BMP C160: Certified Erosion and Sediment Control Lead

**Purpose**

The project proponent designates at least one person as the responsible representative in charge of erosion and sediment control (ESC), and water quality protection. The designated person shall be the Certified Erosion and Sediment Control Lead (CESCL) who is responsible for ensuring compliance with all local, state, and federal erosion and sediment control and water quality requirements.

**Conditions of Use**

A CESCL shall be made available on projects one acre or larger that discharge stormwater to surface waters of the state.

- The CESCL shall:
  - Have a current certificate proving attendance in an erosion and sediment control training course that meets the minimum ESC training and certification requirements established by Ecology (see details below).

    Ecology will maintain a list of ESC training and certification providers at: [www.ecy.wa.gov/programs/wq/stormwater](http://www.ecy.wa.gov/programs/wq/stormwater).

    OR

    - Be a Certified Professional in Erosion and Sediment Control (CPESC); for additional information go to: [www.cpesc.net](http://www.cpesc.net)

**Specifications**

- Certification shall remain valid for three years.

- The CESCL shall have authority to act on behalf of the contractor or developer and shall be available, on call, 24 hours per day throughout the period of construction.

- The CSWPPP shall include the name, telephone number, fax number, and address of the designated CESCL.

- A CESCL may provide inspection and compliance services for multiple construction projects in the same geographic region.

Duties and responsibilities of the CESCL shall include, but are not limited to the following:

- Maintaining permit file on site at all times which includes the SWPPP and any associated permits and plans.

- Directing BMP installation, inspection, maintenance, modification, and removal.

- Updating all project drawings and the CSWPPP with changes made.

- Keeping daily logs, and inspection reports. Inspection reports should include:
  - Inspection date/time.
Weather information; general conditions during inspection and approximate amount of precipitation since the last inspection.

A summary or list of all BMPs implemented, including observations of all erosion/sediment control structures or practices. The following shall be noted:

1) Locations of BMPs inspected,

2) Locations of BMPs that need maintenance,

3) Locations of BMPs that failed to operate as designed or intended, and

4) Locations of where additional or different BMPs are required.

Visual monitoring results, including a description of discharged stormwater. The presence of suspended sediment, turbid water, discoloration, and oil sheen shall be noted, as applicable.

Any water quality monitoring performed during inspection.

General comments and notes, including a brief description of any BMP repairs, maintenance or installations made as a result of the inspection.

Facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies or the owner.
Minimum Requirements for ESC Training and Certification Courses

General Requirements

1. The course shall teach the construction stormwater pollution prevention guidance provided in the most recent version of:
   b. Other equivalent stormwater management manuals approved by Ecology.

2. Upon completion of course, each attendee shall receive documentation of certification, including, at a minimum, a wallet-sized card that certifies completion of the course. Certification shall remain valid for three years. Recertification may be obtained by completing the 8-hour refresher course or by taking the initial 16-hour training course again.

3. The initial certification course shall be a minimum of 16 hours (with a reasonable time allowance for lunch, breaks, and travel to and from field) and include a field element and test.
   a. The field element must familiarize students with the proper installation, maintenance and inspection of common erosion and sediment control BMPs including, but not limited to, blankets, check dams, silt fence, straw mulch, plastic, and seeding.
   b. The test shall be open book and a passing score is not required for certification. Upon completion of the test, the correct answers shall be provided and discussed.

4. The refresher course shall be a minimum of 8 hours and include a test.
   a. The refresher course shall include:
      i. Applicable updates to the Stormwater Management Manual that is used to teach the course, including new or updated BMPs; and
      ii. Applicable changes to the NPDES General Permit for Construction Activities.
   b. The refresher course test shall be open book and a passing score is not required for certification. Upon completion of the test, the correct answers shall be provided and discussed.
   c. The refresher course may be taught using an alternative format (e.g. internet, CD ROM, etc.) if the module is approved by Ecology.

Required Course Elements

1. Erosion and Sedimentation Impacts
   a. Examples/Case studies
2. Erosion and Sedimentation Processes  
   a. Definitions  
   b. Types of erosion  
   c. Sedimentation  
      i. Basic settling concepts  
      ii. Problems with clays/turbidity  

3. Factors Influencing Erosion Potential  
   a. Soil  
   b. Vegetation  
   c. Topography  
   d. Climate  

4. Regulatory Requirements  
   a. NPDES - Construction Stormwater General Permit  
   b. Local requirements and permits  
   c. Other regulatory requirements  

5. Stormwater Pollution Prevention Plan (SWPPP)  
   a. SWPPP is a living document – should be revised as necessary  
   b. 12 Elements of a SWPPP; discuss suggested BMPs (with examples)  
      1. Mark Clearing Limits  
      2. Establish Construction Access  
      3. Control Flow Rates  
      4. Install Sediment Controls  
      5. Stabilize Soils  
      6. Protect Slopes  
      7. Protect Drain Inlets  
      8. Stabilize Channels and Outlets  
      9. Control Pollutants  
     10. Control De-watering  
     11. Maintain BMPs  
     12. Manage the Project  

6. Monitoring/Reporting/Recordkeeping  
   a. Site inspections/visual monitoring  
      i. Disturbed areas  
      ii. BMPs  
      iii. Stormwater discharge points  
   b. Water quality sampling/analysis  
      i. Turbidity  
      ii. pH  
   c. Monitoring frequency  
      i. Set by NPDES permit  
      ii. Inactive sites - reduced frequency
d. Adaptive Management
   i. When monitoring indicates problem, take appropriate action (e.g. install/maintain BMPs)
   ii. Document the corrective action(s) in SWPPP

e. Reporting
   i. Inspection reports/checklists
   ii. Discharge Monitoring Reports (DMR)
   iii. Non-compliance notification

Instructor Qualifications

1. Instructors must be qualified to effectively teach the required course elements.

2. At a minimum, instructors must have:
   a. Current certification as a Certified Professional in Erosion and Sediment Control (CPESC), or
   b. Completed a training program for teaching the required course elements, or
   c. The academic credentials and instructional experience necessary for teaching the required course elements.

3. Instructors must demonstrate competent instructional skills and knowledge of the applicable subject matter.