CSA/W202-18, Erosion and Sediment Control Inspection and Monitoring was developed to bring greater consistency and efficiency to the inspection and monitoring functions associated with erosion and sediment control measures installed on construction sites. The standard contains requirements and recommendations for inspection personnel qualifications, water monitoring targets, inspection frequency, documentation and communication, and other special conditions.

Qualified Personnel

CSA/W202-18 outlines the qualifications necessary of a ‘Qualified Erosion and Sediment Control Inspector’ (QESCI), which among other things includes:

- A relevant post-secondary degree or technical diploma
- Minimum three years of on-site field expertise directly related to environmental inspection and monitoring, or construction management of similar size/complexity
- The successful completion of one or more recognized training or certificate courses
- The ability to read and comprehend erosion and sediment control plans, contract drawings, specifications, and technical reports directing the proposed works

Thorough Inspections

The standard establishes requirements for conducting visual ESC measure inspection across the major phases of construction.

Before construction:

The QESCI shall, for example:

- Verify that all receptors are adequately identified and protected by planned ESC measures in order to monitor changes
- Establish reference/vantage points and monument for photo documentation
- Collect date and time stamped photographs + video of receptors, and other areas of interest as determined during the planning and design stage

During construction:

The QESCI shall, for example:

- Verify that all installed ESC measures are in place, according to the ESC plan agreed to by the project owner or regulatory authority
- Complete a daily review of weather forecasts to ensure necessary inspection frequencies
- Conduct daily inspections during periods of significant rainfall and thaw events
- Complete at least one inspection weekly during construction
- Complete a daily inspection during thaw events
Thorough Inspections

Post-construction:
The QESCI shall:

- Ensure inspections are carried out by the QESCI in accordance with the requirements of Clause 5.2.2 and until sign-off is obtained from the project owner or regulatory authority.

ESC Performance Monitoring

The standard provides important recommendations that form a national benchmark for TSS and NTU targets associated with receiving watercourse and effluent discharge monitoring.

Receiving Watercourse Monitoring

Total suspended solids (TSS) within a receiving watercourse should not exceed 25 mg/L TSS above the receiving watercourse's background levels for short-term exposure periods (e.g., 24 h). For longer term exposure periods (e.g., 24 h to 30 days), the maximum average increase above background should not exceed 5 mg/L.

When the receiving watercourse’s background levels are between 25 and 250 mg/L, the maximum increase in TSS above background should not exceed 25 mg/L.

When the receiving watercourse’s background levels are greater than 250 mg/L, the increase in TSS above background should not exceed 10% of the background level.

The maximum increase in Turbidity (NTU) above the receiving watercourse's background level should not exceed 8 NTU for short-term exposure periods (e.g., 24 h). For longer term exposure periods (e.g., 30 days), the maximum average increase above background should not exceed 2 NTU.

When the background level of a receiving watercourse is 80 NTU or less, the maximum increase above background should not exceed 8 NTU. When the background level in the receiving watercourse is greater than 80 NTU, the maximum increase should not exceed 10% of the background level (CCME, 2002).

Effluent Discharge Monitoring

Measurements of effluent water at the point of discharge from the construction site should not exceed 25 mg/L TSS.

If using NTU the user should consult with the project owner or regulatory authority to determine an acceptable NTU value equivalent to 25 mg/L TSS, based on site specific parameters.

Other Provisions

In addition to its main provisions, the standard also provides requirements and recommendations for:

- Site inspection documentation and communication
- In-water works
- Material haulage
- Spill control and response plans
- Stormwater management facilities
- Project sign-off

Order Your Copy Today

Visit store.csagroup.org
Call 800 463 6727, or email us at sales@csagroup.org