

## Legal Requirements and Performance Standards

### 4.2 What is a Performance Standard?

A performance standard identifies the desired result for work that is carried out. It must be met to ensure compliance with applicable environmental legislation. In some cases, it may be defined by scientifically-supported maximum permissible disposal or impact thresholds (e.g., the concentration of a particular chemical in wastewater discharge). At other times, it may be a simple general statement such as the requirement to cause no harmful alteration, disruption or destruction of fish habitat.

Most of the performance standards that apply to routine highway maintenance activities are general statements rather than specific thresholds. In many cases, impact thresholds are site-specific, and may vary between regions and regulatory agencies. Staff from local MOE and DFO offices may be able to provide more information on specific impact thresholds related to a particular activity.

#### **SMART Objectives:**

**S**pecific

**M**easurable

**A**chievable

**R**ealistic

**T**ime Specific

#### **An Example Performance Standard: Deleterious Substance Discharge**

The general performance standard identified is simply a restatement of a section of the *Fisheries Act*: **No release of any substance that could be deleterious (toxic) to fish or fish habitat (*Fisheries Act*, Sections 34(1) and 36(3)).**

Many highway maintenance works involve the disturbance of sediment and soil or the use of potentially hazardous or harmful materials. Without proper containment measures and careful use, these materials may be released to the environment as deleterious substances. A deleterious substance is any compound or material which, when introduced into the environment, causes a harmful effect. A substance may be considered deleterious because of its concentration or chemical or physical effects on the water quality and organisms within the watercourse or water body receiving the discharged substance.

Examples of deleterious (or potentially deleterious) substances resulting from highway maintenance activities include, but are not limited to:

- Runoff from patching and sealing compounds, tar, asphalt, and chemical surface treatments used in highway surface management activities
- Sediment in runoff from bridge deck cleaning activities, disturbed soils, newly applied gravel or riprap materials, and materials stockpiles
- Leachate and raw product from concrete and cement-based products used to repair concrete structures
- Runoff or overspray containing de-icing compounds and dust control palliatives
- Equipment oils and fuels

#### **The Sediment Question**

Studies have shown that the introduction of fine sediments generated directly from digging activity in the stream and indirectly from run-off from exposed soils has severe negative impacts on all life stages of fish and other aquatic life and their habitats. While no amount of a deleterious substance is permitted to be discharged, DFO uses the following threshold value to identify the level at which sediment becomes deleterious. Sediment becomes a deleterious substance when a water sample taken from the discharging water source has a total suspended solids (TSS) value more than **25mg/l** above the background TSS value of the receiving watercourse. During storm events, sediment-laden waters are considered deleterious when the TSS value of the discharging water source is more than **75mg/l** above the background TSS value for the receiving watercourse.