Code of Practice for Wastewater Systems Consisting Solely of a Wastewater Collection System

September 2003

Made under the Environmental Protection and Enhancement Act, RSA 2000, c.E-12, as amended and the Wastewater and Storm Drainage Regulation, A.R. 119/93
ALBERTA ENVIRONMENT

CODE OF PRACTICE FOR WASTEWATER SYSTEMS CONSISTING SOLELY OF A WASTEWATER COLLECTION SYSTEM
[made under the Environmental Protection and Enhancement Act, RSA 2000, c.E-12 and the Wastewater and Storm Drainage Regulation, A.R. 119/93]

September 2003
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PART 1: DEFINITIONS

1.1 All definitions in the Act and the regulations apply except where expressly defined in this Code of Practice.

1.2 In this Code of Practice:

(a) “Act” means the Environmental Protection and Enhancement Act, R.S.A. 2000, c.E-12, as amended from time to time;

(b) “grab” means, when referring to a sample, an individual sample collected in less than 30 minutes and which is representative of the substance sampled;

(c) “low pressure wastewater collection system” means a wastewater collection system from which domestic wastewater is discharged periodically into a pressure main by means of a grinder pump capable of grinding the solids in the wastewater;

(d) “professional engineer” means a professional engineer or registered professional technologist (engineering) under the Engineering, Geological and Geophysical Professions Act;

(e) “regulations” means the regulations under the Act;

(f) “this Code of Practice” means the Code of Practice for Wastewater Systems Consisting Solely of a Wastewater Collection System; and

(g) “vacuum wastewater collection system” means a wastewater collection system from which domestic wastewater is discharged periodically into a vacuum main, which maintains a vacuum in the system.

PART 2: GENERAL PROVISIONS

2.1.1 Any person who constructs, operates or reclaimed a wastewater system consisting solely of a wastewater collection system that discharges into a wastewater system authorized under the Act, must do so in accordance with this Code of Practice.

2.1.2 Any conflict between the registration application and the terms and conditions of this Code of Practice shall be resolved in favour of this Code of Practice.

2.1.3 The terms and conditions of this Code of Practice do not affect any rights or obligations created under any other authorization issued or adopted by Alberta Environment.

2.1.4 The terms and conditions of this Code of Practice are severable. If any term or condition of this Code of Practice is held invalid, the application of such
term or condition to the other circumstances and the remainder of this Code of Practice shall not be affected by that invalidity.

2.1.5 If the registration holder monitors for any substances or parameters which are the subject of limits in this Code of Practice more frequently than is required, using procedures authorized in this Code of Practice, then the registration holder shall provide the results of such monitoring as an addendum to the next report required by this Code of Practice.

Section 2.2: Analytical Requirements

2.2.1 With respect to any sample required to be taken pursuant to this Code of Practice, all samples shall be:

(a) collected;
(b) preserved;
(c) stored;
(d) handled; and
(e) analyzed

in accordance with:

(i) the Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Waterworks Association and the Water Environment Federation, as amended or replaced from time to time,

(ii) the Methods Manual for Chemical Analysis of Water and Wastes, published by the Alberta Research Council, as amended or replaced from time to time, or

(iii) a method authorized in writing by the Director.

2.2.2 Any analysis of a sample required pursuant to this Code of Practice shall be done only in an approved laboratory, unless otherwise specified in writing by the Director.

PART 3: ADMINISTRATION, DESIGN, AND CONSTRUCTION REQUIREMENTS

3.1.1 An application for a registration of a wastewater collection system shall contain, at a minimum, all of the following information:

(a) engineering design drawings and specifications for the wastewater system, including the design capacity, stamped and signed by a professional engineer;
(b) for low pressure wastewater collection systems or vacuum wastewater collection systems, the written opinion of a professional engineer regarding the adequacy of the design of the wastewater system, based, at a minimum, on the designed hydraulic capability of the wastewater system;

(c) a statement, signed and sealed by a professional engineer:
   
   (i) indicating whether the design of the project complies with all design requirements of this Code of Practice, and the regulations, and

   (ii) in cases in which a design requirement is not met, identifying and justifying the deviation; and

(d) any other information required by the Director in writing.

**PART 4: OPERATIONAL REQUIREMENTS**

4.1.1 No release from the wastewater collection system to the environment is permitted.

4.1.2 At all times, the operation of the wastewater collection system shall be performed by, or under the direction of, a person who holds a valid wastewater collection certificate of qualification at the applicable level as set out in Table 4-1.

**TABLE 4-1: MINIMUM WASTEWATER COLLECTION SYSTEM OPERATOR CERTIFICATE OF QUALIFICATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Population Served</th>
<th>Minimum Wastewater Collection (WWC) Operator Certificate of Qualification Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 500</td>
<td>One operator with a Small System Certificate</td>
</tr>
<tr>
<td>501 to 1,500</td>
<td>One operator with a Level 1 Wastewater Collection (WWC) Certificate</td>
</tr>
<tr>
<td>1,501 to 15,000</td>
<td>One operator with a Level 2 Wastewater Collection (WWC) Certificate</td>
</tr>
<tr>
<td>15,001 to 50,000</td>
<td>One operator with a Level 3 Wastewater Collection (WWC) Certificate</td>
</tr>
<tr>
<td>More than 50,000</td>
<td>One operator with a Level 4 Wastewater Collection (WWC) Certificate</td>
</tr>
</tbody>
</table>

**PART 5: MONITORING REQUIREMENTS**

5.1.1 In the event of an unauthorized release into the environment from the wastewater collection system:
(a) all steps possible must be taken to stop the release;
(b) all steps possible must be taken to mitigate all adverse effects of the release; and
(c) the unauthorized release from the wastewater collection system shall be monitored in accordance with Table 5-1, if any portion of that unauthorized release may enter or has entered a watercourse.

**TABLE 5-1: UNAUTHORIZED RELEASE MONITORING REQUIREMENTS**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Sample Type</th>
<th>Monitoring Location</th>
<th>Minimum Monitoring Frequency and Minimum Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 day Biochemical Oxygen Demand</td>
<td>Grab</td>
<td>At the release point, before any dilution</td>
<td>One sample during the unauthorized release</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia-Nitrogen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Coliform</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliform</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.1.2 In addition to the monitoring required in 5.1.1, in the event of an unauthorized release, the total volume of any unauthorized release from the wastewater collection system into the environment shall be:

(a) measured, or if measurement is not possible, estimated; and

(b) recorded.

**PART 6: RECLAMATION REQUIREMENTS**

6.1.1 Where the land surface has been disturbed during construction, expansion, modification or repair of any portion of the wastewater collection system, reclamation of the land surface to equivalent land capability shall be performed following the construction, expansion, modification or repair, in accordance with *Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems*, published by the Department, as amended or replaced from time to time.

6.1.2 At least six months prior to the wastewater collection system permanently ceasing operation, the Director shall be informed in writing of the intention to cease the operation.
6.1.3 Within six months after the wastewater collection system permanently ceases operation, the registration holder shall submit to the Director a reclamation plan.

6.1.4 The reclamation plan shall contain, at a minimum, the following information:

(a) a proposal for reclaiming all disturbed land to equivalent land capability; and

(b) any other information required by the Director in writing.

6.1.5 Any person conducting reclamation shall do so in accordance with the reclamation plan as authorized in writing by the Director.

PART 7: REPORTING REQUIREMENTS

Contravention Reporting

7.1.1 In addition to any other reporting required under the Act, the regulations and this Code of Practice, the registration holder shall immediately report any contravention of this Code of Practice to the Director, either:

(a) by telephone at (780) 422-4505; or

(b) by a method:

   (i) in accordance with the release reporting provisions in the Act and regulations, or

   (ii) authorized in writing by the Director.

7.1.2 In addition to any other reporting required pursuant to the Act or the regulations, where a contravention is reported under 7.1.1, the registration holder shall provide a report to the Director:

(a) in writing; or

(b) by a method:

   (i) in accordance with the release reporting provisions in the Act and regulations, or

   (ii) authorized in writing by the Director

within seven (7) calendar days after the discovery of the contravention or within another time period specified in writing by the Director, unless the requirement for the report is waived by the Director.

7.1.3 The report required in 7.1.2 shall contain, at a minimum, the following information:
(a) a description of the contravention;
(b) the date of the contravention;
(c) the duration of the contravention;
(d) the legal land description of the location of the contravention;
(e) an explanation as to why the contravention occurred;
(f) a summary of all preventive measures and actions that were taken prior to the contravention;
(g) a summary of all measures and actions that were taken to mitigate any effects and potential effects related to the contravention;
(h) a summary of all measures that will be taken to address the remaining effects and potential effects related to the contravention;
(i) the number of the registration issued under the Act for the wastewater system and the name of the person who held the registration at the time the contravention occurred;
(j) the name, address, phone number and responsibilities of the person operating the wastewater collection system at the time the contravention occurred;
(k) the name, address, phone number and responsibilities of all persons who had charge, management or control of the wastewater collection system at the time that the contravention occurred;
(l) a summary of proposed measures that will prevent future contraventions, including a schedule of implementation for these measures;
(m) any information that was maintained or recorded under this Code of Practice, as a result of the incident; and
(n) any other information required by the Director in writing.

PART 8: RECORD KEEPING REQUIREMENTS

8.1.1 The registration holder shall:

(a) record; and

(b) maintain for the life of the wastewater collection system:

(i) a copy of all registrations and authorizations issued under the Act regarding the wastewater collection system,
(ii) all documentation informing the Director regarding all extensions and replacements of any portion of the wastewater collection system,

(iii) a copy of all documentation informing the Director of a contravention, as required under 7.1.2 and 7.1.3,

(iv) a copy of all inspection reports issued by the Department regarding the wastewater collection system,

(v) the current version of the design for the wastewater collection system,

(vi) operating procedures for the wastewater collection system,

(vii) a copy of the reclamation plan as required in 6.1.2 and 6.1.3, and

(viii) a record of all past and current certified operators, including updates.

PART 9: CODE OF PRACTICE ADMINISTRATION

9.1.1 This Code of Practice will be reviewed as changes in technological or other standards warrant.