



MEMORANDUM

Chief Engineer's Office
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November 1, 2021

To: CDOT Project Managers and Project Engineers
Hydraulic Engineers
Maintenance and Operations
Region and HQ Environmental
CDOT Consultants

From: Stephen Harelson, P.E.
Chief Engineer, Director of Stormwater Compliance

Subject: Water Quality and Related Environmental Trainings

In an effort to improve awareness of CDOT's Municipal Separate Storm Sewer Systems (MS4) programs, requirements, and related water quality permits, several classes are available to all employees and the consultants who influence or impact water quality during CDOT work. This Memo replaces the Chief Engineer's Memo, Water Quality Training, dated June 1, 2012.

For additional information on water quality and environmental classes, refer to the environmental training [webpage](#).

To sign up for classes, unless otherwise specified below, visit the CDOT Learning Management System (LMS) and/or the CDOT Learning Lane website.

WATER QUALITY TRAINING

Water Quality Training brings awareness, increases knowledge, and strengthens skills related to compliance issues facing CDOT, as required by the MS4 Permit and in alignment with CDOT's Environmental Stewardship Guide. Current and future training opportunities include:

Transportation Erosion Control Supervisor (TECS) Certification

Class Description: The TECS class focuses on CDOT specifications and permit requirements related to erosion and sediment control management on CDOT projects. The class provides

participants with the tools to perform the duties of the Stormwater Management Plan (SWMP) Administrator for Construction and Erosion Control Inspector during construction.

Attendees: Certification is required for those that act in the capacity of a Qualified Stormwater Manager or Erosion Control Inspector on CDOT construction projects.

Length: Two day class

Certification: To obtain this certification, one must attend both days of the class and pass the test with a minimum score of 80%. Certification is valid for three years.

LMS Course Number: 161003

Stormwater Management Plan (SWMP) Certification

Class Description: This class provides a basic understanding of construction stormwater management and erosion and sediment control principles in order to design and review SWMPs.

Attendees: Required for CDOT Environmental staff who review CDOT SWMPs and all CDOT staff and consultant staff who design CDOT SWMPs one acre or greater. For consistency, the course is highly recommended for those who design CDOT SWMPs less than one acre.

Class Length: Two day class

Certification: To obtain this certification, one must attend both days of the class and pass the test with a minimum score of 80%. Certification is valid for three years. Continuing education classes will be offered to extend the certification.

LMS Course Number: 142012

Municipal Separate Storm Sewer System (MS4) Permit

Class Description: Inform participants about CDOT's MS4 program to ensure compliance. This self-paced virtual class is currently in development for 2022. Additional training modules are required for Engineers and Maintenance personnel to enhance their understanding of their MS4 responsibilities.

Attendees: Required for personnel that design, inspect, maintain or provide construction oversight that may impact water quality. When developed, the MS4 class will be automatically assigned to applicable positions. However, this class is highly recommended for all CDOT employees.

Class Length: 1-2 Hours

Certification: n/a

LMS Course Number: TBD

Control Measure (CM) Selection for Stormwater Management (formerly Best Management Practices)

Class Description: Class participants will gain an understanding of the appropriate temporary CMs to specify when designing and reviewing CDOT SWMPs and when on construction sites.

Attendees: This class is currently being revised. When available, this class will be a required prerequisite to obtain TECS and SWMP Certifications.

Length: One day class

Certification: To obtain this certification, one must attend and participate in the class and pass the test with a minimum score of 80%. Certification is valid for three years.

LMS Course Number: 50086931

Permanent Water Quality (PWQ) Design and Design Review

Class Description: Participants will gain an increased understanding of the PWQ program to both properly design and review PWQ features to improve inspection and maintenance activities.

Attendees: Required for Region Hydraulic Engineers, Water Quality and Environmental Staff, Consulting Engineers who design or review PWQ features.

Length: This two-day class is offered and delivered by Colorado State University (CSU).

Sign Up: For more information and to sign up for the class, contact Jeremiah Unger jeremiah.unger@state.co.us

Certification: Certification is valid for three years and tracked by CSU.

LMS Course Number: 161002

Permanent Water Quality (PWQ) Inspection and Maintenance

Class Description: The class covers the proper techniques to inspect and maintain PWQ Control Measures (CMs).

Attendees: Required for all CDOT and consultant staff that inspect or maintain CDOT PWQ CMs and TM-I, TM-II, TM-III, and LTC-Ops in maintenance areas or patrols with Permanent Water Quality Control Measures (MS4 or other).

Length: Two-day class delivered by CSU

Sign Up: For more information and to sign up for the class, contact Jeremiah Unger jeremiah.unger@state.co.us or Ken Howlett kenneth.howlett@state.co.us

Certification: The certification is valid for three years and is tracked by CSU.

LMS Course Number: 132001

Pond Information Certification (PIC) Statement

Class Description: The training provides details on how to complete a PIC. The class explains the step-by-step process to compare as-constructed surveys to the design plans. The PIC is the compliance mechanism to ensure that PWQ CM capture volumes are met to comply with the MS4 permit.

Attendees: Required for CDOT Region and Consultant hydraulic engineers.

Length: 2 hours (includes discussions and pond volume calculation exercises)

Access: https://drive.google.com/file/d/1W8SgYkYUT1o7QMpvRLxxubO1Xi3h_1cl/view

Certification: n/a

LMS Course Number: n/a

Permanent Water Quality Expenditure Tracking (AASHTOWare Project Category 1300)

Class Description: Participants will gain knowledge and skills to ensure proper tracking and use of funds (e.g., PWQ Mitigation Pool Fund and other CDOT budgets) to build and install PWQCMs, per CDOT’s MS4 permit. Training is provided by the Data Program & Project Analysis Unit, and provides step-by-step guidance for creating Category 1300 in the AASHTOWare Project.

Attendees: Required for Project Engineers managing projects installing PWQCMs.

Length: Less than 10 minutes

Access: <https://www.youtube.com/watch?v=MkiiymvpIyI&t=2s>

Certification: n/a

LMS Course Number: n/a

Safety	People	Integrity	Customer Service	Excellence	Respect
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Pollution Prevention Good Housekeeping (PPGH)

Class Description: Participants will gain knowledge of maintenance and inspection procedures to protect stormwater at CDOT maintenance facilities and within CDOT’s Right of Way.

Attendees: Required for TM-I, TM-II, and TM-III.

Class Length: TBD

Certification: PPGH Training is required and automatically assigned to applicable positions. However, this class is highly recommended for all CDOT maintenance employees.

LMS Course Number: TBD

ENVIRONMENTAL TRAINING

Several environmental training classes are offered to increase understanding of the National Environmental Policy Act (NEPA) and other planning and environmental processes and requirements.

National Environmental Policy Act (NEPA) at CDOT

Class Description: This is an overview of the complex NEPA process and other environmental regulations that have to be applied to any project receiving federal funding or has any other federal nexus. Participants will learn about NEPA, the environmental clearance process, environmental resources that are considered, roles of CDOT environmental staff, and more.

Attendees: Required for all Environmental Staff and Design Engineers who manage projects to obtain a basic understanding of the Act and its requirements.

Length: Two-day in person class

Certification: n/a

LMS Course Number: 142010142010

Categorical Exclusions (CatEx)

Class Description: This course is an in-depth look at the Categorical Exclusion clearance process for projects that have a federal nexus. The CatEx is the lowest level of NEPA and is used to clear 95% of CDOT projects. Participants will learn about the clearance process, details about the environmental resources that are reviewed, how to fill out Form 128, coordination that takes place between environmental staff and project engineers, and more.

Attendees: Required for Environmental Project Managers, Resource Specialist, Design Engineers, and those that are Project Managers.

Length: 1.5 days in person and/or virtual class

Certification: n/a

LMS Course Number: TBD

Context Sensitive Solutions

Class Description: This course is an overview of the Context Sensitive Solutions (CSS) process. Participants will learn what CSS is, the benefits of CSS, who should be involved with the CSS process, how CSS is applied through the project lifecycle, and more.

Attendees: Highly recommended for Environmental Project Managers, Design Engineers, and those that are Project Managers.

Length: One-day virtual class

Certification: n/a

LMS Course Number: 50028165

Planning Environmental Linkages (PEL)

Class Description: This course is an overview of the PEL process. Participants will learn what is a PEL study, elements of a PEL and how to conduct one, the flexibility of PELs, how to transition from PEL to NEPA, and more.

Attendees: Highly recommended for Environmental Project Managers, Environmental Resource Specialists, Design Engineers, and those that are Project Managers.

Length: Two-day in person and/or virtual class

Certification: n/a

LMS Course Number: 30001

Visual Impact Assessments (VIA)

Class Description: This class provides an overview of the VIA process and participants will learn how to prepare a VIA.

Attendees: Highly recommended for both CDOT and Consultant Landscape Architects, Environmental Resource Specialists and Environmental Project Managers who prepare or review VIAs. The class is recommended for Design Engineers to gain a greater understanding of the process.

Length: One day class. Shorter classes and pre-recorded videos will be made available.

Sign Up: To express interest or more information contact Pamela Cornelisse

pamela.cornelisse@state.co.us

Certification: n/a

LMS Course Number: TBD