

Title

Bulk Delivery of Drinking Water Regulation

Preamble

Legislative and policy framework is an important component in Yukon's multi-barrier approach to safe drinking water. This Regulation outlines who is responsible for each aspect of the trucked distribution system / bulk delivery of drinking water, and gives criteria for the construction, operation and maintenance of a water delivery truck.

Definitions

1. In this regulation:

“bulk delivery” means transportation of drinking water in a container which is fixed to a transportation vehicle, and which is filled at the source and emptied at one or more destinations.

“competent person” means a person who

- (a) is qualified because of their knowledge, training and experience to perform an activity;
- (b) is familiar with the provisions of this Regulation that apply to the activity; and
- (c) has knowledge of any potential or actual risk to health or safety that may or is created by the activity in relation to the water system for which they have all or some responsibility for.

“drinking water” means water destined for

- (a) drinking;
- (b) preparing food, infant formulas, juices and ice;
- (c) washing fruits and vegetables;
- (d) cooking;
- (e) dental hygiene;
- (f) body washing; and/or
- (g) hand washing.

“*Guidelines for Canadian Drinking Water Quality*” means the most recent version of the *Guidelines for Canadian Drinking Water Quality*, published by Health Canada, as amended from time to time.

"health and safety risk" means a condition that is or is likely to cause disease, injury and/or illness in humans.

"health officer" means a medical health officer or health officer appointed under the *Public Health and Safety Act*.

"laboratory" means a laboratory that is accredited for analysis of that parameter, by a certification body approved by the Standards Council of Canada.

“operator” means a person who has direct responsibility for the on-site operation and maintenance of a trucked distribution system, and includes back-up operator(s).

“operators certification certificate” means a certificate issued by the B.C. Environmental Operators Certification Program or any other certification recognized by the *Association of Boards of Certification*.

“owner” includes any person, firm, corporation, or agent who owns, operates or maintains a trucked distribution system for drinking water; and is identified as the owner in the application and on the permit.

“professional engineer” means a person who is registered and licenced to practice engineering under the provisions of the Yukon *Engineering Profession Act*.

“safe drinking water” means drinking water that meets the health-related criteria set out in the *Guidelines for Canadian Drinking Water Quality*, and does not pose a health or safety risk to its users.

“trucked distribution system” includes the water source, any infrastructure (e.g., well, water treatment system,) and/or one or more water delivery truck(s) that are owned, operated and maintained by the same owner.

“water delivery truck” means a vehicle constructed or modified and used for the purpose of bulk delivery of drinking water.

“water tank” means the container which is mounted on the water delivery truck for the purpose of containing drinking water in bulk during delivery.

Application

2.(1) This Regulation applies in all municipalities and in all health districts established under the *Public Health and Safety Act*.

2.(2) If there is a conflict between a provision of the Regulation and a bylaw of a municipality, then this Regulation governs.

3. This Regulation applies to a trucked distribution system

- (a) that provides the bulk delivery of drinking water to five or more delivery sites, or
- (b) which is designated as a trucked distribution system by a health officer.

General

4. The owner is responsible for delivering safe drinking water to consumers.

5. Drinking water transported in water delivery trucks shall only be obtained from

- (a) a public drinking water system permitted under the *Public Drinking Water Systems Regulation*; and/or
- (b) a drinking water system that is permitted under the *Bulk Delivery of Drinking Water Regulation*.

6. A drinking water system as outlined in section 5.(b) must comply with the same provisions applicable to a public drinking water system permitted under the *Public Drinking Water Systems Regulation*.

7. The owner is responsible for the maintenance and upgrade of the components of a trucked distribution system, as necessary, for the purpose of providing safe drinking water to its users.

8. A water delivery truck for the bulk delivery of drinking water shall not be used for any other purpose, except with the prior written approval of a health officer.

Permit to Operate

9.(1) No person shall operate a trucked distribution system for drinking water without first obtaining a written permit from a health officer.

9.(2) If the trucked distribution system commenced operation before the enactment of the Regulation and is not in compliance with subsection (1), the owner is required to comply within six months.

9.(3) This section does not apply to water delivery trucks that are part of the trucked distribution system of a public drinking water system permitted under the *Public Drinking Water Systems Regulation*.

10.(1) The owner shall make application for a permit to operate a trucked distribution system for drinking water and submit such to Environmental Health Services, Yukon Government.

10.(2) Should the trucked distribution system include a drinking water system, then the application must also include all information and documentation that would be required for the permitting of a public drinking water system.

11. A permit to operate a trucked distribution system remains valid unless

- (a) there is a change in the
 - (i) owner, or
 - (ii) name of the trucked distribution system;
- (b) the permit is revoked or suspended by a health officer; or
- (c) the trucked distribution system ceases to operate.

12.(1) A permit shall be issued, if the application complies with provisions set out in this Regulation, and any requirements prescribed by a health officer.

12.(2) No permit shall be issued where

- (a) a trucked distribution system does not conform to the requirements of the *Public Health and Safety Act* and its Regulations, or any other Act or Regulation;
- (b) use of the drinking water would be detrimental to the health or safety of its users;
- (c) the quality of the drinking water does not meet the criteria set out in this Regulation; or
- (d) a trucked distribution system is under a health officer's order, and the owner has not complied with the terms of the order.

13. A health officer may revoke or suspend a permit to operate a public drinking water system.

14. Fees for permits and other documents or services are payable as set out in the Schedule A.

15. A health officer may allow the operation of a trucked distribution system that does not conform to the requirements of this Regulation, if such variance does not present a health or safety risk to users.

Engineering Assessment

16. The owner shall ensure that an engineering assessment for each water delivery truck is prepared under the seal of an independent professional engineer upon initial application for a permit to operate; and thereafter for any additional water delivery trucks.

17. The engineering assessment shall identify any existing or potential public health risks; and include observations, comments and recommendations on all relevant aspects of the operation.

18. An owner shall submit all engineering assessments required by this Regulation to Environmental Health Services, in duplicate.

19. In addition to the engineering assessment required under section 16, a health officer may require the owner to conduct, or cause to be conducted, an engineering assessment at any time, if the health officer reasonably believes that

- (a) the use of a water delivery truck presents or may present a risk to the safety of the drinking water obtained from the water system; or
- (b) a water delivery truck has been substantially modified (e.g., water tank replacement).

Operator Training

20.(1) An owner shall ensure that the operator holds a valid operator certification certificate for the bulk delivery of drinking water.

20.(2) If the trucked distribution system commenced operation before the enactment of the Regulation and is not in compliance with subsection (1), the owner is required to comply within two years of the enactment of the Regulation.

21. An owner shall ensure that any activity (e.g., maintenance, sampling, testing, inspections, delivery) in relation to the water delivery truck(s) and/or drinking water system he or she is responsible for, is performed by a competent person.

Water Tank

22. Every water delivery truck shall be equipped with a stainless steel tank or other material (e.g., aluminum, plastic, fibreglass) suitable for transporting drinking water.

23. For water tanks that require an internal coating, the owner shall ensure the proper composition, application and maintenance of the coating.

24. Every water tank mounted on a water delivery truck shall be equipped with sufficient access ports fitted with water tight lids to allow for inspection and cleaning.

25. The lids noted in section 24 shall be lockable or otherwise be secured to prevent unauthorized entry and tampering.

26. Water tank vents shall be suitably designed to prevent the entrance of contaminants.

27. The water tank is to be clearly labeled with the words “DRINKING WATER”, in weather-resistant, bold letters, and sized to allow for easy identification at a minimum distance of 30 m (100 ft.).

Equipment

28. Every water delivery truck is to be equipped with a clean, lockable compartment for containing and protecting hoses, nozzles and related couplers and fittings from contamination.

29. All water delivery trucks are to be designed to prevent backflow of water from the truck into the water source.

30.(1) All equipment on a water delivery truck which is in contact with drinking water, including but not limited to hoses, valves, couplers, fittings, nozzles and pumps, shall be constructed of materials that are suitable (e.g., corrosive resistant) for drinking water use; and shall be maintained in a clean and sanitary condition.

30.(2) No equipment which is installed on a water delivery truck and which is in contact with drinking water shall have been previously used for any purpose incompatible with the conveyance of drinking water.

Operation and Maintenance

31. At least once every six months, all internal areas of the water tank and all water delivery equipment on the water delivery truck shall be cleaned and disinfected.

32. Immediately prior to commencing the first delivery of each day, the hose compartment, delivery hose nozzle and/or coupler shall be disinfected.

33. Should the water delivery nozzle and/or coupler come into contact with the ground or any other source of contamination, it shall immediately be cleaned and disinfected.

34. Disinfection shall be carried out when a water tank

- (a) has not been in use for greater than 30 days;
- (b) when any part of the tank or related water delivery equipment has been repaired or replaced; or
- (c) when the sanitation of the tank and/or delivery system is known or suspected to have been compromised.

35. Drinking water shall not be retained in a water delivery truck longer than 24 hours after the time of loading, upon which time any remaining water in the tank shall be drained; and shall not be used for drinking water.

36. Where an owner of a trucked distribution system is also involved in the transportation of sewage, different personnel are to be used for the bulk delivery of drinking water than those transporting sewage, except with the prior written approval of a health officer.

37. An owner shall ensure the availability of equipment and supplies to be used in the event of an emergency or abnormal operational circumstances.

38. An owner shall ensure that equipment, manuals and written procedures are available and accessible.

Chlorination and Testing

39. All drinking water shall be chlorinated and shall have a free chlorine residual concentration of no less than 0.4 milligrams per litre (mg/L) at the time of loading into the water delivery truck and a free chlorine residual concentration of no less than 0.2 mg/L at the time of delivery.

40. The owner shall ensure that

- (a) each water delivery truck is equipped with an approved chlorine test kit; and
- (b) a free residual chlorine test is performed in accordance with accompanying manufacturer directions.

41.(1) The owner shall ensure that a record is made that shows the

- (a) location of the source of each load of water;
- (b) date and time at which the water was loaded and by whom;
- (c) address, date, time and volume of each delivery and by whom;
- (d) free residual chlorine concentration in the water at time of loading;
- (e) free residual chlorine concentration in the water of the first and last delivery site of each tank load;
- (f) date, time and location of each equipment disinfection; and
- (g) the name of the person making the measurements and recording the information.

41.(2) Notwithstanding subsection (1)(d) and (1)(e) the testing for free residual chlorine levels may be reduced to no less than once per day, if the owner provides data/documentation to the satisfaction of a health officer which demonstrates consistency in meeting free residual chlorine levels prescribed in section 39.

Sampling and Analysis

42.(1) The owner shall ensure that water samples from the fill line and water truck delivery hose are submitted to a laboratory for bacteriological analysis when a water truck

- (a) is first put into use;
- (b) has not been in use for greater than 30 days; and
- (c) biweekly (twice a month) when in regular use, or as prescribed by a health officer.

42.(2) Subsequent to subsection (1), when a water delivery truck is first put into use or has not been in use for a month, the owner shall ensure that the water delivery truck is not used to distribute drinking water until test results from water samples are satisfactory and approval to operate is given by a health officer.

43. An owner shall ensure water samples for bacteriological analysis are collected, stored and transported as per instructions from the laboratory performing the analysis.

44. An owner shall ensure that the laboratory performing the bacteriological analysis immediately notifies Environmental Health Services of any result that exceeds the maximum acceptable concentration set out in the *Guidelines for Canadian Drinking Water Quality*.

Storage of the Water Delivery Truck

45.(1) When a water delivery truck is stored in a garage or similar structure, it and any related drinking water delivery equipment should be kept in a completely enclosed bay or compartment (e.g., floor to ceiling partition designed to prevent contaminants from being transported between the equipment), so as to be physically separated from any source of contamination, including any sewage transporting equipment.

45.(2) When not in use, a water delivery truck should be stored in a secure area designed to prevent the entry of unauthorized persons.

45.(3) If the trucked distribution system commenced operation before the enactment of the Regulation and is not in compliance with subsection (1) and/or (2); the requirement to comply will vary based on potential health and safety risks, not to exceed two years from the enactment of the Regulation.

46. When not in use, being cleaned or drained dry,

(a) delivery hoses should be capped at both ends, and

(b) delivery hoses and related couplers fittings and nozzles shall be placed in the hose compartment.

Notification and Corrective Action

47.(1) An owner shall notify a health officer immediately upon becoming aware that its trucked distribution system is not meeting criteria set out in this Regulation, and/or is or may become a health and safety risk to users.

47.(2) If notice is required under subsection (1), the owner shall take corrective action, as necessary, to mitigate a health or safety risk to system users, and/or corrective action as directed by a health officer.

48. The health officer may give notice of a boil water advisory or order or its rescinding; or require the owner to give said notice to users of the trucked distribution water system by any method the health officer considers appropriate.

Record Keeping

49. An owner must ensure written and electronic records (to include reports and plans) relating to the construction, operation, inspection, maintenance, sampling, testing, and other related matters for a trucked distribution system are made, retained for a minimum of six years, and appropriately located.

50. The owner shall ensure that records are available to a health officer immediately upon request in the event of an emergency; or otherwise, within seven days.

Public Information

51. The owner shall ensure that assessments, reports, sampling and testing results pertaining to the trucked distribution system will be made available for inspection by any member of the public, during normal working hours.

52. The owner shall permit Environmental Health Services to post or release information on their trucked distribution system that was collected by Regulation to any member of the public.

Enforcement

53. Where in the opinion of a health officer a health or safety risk exists or likely to be created, the owner shall take such correct measures as the health officer deems necessary.
54. A health officer may request any documentation; or conduct or have the owner conduct inspections, assessments, sampling, testing, as he or she deems necessary to determine whether a trucked distribution system is located, constructed, installed, operated, maintained and used in accordance to this Regulation.
- 55 A health officer may order closure of a trucked distribution system, if the system is or is likely to present a health or safety risk to users, and or is not in compliance with the Regulation.
56. The health officer may rescind the closure order on a trucked distribution system, when it has been determined that the drinking water from the system does not present a health or safety risk to users, and/or is in compliance with the Regulation.

Schedule A - Fees

Issue of permit to operate a trucked distribution system that includes the operation of a drinking water system	\$450.00
Issue of permit to operate a trucked distribution system	\$150.00
Document search and copies per system	\$ 50.00