Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines

Effective January 1, 1999

Water Act - Water (Ministerial) Regulation

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# ALBERTA ENVIRONMENTAL PROTECTION WATER ACT; WATER (MINISTERIAL) REGULATION,

## CODE OF PRACTICE FOR THE TEMPORARY DIVERSION OF WATER FOR HYDROSTATIC TESTING OF PIPELINES

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### Schedules

1. Schedules: List of Directors and Regional Boundaries Map
Definitions

1(1) All definitions in the Water (Ministerial) Regulation and in Section 1 of the Water Act apply except where expressly defined in this Code of Practice.

(2) In this Code of Practice,

(a) “biota” means plants and/or animals and any portion thereof, living or dead, including but not limited to all life stages, eggs, seeds, spores, bacteria, and free-floating or within-a-host disease organisms;

(b) “Code of Practice” means the Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines, as amended;

(c) “Director” means the Director as determined from Schedule 1;

(d) “fully mitigate” means that the quality and quantity of the aquatic environment affected by the hydrostatic testing is restored at a minimum to same level that existed prior to the hydrostatic testing;

(e) “hydrostatic testing” means the pressure testing of a pipeline which is comprised of

(i) the diversion of up to 30,000 cubic metres of water from any sources;

(ii) the use of the described in (i) as a test medium for pressure testing a pipeline to determine its integrity; and

(iii) the release of the water any portion of the pipeline;

(f) “owner” means

(i) the person who owns the pipeline that is the subject of the hydrostatic testing; or

(ii) a successor, assignee, executor, administrator, receiver, receiver-manager, liquidator or trustee of a person described in (i); or

(iii) a person who acts as the principal or agent of a person described in (i) or (ii);

(g) “person responsible” means

(i) any person who undertakes hydrostatic testing, or who supervises any part of hydrostatic testing; or

(ii) an owner; or
(iii) a successor, assignee, executor, administrator, receiver, receiver-manager, liquidator or trustee of a person described in (i) or (ii); or

(iv) a person who acts as the principal or agent of a person described in (i), (ii) or (iii);

(h) “pipeline” means a pipe for the transmission of any substance and includes any installations, including storage tanks, in connection with that pipeline;

(i) “plan(s)” means written and drawn information, including, but not limited to drawings, specifications, documents and written instructions;

(j) “release” means the discharge, seepage or leakage of water from a pipeline, and;

(k) “source” means the supply from which water will be diverted for hydrostatic testing, and includes but is not limited to a water body or a municipal supply.

**Bound by Code of Practice**

2 A person responsible must meet the requirements set out in this Code of Practice.

**Notification**

3(1) For the purposes of Section 7 of the Water (Ministerial) Regulation, an owner must provide written notice to the Director, at least seven (7) calendar days, before the hydrostatic testing is commenced, or as otherwise specified in writing by the Director.

(2) In addition to 3(1) if there are releases of water of a volume greater than 1000 cubic meters, a registration number must be obtained 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, an owner must submit the written notice described in 3(1) at least seven (7) calendar days, or as otherwise specified in writing by the Director, before the hydrostatic testing is commenced to the:

Regulatory Approvals Centre  
Main Floor, Oxbridge Place  
9820-106 Street  
Edmonton, Alberta  
T5K 2J6

(3) The written notice under 3(1) and 3(2) must contain the following information unless otherwise authorized in writing by the Director:
(a) the name, address and telephone number of the owner of
the pipeline;

(b) a description of the source including:

   (i) legal land description of the source site (on the source) from
       which water will be temporarily diverted;

   (ii) whether the source is groundwater, a surface water body, a
        municipal supply, or another source;

   (iii) name of the source if it is a named surface water body;

   (iv) volume of water to be diverted from the source;

   (v) the method of diversion from the source;

   (vi) rate of diversion;

   (vii) the expected instantaneous discharge for the time of the
        diversion when the rate of diversion will exceed 5% of the rate
        of flow in the watercourse during the diversion;

   (viii) dates at which the water will be diverted from the source;

   (ix) method to be used to convey water from the source to the
        pipeline section to be tested;

(d) the legal land descriptions of the lands at the beginning and end of
the pipeline section to be tested;

(e) a description of the expected release of water including:

   (i) legal land description of any point where water is to be
       released;

   (ii) a description of whether the water will be released to:
       
       (A) land where no diverted water will enter a water body; or

       (B) a surface water body; or

       (C) an injection well; or

       (D) another location;

   (iii) name of the water body to which water is to be released;

   (iv) volume of water to be released;

   (v) approximate rate the water will be released (cubic meters/hr);

   (vi) dates on which the water will be released; and
(vii) the last date of hydrostatic testing;

(f) a statement of whether the hydrostatic testing could cause the transfer of biota to any portion of a water body where that biota does not exist;

(g) if the statement in clause (f) indicates that the hydrostatic testing could cause the transfer of biota, then a description of:

(i) measures that will be taken to prevent the transfer of biota; and

(ii) tests that will be done to ascertain the effectiveness of the measures described in subclause (i);

(h) a letter signed by a person responsible certifying that the information in the notification is correct and the hydrostatic testing will be conducted in accordance with the Code of Practice.

(4) Where written notice was provided in accordance with 3(1), 3(2) and 3(3), and the hydrostatic testing was not completed within the time period specified in the notice, the notice is no longer in effect, and an owner must provide a new notice in accordance with 3(1) and 3(2) prior to commencing any hydrostatic testing.

Water Use Bound by Water Act

4 Water released under this Code of Practice must not be used except in accordance with the Water Act.

Operating Standards

5(1) A person responsible must conduct hydrostatic testing so that:

(a) the hydrostatic testing does not directly or indirectly cause a significant adverse effect on the aquatic environment;

(b) there is no significant adverse effects on any household user, licensee or traditional agricultural user;

(c) all adverse effects on the aquatic environment are fully mitigated; and

(d) no deleterious material is deposited into any water body;

(2) In addition to the requirements specified under 5(1), a person responsible who has commenced hydrostatic testing must complete the hydrostatic testing within the time period stated in the notice required under Section 3.
6(1) Prior to commencing any hydrostatic testing, an owner or a person responsible must prepare plans which meet all of the following requirements:

(a) specifications for the hydrostatic testing that meet the requirements of Section 5(1) of this Code of Practice;

(b) description of procedures and measures which will be followed to ensure that:

(i) all biota in water temporarily diverted for the testing will be destroyed prior to the pressure testing being commenced or any release of water, except where it has been proven that the biota at the source is present in potentially affected water bodies along the route of the section of pipeline to be tested;

(ii) the requirements of any applicable instream objectives, instream flow needs, water mastering plan, water guideline, water conservation objective and water management plan are met;

(iii) any water from any fish bearing source will enter the intake pipe

(A) after passing through a screen with openings that are no larger than 2.54 millimetres; and

(B) at a velocity of flow at the screen described in 6(1)(b)(iii)(A) not exceeding 0.038 metres/second;

(iv) that there is no flooding of land without the written consent of the landowner;

(v) that there is no erosion or siltation of any land;

(vi) the effects on any water body will be fully mitigated; and

(vii) when groundwater is used as a source;

(A) groundwater users within three (3) kilometres of the diversion will be notified prior to the diversion; and

(B) the aquifer will be determined to be capable of producing the required quantity of water without an adverse effect to the aquifer;

(c) procedures and measures to address the transfer of biota referred to clause 6(1)(b)(i), which must include the following:

(i) tests done to determine the biota present;
(A) at the location(s) on the source where the water will be diverted;

(B) at the location(s) of the crossing of any water bodies crossed by the section of pipeline to be tested; and

(C) at the location(s) in any water bodies that will or may receive the release of water;

(ii) measures to be taken to prevent the transfer of biota; and

(iii) tests to be done to ascertain the effectiveness of the measures to be taken to prevent the transfer of biota;

(d) a description of information to be collected before, during and after the hydrostatic testing, and which must include photographs of the points of diversion and release, and after any diversion and release;

(e) a copy of any plans, information, published reports and written assessments used to develop the specifications described in 6(1)(a) may include but are not limited to:

(i) reports prepared and information gathered with respect to any source of water, any water bodies crossed by the section of pipeline to be tested and any water bodies that may receive the release of water;

(ii) information used in the determination that the hydrostatic testing could result in biota being transferred from a source to any portion of a water body where that biota is not present; and

(iii) a list of any other information and published reports that were used to prepare the plan including but not limited to information related to the effectiveness of the proposed measures to destroy biota in the diverted water to prevent its transfer to water bodies in which that biota is not present;

and

(f) certification by the person who prepares the specifications referred to in 6(1)(a) stating that the specifications meet the requirements of Section 5(1) of this Code of Practice.

(2) All plans prepared shall comply with this Code of Practice.

Post Test Certification

7 Within 21 calendar days after the hydrostatic testing has been completed, an owner must sign a letter certifying that Section 5(1) has been met, except where an owner has, under Section 8 of this Code of Practice, reported a contravention of this Code of Practice, in which case an owner must sign a letter
certifying Section 5(1) has been met except for the reported contravention of this Code of Practice.

**Reporting**

8(1) A person responsible must immediately, by telephone, report any contravention of this Code of Practice, or any leakage of water from the pipeline that occurs during the hydrostatic testing and which results in a release of water to a water body to:

(a) Director; and

(b) the owner.

(2) An owner must, within 7 days of receiving a report of a contravention or leakage of water from the pipeline under 8(1) or within another time period specified in writing by the Director, provide to the Director a written report that must contain:

(a) a description of the contravention;

(b) an explanation of the cause or causes of the contravention;

(c) a summary of all preventive measures and actions that were taken prior to the contravention;

(d) a summary of all measures that were taken to mitigate the contravention and any remaining actions required to achieve compliance with the Code of Practice;

(e) the names, addresses, phone numbers and the duties related to the hydrostatic testing of the persons responsible at the time that the contravention occurred; and

(f) proposed preventive measures designed to prevent future contraventions.

**Record Keeping and Information Availability**

9(1) An owner must:

(a) compile and retain records of:

(i) the names, addresses and phone numbers of the owners of the pipeline;

(ii) a copy of the plan(s) prepared under Section 6 of this Code of Practice;

(iii) the names, addresses and phone numbers of persons responsible who were at the site during the hydrostatic testing of the pipeline;
(iv) the dates of the diversion of water from the source, the pressurization of the pipeline and the release of water from the pipeline;

(v) the duration of time each day that activities occurred in a water body;

(vi) a record of measures taken to prevent the transfer of biota, and the results of tests done to ascertain the effectiveness of the measures;

(vii) photographs of the points of diversion and release before and after the diversion and release of any water;

(viii) a copy of all letters obtained or prepared under Section 7 of this Code of Practice; and,

(b) compile the records referred to in 9(1)(a) in accordance with the following requirements, unless otherwise authorized in writing by the Director:

<table>
<thead>
<tr>
<th>Records or Letters Referred to in clause (1)(a)</th>
<th>Time Requirements</th>
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<tr>
<td>(1)(a)(i) and (1)(a)(ii)</td>
<td>Must be compiled before submission of the notice under Section 3 of this Code of Practice</td>
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<tr>
<td>(1)(a)(iii), (1)(a)(iv), (1)(a)(v), (1)(a)(vi), and (1)(a)(vii)</td>
<td>Must be compiled within two weeks after the completion of the hydrostatic testing</td>
</tr>
<tr>
<td>(1)(a)(viii)</td>
<td>Must be secured in accordance with the requirements set out in section 7 of this Code of Practice</td>
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</tbody>
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(2) An owner must retain all records referred to in 9(1) for five years after the completion of the hydrostatic testing.

(3) An owner must, within seven days or another time period specified by the Director, provide to the Director any requested information retained in accordance this Code of Practice.

Effective Date

10 This Code Of Practice is effective January 1, 1999.

Code Amendment

11 Alberta Environmental Protection may institute a review and amendment of
this Code Of Practice at any time, however this code Of Practice will be reviewed by January 1, 2004.
### SCHEDULE 1 – (List of Directors and Regional Boundaries Map)

**A) List of Directors for “Code of Practice For the Temporary Diversion of Water for Hydrostatic Testing of Pipelines”**

<table>
<thead>
<tr>
<th>Director and REGIONAL AREA</th>
<th>ADDRESS</th>
<th>FAX</th>
<th>TELEPHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional Water Manager</strong> Northwest Boreal Region</td>
<td>Alberta Environmental Protection Natural Resources Service Northwest Boreal Region Bag 900-5, Provincial Bldg. 9621 - 96 Avenue Peace River, AB, T8S 1T4</td>
<td>624-6335</td>
<td>624-6167</td>
</tr>
<tr>
<td><strong>Manager Regional Support</strong> Northeast Boreal Region</td>
<td>Alberta Environmental Protection Natural Resources Service Northeast Boreal Region 7th Floor, Oxbridge Place 9820 -106 Street Edmonton, AB, T5K 2J6</td>
<td>422-0528</td>
<td>427-5296</td>
</tr>
<tr>
<td><strong>Manager Regional Support</strong> Northern East Slopes Region</td>
<td>Alberta Environmental Protection Northern East Slopes Region Natural Resources Service 11th Floor, Oxbridge Place 9820 -106 Street Edmonton, AB, T5K 2J6</td>
<td>422-2147</td>
<td>427-6059</td>
</tr>
<tr>
<td><strong>Manager Regional Support</strong> Parkland Region</td>
<td>Alberta Environmental Protection Natural Resources Service Parkland Region 3rd Floor, Provincial Building 4920 - 51 Street Red Deer, AB., T4N 6K8</td>
<td>340-5022</td>
<td>340-5310</td>
</tr>
<tr>
<td><strong>Regional Water Manager</strong></td>
<td>Alberta Environmental Protection</td>
<td>297-2749</td>
<td>297-6582</td>
</tr>
</tbody>
</table>
| Bow Region | Natural Resources Service Bow Region  
| 2nd Floor, 3115 - 12 Street NE  
| Calgary, AB., T2E 7J2 |
| Regional Water Manager  
Prairie Region | Alberta Environmental Protection  
Natural Resources Service Prairie Region  
Provincial Building  
293, 200 - 5 Avenue, S.; Lethbridge, AB., T1J 4C7 | 381-5337 | 381-5396 |