

Testing Spill Contingency Plans

Division 2.1 Spill Preparedness, Response and Recovery of the *Environmental Management Act* (EMA) came into effect on October 30, 2017. Section 91.11 sets out the requirement that regulated persons develop and test spill contingency plans. Section 15 of the [Spill Contingency Planning Regulation](#) outlines how these plans are to be developed and tested.

This document helps regulated persons understand and comply with requirements for testing spill contingency plans.

Note: testing requirements come into effect as follows:

- [April 30, 2018](#) for pipeline and rail sectors; and
- [October 30, 2018](#) for the highway transport sector.

Testing requirements do not come into effect until the date that the spill contingency plans are to be completed. Therefore, if a proponent is granted an extension for the completion of a spill contingency plan (See Spill Contingency Plan fact sheet for further information), the testing requirements do not come into effect until after the contingency plan is due.

Types of tests

Tests are the simulated implementation of a spill contingency plan against a scenario reflective of a real spill. Tests are performed using drills and exercises.

- **Drills** are tests that evaluate a single, specific function. For example, a drill for a spill contingency plan could be the initiation of notification procedures of a real spill scenario.
- **Exercises** are tests that evaluate a process or series of functions. For example, the activation of the entire spill contingency plan in sequence to assess how the various components work together.

Required tests are:

- **Discussion-based test** is an exercise or drill, based on a simulated spill of regulated substances, which is not operations-based. Discussion-based tests are also known as table-top tests.
- **Operations-based test** is an exercise or drill based on a simulated spill of a regulated substance. The exercise or drill involves deployment of equipment, personnel and other resources, or the implementation of spill response procedures.
- **Worst-case scenario test** is an operation-based test that is the simulated worst -case scenario spill of a specified volume of regulated substance. Worst-case scenario tests must be conducted in British Columbia.

Components of the plan to test

Section 16 of the Spill Contingency Planning Regulation lists all the components of a regulated person's spill contingency plan that must be tested. Section 15 (2) (a) sets the requirement that all components are to be tested during a three-year period. The components to test are:

- Notification
- Mobilization, deployment and ongoing sufficiency of personnel and equipment
- Maintenance of equipment, personnel, and other resources
- Incident command system and post incident command system
- Spill source control
- Initial and ongoing assessment of the spill site
- Stabilization, removal, containment and clean up

- Protection of aspects of the environment, human health, and infrastructure as related to the spill response planning map (Section 5 (1) (g)) and hazard assessment (Section 4 (1) (c))
- Monitoring and documentation
- Communications
- Waste management

Response staff must participate in tests

Tests must involve individuals who would be responsible for implementing the components of the plan that are being tested.

Frequency of tests for highway transporters

Section 15 (1) and (4) set out the types of tests required by highway transporters in a three-year period. Highway transporters must perform a discussion-based and operation-based test each year in a three-year period for a total of six tests. They are not required to conduct worst-case scenario tests.

Highway transporters must test all 11 components in the three-year period as listed under the *What must be tested* heading in this fact sheet. Additional tests can be conducted in the period if all 11 components were not tested as part of the minimum six required tests.

Frequency of tests for pipelines and rail

Section 15 (1) sets out the types of tests required by pipeline and rail operations. Unlike highway transporters, pipeline and rail operations must conduct worst-case scenario tests. During each three-year period pipeline and rail operations that are regulated persons must perform a worst-case scenario test in one year and both a discussion-based and operations-based test in each of the other two years for a total of five tests. For example:

- Year 1: discussion-based and operations-based test
- Year 2: discussion-based and operations-based test
- Year 3: worst-case scenario test (conducted in B.C.)

Pipeline and rail operations must test all 11 components in the three-year period as listed under the *What must be tested* heading in this fact sheet. Additional tests can be conducted in the period if all 11 components were not tested as part of the minimum five required tests.

The order of tests in each three-year period is not prescribed in the regulation. This means a worst-case scenario test can occur at any point in the period. However, the discussion-based and operation-based tests must be conducted in the years that the worst-case test is not being conducted.

A worst-case scenario test is not required in a three-year period by regulated persons that faced a worst-case scenario spill during that time.

Regulated Person
<p>A regulated person is a person who has possession, charge or control of liquid petroleum products – as defined in the Spill Preparedness, Response and Recovery Regulation – in the following defined quantities:</p> <ol style="list-style-type: none"> 1. Any quantity being transported by pipeline 2. 10,000 litres or more transported by rail 3. 10,000 litres or more being transported by truck <p><u>Note:</u> operations regulated by the B.C. Oil and Gas Commissions are exempt from the spill contingency planning requirements in Section 91.11 of EMA (see below on OGC exemption). These operations are governed by a comprehensive emergency preparedness and response system under the <i>Oil and Gas Activities Act</i>.</p>

Determining the specified quantity for a worst-case scenario spill

The specified quantity for each type of regulated person is set out in Section 2 of the Spill Contingency Planning Regulations. A worst-case scenario test is based on a simulated spill of a specified quantity.

- A pipeline specified quantity is based on the greater of: (1) the quantity of the largest historical spill from the pipeline; (2) the volume of the largest battery of breakout tanks without secondary containment; or (3) a calculation of how much could spill based on the maximum amount of time it may take to detect a spill and shutdown the pipeline [*Formula: Quantity= (detection time + shutdown time) x flow rate + line drainage*].

A railways specified quantity is based on the greater of (1) the maximum in a single railcar, or (2) 20% of the maximum quantity that *could be* transported by the train. For example if a train has 10 railcars with the maximum oil transporting capacity of 1,150,000 litres, the specified quantity that must be considered as the volume of spilled oil in worst-case-scenario planning is 230,000 litres. Note that the worst-case-scenario planning for this train is consistently based on 230,000 liters of oil, even if it carries less than that amount at times. As a result, the emergency staff is always prepared for 20% of maximum capacity spill, regardless of the total carried regulated substance.

Providing information about tests to the ministry

Section 15 (3) sets out that a regulated person, on request of a director must:

- Provide the dates when tests were conducted or will be conducted in the current three-year period;
- Provide information about the above mentioned tests; and
- Allow the director, or a designated individual, to observe any tests that are planned for the future.

Oil and Gas Commission Exemption

Parties regulated by the Oil and Gas Commission (OGC) who meet the regulated person criteria are regulated persons, but are exempt from the spill contingency planning requirements under Section 91.11 of EMA. These parties are already regulated by an existing provincial regulatory system and are therefore exempt from all the ministry preparedness requirements, which are (1) spill contingency planning, (2) testing spill contingency plans, and (3) records keeping.

Parties are considered to be regulated by the OGC if they are regulated under the *Oil and Gas Activities Act* and its associated Emergency Management Regulation.

It remains the intent of the B.C. government for the OGC to be the “one window” for all provincially

regulated oil and gas activities. Parties regulated by the OGC who would otherwise be regulated persons under the *Environmental Management Act* will continue to interact primarily with the OGC in order to fulfil the regulatory requirements of both.

Fines and Penalties

It is the responsibility of regulated persons, responsible persons and the owners of substances or things to understand and comply with the *Environmental Management Act* and its associated regulations.

This document is solely for the convenience of the reader and is intended to assist in understanding the legislation and regulations, not replace them. It does not contain and should not be construed as legal advice. Current legislation and regulations should be consulted for complete information.

Failure to be in compliance can result in convictions of fines and imprisonment, as outlined in the *Environmental Management Act* and its associated regulations.

Additional Fact Sheets

Fact Sheets on other relevant topics are published by the Environmental Emergency Program (EEP) and available at:

www.gov.bc.ca/spillresponse

The complete list of available fact sheets:

- 01 Regulated Person
- 02 Responsible Person
- 03 Spill Reporting
- 04 Lessons-Learned reports
- 05 Cost Recovery
- 06 Requirement to Provide Information
- 07 Spill Contingency Planning
- 08 Testing Spill Contingency Plans
- 09 Recovery Plan

**For more information, contact
Environmental Emergency Program
at: spillresponse@gov.bc.ca**

Appendix 1: Example testing schedule for three-year period starting in 2018

- Regulated persons are free to plan their own schedule to meet testing requirements set out in the Spill Contingency Planning Regulation. The purpose of this sample schedule is to assist regulated persons in planning their testing schedules.

Highway transporter regulated persons

Three-year period		
Oct 31, 2018 to Oct 30, 2019	Oct 31, 2019 to Oct 30, 2020	Oct 31, 2020 to Oct 30, 2021
Discussion-based test DRILL <i>Component: (1) maintaining the ongoing sufficiency of equipment, personnel and other resources as it relates to the mobilization and deployment of spill response equipment and spill response personnel</i>	Discussion-based test EXERCISE <i>Components: (1) notification; (2) incident command system and incident command post; (3) monitoring and documentation; and, (4) communication</i>	Discussion-based test DRILL <i>Component: (1) protection of aspects of environment, human health and infrastructure</i>
Operations-based test EXERCISE <i>Components: (1) mobilization, deployment and ongoing sufficiency as it relates to spill response equipment and spill response personnel; and, (2) source control</i>	Operations-based test DRILL <i>Component: (1) initial and ongoing assessments</i>	Operations-based test EXERCISE <i>Components: (1) stabilizing containing removing and cleaning up; and, (2) waste management</i>

Pipeline and rail operations regulated persons

Three-year period		
May 1, 2018 to Apr 30, 2019	May 1, 2019 to Apr 30, 2020	May 1, 2020 to Apr 30, 2021
Discussion-based test EXERCISE <i>Components: (1) initial and ongoing assessments; and, (2) protection of aspects of environment, human health and infrastructure</i>	Discussion-based test DRILL <i>Component: (1) maintaining the ongoing sufficiency of equipment, personnel and other resources as it relates to the mobilization and deployment of spill response equipment and spill response personnel</i>	Worst-case scenario test EXERCISE <i>Components: (1) notification; (2) incident command system and incident command post; (3) monitoring and documentation; and, (4) communication</i>
Operations-based test DRILL <i>Component: (1) mobilization, deployment and ongoing sufficiency as it relates to spill response equipment and spill response personnel</i>	Operations-based test EXERCISE <i>Components: (1) source control; (2) stabilizing containing removing and cleaning up; and, (3) waste management.</i>	