Oregon 1200C Overview and Training

Site/Client to Whom you are Providing Training
Date of Training

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Introductions and Agenda

Thought a slide like this might be nice since this is all virtual…

Maybe a photo of you, an intro, and an 'around the table'?

Then a brief agenda? Or remove that

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Oregon 1200C Basics in a Nutshell

- Effective December 15, 2020 through December 14, 2025
- Administered by the state Department of Environmental Quality (DEQ) on behalf of the US Environmental Protection Agency (EPA)
  - Component of the federal National Pollutant Discharge Elimination System (NPDES) program
  - Implements Section 402 of the Clean Water Act "permits for discharges of pollutants"
  - Authorizes all construction discharges in Oregon excluding tribal trust and reservation lands.
- Does not authorize in-water work, dredging, underground injection, or other activities regulated under other programs.
- Other activities need other NPDES permits, such as those with discharges from industrial activities (1200Z), SSG and mining (1200A) municipal storm sewers (MS4), or shellfish (900J).
- Only covers stormwater discharges during construction – not after!
- Two types depending on project location: 1200C and 1200CN

EPA

DEQ State of Oregon Department of Environmental Quality

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When do I need a 1200C Construction General Permit?

- When construction activity or materials/equipment staging and stockpiling disturbs more than one acre of land.
- When construction activity or materials/equipment staging and stockpiling will disturb less than an acre but is part of a larger common plan of development or sale.
- When construction activity disturbs less than one acre but is a necessary and required component of a final project that disturbs more than one acre of land.
- When construction activity may result in a discharge that is a significant contributor of pollutants to waters of the state or may cause an exceedance of a water quality standard.

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Will I need a standard 1200C or 1200CN?

- 1200-CN Jurisdictions (aka Agents) (less than five acres)
  - Albany
  - Corvallis
  - Eugene
  - Keizer
  - Marion County
  - Milwaukie
  - Oak Lodge Water Services District
  - Springfield
  - West Linn
  - Wilsonville
  - Clackamas County Water Services
  - Rogue Valley Sewer Services
  - Clean Water Services
  - Lane County within MS4 permit area
  - Multnomah County (unincorporated)

- 1200-CN Jurisdictions (Agents) (less than one acre)
  - Gresham
  - Troutdale
  - Wood Village
- 1200-C Jurisdiction
  - Everywhere else!
  - This training covers the 1200C CSGP

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How to obtain a 1200C permit in Oregon

- Register the "Responsible Person (RP)" with DEQ or Agent before any land disturbance begins
- Submit a complete and accurate application at least 30 days before land disturbance begins (done by the RP). This includes:
  - DEQ Application Form
  - Erosion and Sediment Control Plan (ESCP) for the project, inclusive of all phases
  - A Land Use Compatibility Statement (LUCS) for local jurisdiction
  - Associated fees

- If disturbing more than 5 acres, applications are subject to 14-day public review period; time begins after DEQ or Agent determines application is complete.
- Land disturbance is allowed to begin only upon receipt of approval from DEQ (not even no-discharge activities!)

Let's break these down…

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The "Responsible Person"

- The Responsible Person for the project must be either:
  - Someone who has operational control over construction plans and specs, and can modify them (e.g., site owner or agent), or:
  - Someone that has day-to-day operational control at a project (e.g., general contractor)
- The RP must ensure that all application materials are accurate and submitted appropriately and must sign with their own signature
  - They are then considered the "Permit Registrant"
- Note that the Responsible Person/ Permit Registrant identified in the permit application is ultimately responsible for permit compliance, even activities conducted by contractors or outside entities, and will be held liable if enforcement action occurs!

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PROHIBITED DISCHARGES

a. Visually turbid discharge or discharge of sediment from the construction site to surface waters or a conveyance system that leads to waters of the state;
b. Causing or contributing to an exceedance of any applicable water quality standard;
c. Concrete wastewater from washing tools and vehicles after pouring, prepping, or finishing concrete;
d. Wastewater from washing and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
e. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
f. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown;
g. Wheel/tire wash wastewater, unless the discharge of wheel wash or tire bath wastewater is to a separate treatment system that prevents discharge to surface water;
h. Hydro-demolition water; and saw-cutting slurry; and
i. Toxics or hazardous substances from a spill or other release.

To prevent the above-listed prohibited non-stormwater discharges, registrants must comply with the applicable Pollution Prevention requirements in Section 2.3.

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The Application (and the planning!)

- Intended to gather essential information, but also ensures the Registrant is planning accordingly to implement required:
  - Water Quality-based Effluent Limitations (WQBLs)
    - No more than a 10% cumulative increase in natural stream turbidities may be allowed (NTU)
    - Other limits based on TMDL or 303(d) listed parameters
  - Technology-based Effluent Limitations (TBELs)
    - Stormwater Control, Design, Installation, and Maintenance
    - Erosion Prevention and Sediment Control and Treatment
    - Pollution Prevention Controls
    - Construction Dewatering
- These components help determine which BMPs to use and include in ESCP/EMP

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TBELs in Detail (lots of text - do your research!)

Stormwater Control, Design, Installation, and Maintenance

"Prior to and during the discharge of stormwater and authorized non-stormwater discharges to surface waters of the state, the registrant must design, install, and maintain effective stormwater control and treatment methods required in this section to prevent the discharge of pollutants in stormwater from construction activities that may cause or contribute to a violation of water quality standards."

- Install and implement any downgradient sediment controls (e.g. buffers, perimeter controls, discharge point controls, storm drain inlet protection) before construction activity in any portion of the site begins;
- Install erosion prevention measures (e.g. matting, straw mulch, compost blankets) on cleared areas that will not be worked for 14 days; and
- Following the installation of stormwater controls for initial construction activities the registrant must adjust stormwater controls and management strategies throughout the project site to meet and match the needs of each phase of construction as the project is implemented.

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BMP Selection
Economic Considerations

- Save time and money and reduce the likelihood of penalties
- Minimize interruption in operations and decrease costs of repairing damage caused by erosion
- Life Cycle Cost
  - Purchase
  - Installation
    - What tool or accessories are necessary?
  - Maintenance
    - Full or partial replacement
  - Disposal
    - Biodegradable vs. solid waste
    - Media Disposal and Replacement
    - Sludge – Contamination and Land application

BMP Decision Matrix

	Plastic	Hydromulch	No BMP
Purchase	$150.00	$300.00	$0
Install	Labor x 2	$.20 sq ft	$0
Maintain	Fix after wind	Fix high flow areas	Clean up of soil loss
Disposal	Dumpster and disposal	$0	$0
Risk	Climbing wet plastic	High velocity flows	Loss of buildable substrate, fines, stop works and Lawsuits

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BMP Maintenance

- Inspect and maintain erosion control measures (e.g. reseed, apply additional mulch, address blanket malformation and soil sloughing underneath).
- Remove trapped sediment from sediment fence before it reaches 1/3 of the above-ground fence height.
- Remove sediment before it reaches 2 inches above ground for sediment barriers such as straw wattles and biobags.
- Clean catch basins before sediment retention capacity is reduced by 50%.
- Remove sediments from sediment basins before design capacity is reduced by 50%.

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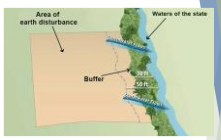
TBELs in Detail (lots of text – do your research!)

- Erosion Prevention and Sediment Control and Treatment
  - Protect vegetation and infiltration areas pre-construction
  - Sequence grading/clearing to minimize disturbance
  - Prevent bypass and ponding
  - Establish/maintain natural buffer zones or equivalent (50-feet – See Appendix B of the Permit)
  - Preserve/revegetate existing vegetation
  - Implement EMPs along all perimeter areas
  - Prevent sediment track-out
  - Locate stockpiles away from sediment/soil producing activities
  - Prevent wind erosion/control dust
  - Prohibit slope disturbance where no construction

Buffer

When a surface water of the state is located within 50 feet of the site's land disturbances:

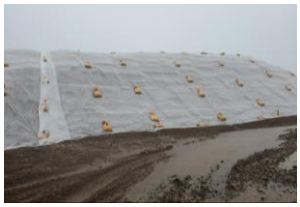
- The registrant must comply with local natural buffer zone requirements before proposing the following compliance alternatives. For any discharges to surface waters of the state located within 50 feet of the site's land disturbances, the registrant must comply with one of the following alternatives:
  - Maintain a 50-foot undisturbed natural buffer zone; or
  - Maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (see Appendix B); or
  - If infeasible to provide and maintain an undisturbed natural buffer zone of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer zone.



Retain 50-foot Buffer	Retain <50 and >30 foot Buffer	Retain ≤ 30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

Prevent Trackout

Defined and stabilized entrances and laydown areas



Manage Stockpiles

Covering and placement for stormwater protection and soil value

Perimeter Control

TBELs in Detail (lots of text – do your research!)

- Erosion Prevention and Sediment Control and Treatment
  - Prevent sediment discharge to conveyances
  - Prevent soil compaction
  - Protect storm drain inlets
  - Establish concrete truck/equipment washout areas
  - Establish material/waste storage areas
  - Control stormwater discharges
  - Properly engineer/install sediment basin/impounds with engineered soils
  - Maintain site
  - Stabilize exposed portions of site
  - Follow final stabilization criteria properly

Subgrade Infrastructure Protection

Filters are polish and not primary protection

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Concrete Wastewater Management

if process water commingles with stormwater – it is all considered process water and must be truck hauled

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TBELs in Detail, cont'd (lots of text – do your research!)

- Pollution Prevention Controls

General conditions: "Provide an effective means of eliminating the discharge of any waste from any activities performed on site", such as:

- Equipment and vehicle fueling, maintenance, washing
- Building materials and building products
- Pesticides, herbicides, insecticides, fertilizers
- Hazardous or toxic wastes
- Construction and domestic wastes
- Sanitary wastes
- Washing applicators and containers
- Emergency spill notifications

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TBELs in Detail, cont'd (lots of text – do your research!)

Construction Dewatering Requirements

- General conditions: "Prevent the discharge of pollutants in groundwater or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation"

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The Erosion and Sediment Control (ESCP) Plan

- Required component for all projects, each phase. Each phase must include sediment and erosion controls, as well as site description and maps for:
  - Demo, clearing, grading, excavating, land development
  - Streets and utilities
  - Vertical construction
  - Final landscaping/stabilization

Multi-Phase Developments (e.g. residential subdivisions)
A map and narrative description of each phase of the multi-phase development must be in the ESCP and submitted with the permit application. All phases of the development for which land use approvals are approved must be included in the ESCP. The addition of post-coverage phases within the proposed development will require separate 1200-C coverage. Construction activities, including stockpiling and staging, cannot commence within a phase unless that phase has a DEQ or Agent approved ESCP.

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The Erosion and Sediment Control (ESCP) Plan

- Must be completed before land disturbance; however, is considered a living document that should be kept up-to-date
- 20+ Acre sites ESCP must be developed and stamped by a professional, either:
  - Certified Professional in Erosion and Sediment Control (CPESC)
  - Certified Professional in Stormwater Quality (CPSWQ)
  - Oregon Registered Professional Engineer (PE)
  - Oregon Registered Landscape Architect, or
  - Oregon Certified Engineering Geologist

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The Erosion and Sediment Control (ESCP) Plan, continued

The objective of the ESCP is to be a useful tool for compliance, to help guide the RP and others on site in implementing best management practices (BMPs) properly in order to control site runoff, and therefore pollution, effectively.

Must contain these elements at a minimum:

- ESCP Preparer credentials and signature/stamp
- Contractors/others on site
- Emergency Management Plan (EMP) (if required)
- Site name/description, including impairment status of known or potential receiving waters
- Identification of BMPs used
- Spill Prevention and Response Plan
- Site Map

Impaired Waterways of the State – 303(d) List

- States, territories and authorized tribes are required to develop a list of waters that do not meet water quality standards.
  - Establish priority rankings and develop action plans to improve water quality, called Total Maximum Daily Loads (TMDLs).
  - Construction sites discharging to listed waterbodies are required to verify that discharges are not causing or contributing to violations of water quality standards.

- Determine in advance (!) if your site discharges to a 303(d) waterbody
  - ESCP Preparer credentials and signature/stamp
  - Contractors/others on site
  - Site name/description, including impairment status of known or potential receiving waters
  - Site map (more on this later)
  - DEQ has an interactive storymap to find waterways: https://geo.maps.arcgis.com/apps/MapJournal/index.html?appid=f2e8fd446c40468ae6a435a9fb7a19a9

Site Description

- Must contain these elements at a minimum:
  - Description of activity including demo
  - Site size
    - disturbed area vs non
    - max area disturbed at any one time
    - Offsite associated areas
  - Description of any in-water work and associated 401 water quality certification
  - Existing soil type and fill material brought in
  - Temporary cover seed mix
  - Identification of engineered soils and associated pH monitoring
  - Any authorized non-stormwater discharge expected
  - Project Schedule:
    - Estimated start date for major events on project
    - Any estimated start or stop dates
    - Estimate date for final stabilization
    - End of project and turn over to post construction
    - Operational hours of activity
  - Pollutant Generating Activities:
    - Materials inventory – paint, fertilizer, fuels, etc)
    - Spill response
    - Waste disposal plan

Site Description

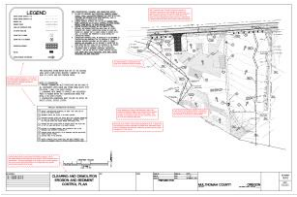
- Must contain these elements at a minimum:
  - Trackout controls
  - Stabilization measures
  - Staff training – Erosion and Sediment Control Inspector or Stormwater Quality Inspector
  - Site map
  - Engineering:
    - Sediment basin and flow control facilities
    - Advanced treatment
  - Spill prevention procedures:
    - Spill control and cleanup
    - Waste management procedures
    - Locations of fertilizers applied

Environmental Management Plan (EMP)

- In addition to all other application requirements, an EMP is necessary when:
  - Contaminated soils, contaminated groundwater, or hazardous materials will or have the potential to be encountered during construction activities, or;
  - An active treatment system (e.g. electro-coagulation, flocculants, filtration, polymers, hydrochloric or sulfuric acid) for sediment, pH neutralization, or other pollutant removal is planned or implemented at the project site).
- An EMP includes DEQ-issued application documents (Appendix A of the 1200C) as well as additional fees
- Becomes part of the ESCP for the project

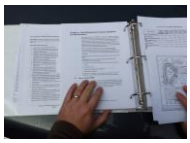
Site Map(s)

- There are nearly 40 items required in the ESCP site maps, as outlined in the new 2020 permit!
  - Remember, each phase of the project need its own map(s) (see example of clearing/demo plan below)
  - It's possible you may need many maps to capture everything



Site Documentation

- Once assigned coverage, the ESCP must be printed and kept on site, along with the following:
  - Copy of the permit application (& any correspondence)
  - Copy of the 1200C assignment letter & ID number
  - Copy of the 1200C permit in its entirety
  - Copy of the Environmental Management Plan
  - All monitoring and inspection reports
  - All Corrective Action documents
- Must be in good order and ready for inspection by DEQ or Agent at any time



You have your Permit – now what?

- Permittees are required to do both visual and discharge monitoring, reporting, and recordkeeping throughout the project:
  - Visual Monitoring on <u>all projects</u> must be done by a certified Erosion and Sediment Control Inspector (ESCI):
    - Certified Professional in Erosion and Sediment Control (CPESC)
    - Certified Professional in Storm Water Quality (CPSWQ)
    - Certified Inspector of Sediment and Erosion Control (CISEC)
    - Washington State Certified Erosion and Sediment Control Lead (CESCL)
    - Rogue Valley Sewer Services Erosion and Sediment Control Certification
  - Must include an evaluation of all the ESCP elements
  - Must be done at a prescribed frequency

What does "Monitoring" mean?

- Visual Inspections
  - Surface water quality – No Visible Turbidity
    - At discharge
    - A conveyance system leading to surface water
  - BMPs
    - Performance
    - Maintenance
- Sampling
  - pH for engineered soils
- Reporting – onsite and available upon request

Visual Inspection Report

- Site name, date, inspector
- BMP performance
- Visual evidence of pollution
- Unauthorized discharges
- Meeting stabilization criteria
- Any pH sample results (if req'd)
- Answer these questions
  - Are BMPs achieving compliance?
  - Are changes to ESCP needed – why and when?
  - Are you on schedule?
- Sign too:

"I certify that this report is true, accurate, and complete to the best of my knowledge, abilities, and belief"

Visual Monitoring Frequency

Site Conditions	Minimum Frequency
1. Active period	On the initial date Once every 14 calendar days Within 24 hours of any storm event, including snowmelt that results in discharge from the site.
2. Prior to the site becoming inactive or in anticipation of site inaccessibility	Once no more than 14 days before inactivity to ensure that erosion and sediment control measure are in working order.
3. When site has been properly stabilized	Twice per month for the first month, no less than 14 days apart, then once per month after that
4. Periods during which construction activity is suspended due to frozen conditions	May be suspended if land disturbance has been suspended and/or disturbed areas have been stabilized
5. Periods during which discharge is unlikely due to frozen conditions	Monthly, Resume monitoring immediately upon melt, or when weather conditions make discharge likely

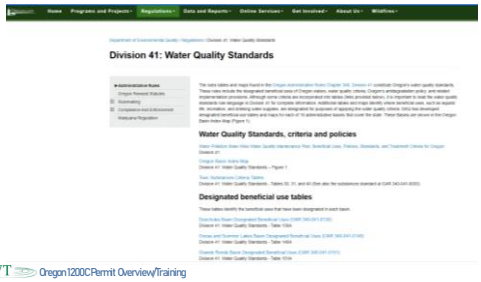
Visual Monitoring Reports

- Visual Monitoring Inspection Reports must be completed within 48 hours of all site inspections
- Must be signed and certified by the qualified Inspector
- All reports should be kept on site and easily accessible

Discharge Monitoring for Sites with Engineered Soils

- pH monitoring is required every 7 calendar days and within 24 hours of the occurrence of discharge from the site, or the occurrence of a storm event of 0.10 inches or greater
- Must monitor pH in the sediment basins/impoundments and at discharge locations before the stormwater reaches surface waters
- Benchmark value for pH is determined by river basin/receiving waterbody
- Samples must be analyzed on site with a handheld meter within 15 minutes of collection
- If pH is outside allowed range, pH adjustment with CO2 or dry ice is acceptable/required
- Any other pH adjustment treatment requires prior DEQ approval

pH benchmark determined by river basin water quality standard



What are Corrective Actions?

- Corrective Actions are required when:
  - The discharges are causing an exceedance of applicable water quality standards
  - Sediment or turbidity are visible in discharge within conveyance systems leading to surface waters or surface waters
  - If DEQ or Agent requires the registrant to take corrective actions
  - A stormwater control needs repair or replacement beyond routine maintenance
  - A necessary stormwater control was never installed, or was installed incorrectly
  - A prohibited discharge has occurred

Corrective Action Requirements

Corrective Actions must be addressed within 24 hours:

- Site name and ID, contact info of inspector, site owner, Responsible Person, etc.
- Identification of discharge locations that were out of compliance
- The period of noncompliance
- The specific condition and the date and time it was identified
- Description and evaluation of stormwater control measures and practices to determine the cause of noncompliance.
- Document the actions taken to address the condition, and steps taken to prevent the reoccurrence of the noncompliance including whether any ESCP revisions are required.
- Update/revise the ESCP to address future issues

Electronic System Use Requirement

Permit registrants must submit all required documents and payments using DEQ's electronic reporting system, available on DEQ's website, when directed to do so. Permit registrants unable to submit reports electronically (for example, those who do not have an internet connection) must contact DEQ to request a waiver. DEQ will notify the registrant in writing if an electronic waiver request is approved or denied.

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DEQ Deadlines for Prior Permittees

- "To ensure all current and future permit registrants have information regarding the new permit and access to technical assistance, DEQ will schedule online 3 trainings and post permit fact sheet documents online. DEQ understands that existing permit registrants will need to modify Erosion and Sediment Controls Plans (ESCPs) and determine how the other new permit conditions may be applicable to each site. As such, DEQ has included timelines for implementation for some of the new permit conditions to ensure adequate time for planning and implementation."
  - February 15, 2021 – All permit registrants that received permit coverage prior to December 14, 2020 must update the ESCP content and site map to ensure that the requirements of this permit are addressed.
  - May 15, 2021 – All permit registrants that received permit coverage prior to December 14th, 2020 must have visual monitoring of sites under 5 acres conducted by a person certified in a DEQ approved erosion and sediment control program
  - Permit registrants that received permit coverage prior to December 14, 2020, the approved natural buffer zone width and approved erosion and sediment controls are deemed appropriate.
  - Permit registrants that received permit coverage prior to December 14, 2020, the approved sediment basin is deemed appropriate.

Current 2021 CESCL Certification Opportunities

	In-Person	Live Zoom	Prerecorded Zoom
2 Day CESCL	Private classes under safe conditions only until COVID restrictions are lifted	2/23-2/24	1/20-1/21
		4/8-4/9	3/23-3/24
			5/12-5/13
Recertification		2/9	1/25
		4/7	3/15
			5/19

For more information or to register contact:
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QUESTIONS?

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