

# Hydrostatic Testing of Pipelines

## FACTS AT YOUR FINGERTIPS

Parties responsible for hydrostatic testing must ensure they are in compliance with Alberta Environment's Legislation including the requirements of the Codes of Practice and other Applicable Legislation

Parties are required to report any contravention in accordance with the provisions outlined in the two Codes of Practice.

# UNDERSTANDING HYDROSTATIC TESTING LEGISLATION

This fact sheet describes when the two Codes of Practice (COP) apply, and the definitions that apply to each.

One of the activities associated with hydrostatic testing of pipelines involves obtaining water from a natural water body. The right to divert water from a natural water body and use of the water is regulated under the authority of the Water Act, Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines. For diversions of water in excess of 30 000m3 a water diversion license is required.

The release of hydrostatic test water to the environment after the completion of the hydrostatic test is regulated under the Environmental Protection and Enhancement Act, Code of Practice for the Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines.

Parties responsible for hydrostatic testing must ensure they are in compliance with Alberta Environment's legislation including the requirements of the Codes of Practice and other applicable legislation.

#### **Enforcement**

Parties found in contravention of either Alberta's *Water Act* and/or *Environmental Protection and Enhancement Act* may be subject to enforcement.

Parties are required to report any contravention in accordance with the provisions outlined in the two Codes of Practice.

Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines (*Water Act*).

Useful definition interpretations are outlined below.

**Hydrostatic testing** applies to the pressure testing of a pipeline, including:

- Applies to all diversions up to 30,000 m<sup>3</sup> of water.
- Used for testing the integrity of any type of pipeline (O&G, Utilities, etc.)
- Release from the pipeline at any point.
- Does not apply if the water is not released from the pipeline (This rarely happens because eventually it does leave the pipeline either at a facility or entering another pipelines).

**Release** means the discharge, seepage, or leakage of water from a pipeline, this includes:

- Any discharge of water from any part of the pipeline is considered a release. Included in this are trucks, tanks, to the environment, or any other location identified below (as described in Section 3(3)(e)(ii):
  - Land where no diverted water will enter a water body; or
  - A surface water body; or
  - o An injection well; or
  - Another location.

**Source** means the supply from which water will be diverted for hydrostatic testing, this includes;

- Groundwater
- A surface water body
- A municipal supply
- o Or another source.





### **FACTS AT YOUR FINGERTIPS**

If a person responsible is going to divert >30,000m3, then a temporary water diversion license is required.

Code of Practice (COP) for The Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines (Environmental Protection and Enhancement Act)

This COP applies to hydrostatic testing for the purpose of pressure testing a pipeline to determine its integrity.

A registration under the COP must be submitted to the Director at least 7 days prior to releasing over 1000m3 of water. If less than 1000m3 of water is released, no registration is required, but the person responsible must still comply with sections 4, 5, 6, 7, 8, and Schedule 1 and schedule 2 of the COP.

Release means release of hydrostatic test water to the environment. In order for the water to be released to the environment it must first meet the requirements of either Schedule 1 for release to land or Schedule 2 for release to surface water.

Source Water means water that is diverted for used in hydrostatic testing. All new pipelines must be tested using water that has not previously been used for hydrostatic testing. A representative grab sample must be taken of the source water and analyzed for electrical conductivity and sodium adsorption ration for all releases and total suspended solids if releases are to receiving water.

#### **Code Comparison**

In a comparison of the two Codes of Practice dealing with hydrostatic testing, distinct differences exist in the definitions of Director, hydrostatic testing, pipeline, release, and source/ source water. The two codes can be reconciled by the following criteria:

- If a person responsible was going to divert < 30,000 m3, but will release <1000m3, then that person need only comply with the Water Act Diversion COP, and need not obtain a registration under the EPEA Release COP. There are still provisions under the EPEA COP the person must follow, but no registration is needed.
- If a person responsible is going to divert >30,000m3, then a temporary water diversion license is required.
- If a person responsible was going to divert <30,000m3, and release >1000m3, but the release is not going to the "environment", then the person need only comply with the Water Act Diversion COP, and need not obtain a registration under the EPEA Release COP. Provisions must still be followed under the EPEA COP.

#### **More Information**

Copies of the regulations and code can be obtained from the Queen's Printer Bookstore at 10611 - 98 Avenue, Edmonton, by telephone at (780) 427-4952, or online at www.gov.ab.ca/qp.

For additional information about hydrostatic testing in Alberta contact the nearest Alberta Environmental regional office.

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