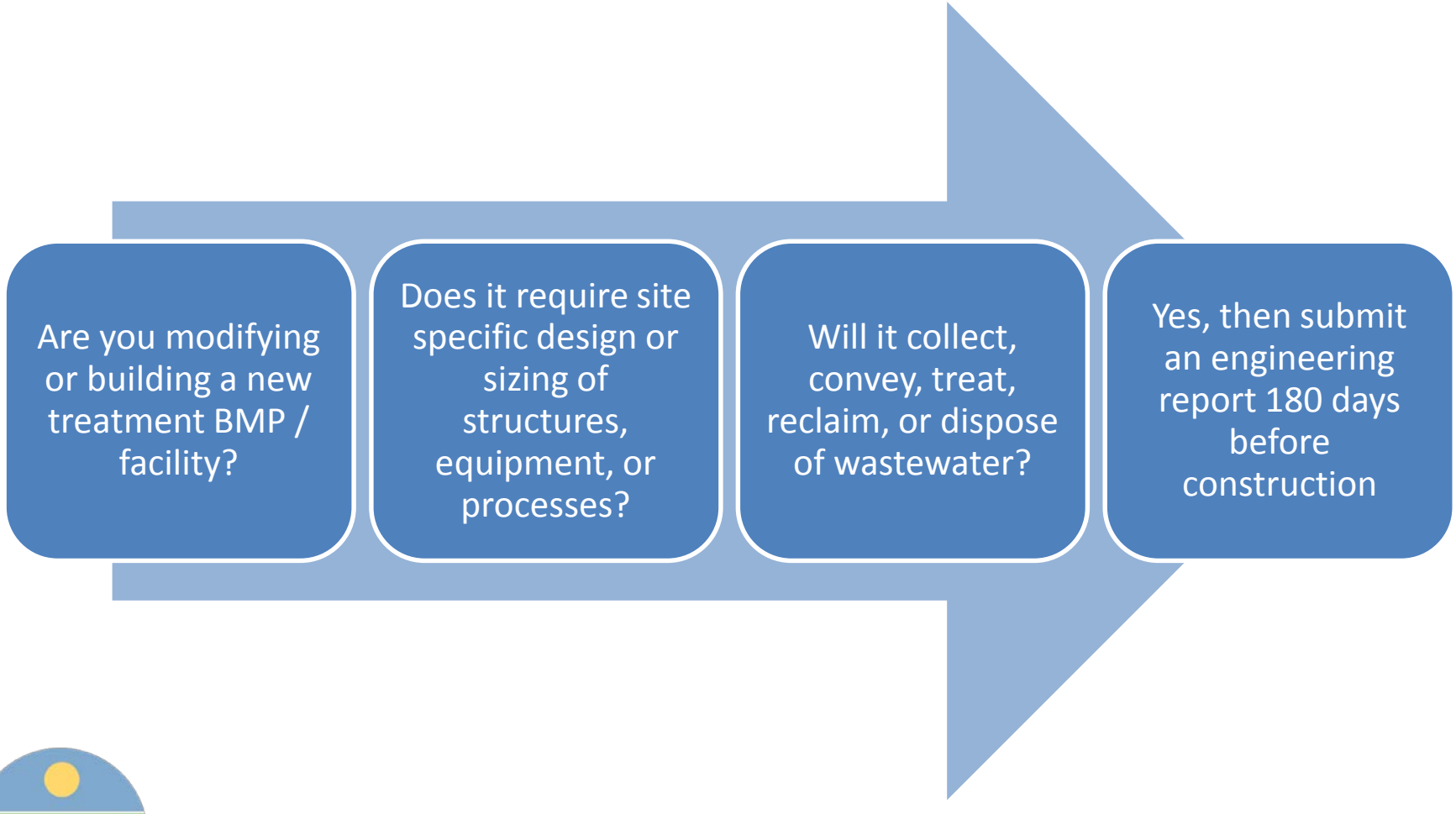
G1 Signatory Requirements

- Signing of applications can not be delegated
- Clarified the delegation for reports and other information

G7 Engineering Report Requirements



G7 Engineering Report Requirements



G7 Engineering Report Requirements

- Chapter 173-240 WAC applies to industrial wastewater facilities
- PCHB issued Summary Judgment on ISGP and determined that 173-240 doesn't apply to stormwater treatment BMPs but Ecology can require engineering reports for stormwater facilities

G.19 Permit Transfer

- If you transfer a portion of your site submit update your information per G8 for the remainder of your site
  - Updates contact information
  - Updates monitoring information
  - Updates NAICS Codes
  - Used to calculate fees correctly

G.20 Duty To Reapply

- Submit renewal applications electronically using Ecology's Water Quality Permitting Portal
  - Electronic reporting waiver request

G.27 Penalties for Tampering

- Added this language from 40 CFR 122.41(k)(2)

Appendicies

Appendix A

- Revised to table format
- Added codes and descriptions for recycling activities

Appendix B - Definitions

Added	Deleted	Clarified
• Application • Concrete Recycling • Discharge Point • Electronic Reporting Waiver • Impoundment • Nonoperating • Outfall • Portable Facility • Reclamation	• Monitoring Benchmark	• Active Site, Closed Site, Inactive Site, Process Water • Stormwater Management Manuals • Wastewater

Pollution Prevention Schedule

- Unchanged from preliminary draft permit
- Added a new pollution prevention schedule in Appendix C
- Similar to the one in the 2005 – 2010 permit for Total Dissolved Solids (TDS)
- Requirements for facilities (ECY002) that exceed a pH of 8.5 in any discharge to ground

Conclusion

Comment Period

- September 9 – October 23
- Submit comments before midnight on October 23
- **E-mail comments to carrie.graul@ecy.wa.gov**
- Or, testify at a public hearing
- Or, mail in your comments
- Visit http://www.ecy.wa.gov/programs/wq/sand/index.html for more information