



RECOMMENDED GUIDELINES FOR COMMERCIAL POTABLE WATER HAULERS

General:

- The water tank shall be disinfected and filled with water from a municipal water supply that holds a valid approval from the department, or a public drinking water supply that is registered with the department and is monitored and tested in accordance with the requirements of the Water and Wastewater Facility Regulations.
- If the municipal water supply or public drinking water supply is not chlorinated, sufficient chlorine is to be added to ensure that a minimum of 0.4 milligrams per litre free chlorine residual is present in potable water contained in the water tank.
- The potable water hauler shall have a chlorine test kit for measuring chlorine residuals. The potable water hauler shall be trained and tested in the accepted method(s) of adding chlorine and testing for chlorine residuals and be familiar with the material safety data sheets (MSDS).
- The potable water hauler shall add sufficient chlorine to assure that there is a minimum of 0.4 milligrams per litre free chlorine residual when delivered to a user. If a free chlorine residual, when delivered to the user, is not found in the water as per the requirements of Section 2.3, then sufficient chlorine shall be added to the water at the destination to obtain a free chlorine residual of 0.4 milligrams per litre.
- There shall be no dipping into the filled water tank for the purposes of obtaining a water sample for testing purposes.
- The tanker truck shall not be used to haul any materials which might have an adverse effect on the potability of the water being transported. If the tanker truck is to be used or has been used for transporting any materials other than potable water, the hauler must receive written authorization from the department.

Equipment:

- Every tanker truck shall be equipped with:
 1. a stainless-steel water tank or a water tank of other material, conforming to the ANSI/NSF 61 standard, and
 2. a clean, lockable compartment for containing and protecting hoses, nozzles and related couplers and fittings from contamination.
- Every water tank mounted on a tanker truck shall be equipped with an access port, suitably designed, having a minimum diameter of at least 400 mm (16 in.) and fitted with a water tight, lockable lid. The water tank shall be supplied with valves, except for the vent, that allows for the complete closure of the water tank.

- All water tank vents shall be screened, and shall be configured to prevent access of rainwater, insects, birds, animals and other unsafe objects.
- The water tank shall be constructed to ensure all water can be drained out during cleaning, to prevent freezing and with rounded corners and a smooth surface to allow thorough disinfection of the interior.
- Every water tank mounted on a tanker truck intended to deliver potable water shall be clearly labeled in a prominent location with the words "POTABLE WATER" in weather resistant, bold letters to allow for easy identification.
- All hoses used on water tanker trucks intended to deliver potable water shall be clearly and prominently labeled, tagged or otherwise identified with the words "POTABLE WATER", in weather-resistant, bold letters. Hoses shall be fitted with caps when not in use as recommended by the hose manufacturer or stored in a secure compartment, to prevent the entry of dirt and contaminants.
- All equipment which is in contact with potable water, including but not limited to hoses, valves, couplers, fittings, nozzles and pumps, shall be constructed of materials suitable for potable water use.
- No equipment which is installed on a tanker truck, which is in contact with potable water, shall have been previously used for any purpose incompatible with the conveyance of potable water.
- Tanker trucks, designed with bottom filled water tanks, shall be equipped with a check valve on the intake line, designed to prevent backflow from the water tank into the water source.
- Tanker trucks, designed with top filled water tanks, shall ensure that an air gap is maintained between the fill pipe and the water tank always.
- Each tanker truck shall be equipped with a chlorine testing kit capable of reading in the range of 0.1 to 3.5 mg/L of free and total chlorine residuals, in increments of 0.1 mg/L.
- Chlorine test kits, and all products required for testing, shall be replaced as recommended by the manufacturer to ensure the integrity of the test results and no test kit nor any products required for testing shall be used after the manufacturer's specified best before or expiry date.
- Potable water haulers shall be trained in the use of the chlorine test kits carried on board.

Storage

- When a tanker truck intended to deliver potable water is being stored it, and any related water delivery equipment, shall be kept in an area separated from any source of contamination, including any sewage transporting equipment.

- When not in use, being cleaned or drained dry delivery hoses and related couplers, fittings and nozzles shall be placed in a secure hose compartment or, if not intended to be stored in a hose compartment, be capped at both ends or as otherwise recommended by the hose manufacturer.

Disinfection

- All water shall be chlorinated and shall have a free chlorine residual concentration of no less than 0.4 mg/L at the time of loading into the tanker truck. A free chlorine residual concentration of greater than 0.4 mg/L at the time of loading may be required to ensure that a free chlorine residual concentration of no less than 0.4 mg/L is available at the time of delivery.
- Notwithstanding the requirement to maintain a free chlorine residual concentration of no less than 0.4 mg/L at the time of delivery, water shall not be retained in a tanker truck longer than 24 hours after the time of loading. After 24 hours, any remaining water in the tank shall be drained and shall not be used as potable water.
- Immediately prior to each delivery, the source fitting, delivery hose nozzle and/or coupler shall be disinfected by spraying with a solution of 2.4 ounces of household bleach (5.25% sodium hypochlorite) per imp. gallon using a spray bottle or other similar device.
- Should the water delivery nozzle and/or coupler meet the ground or any other source of contamination, it shall immediately be cleaned of debris and then disinfected by spraying with a solution of 2.4 oz of household bleach (5.25% sodium hypochlorite) per imp. gallon using a spray bottle or other device. Prior to connecting the water delivery nozzle to the source fitting, the source fitting shall be disinfected.
- the interior of the water tank and all water delivery equipment on the tanker truck shall be disinfected no less frequently than once every three months.
- All internal areas of the water tank and all water delivery equipment on the tanker truck shall be cleaned by scrubbing with brushes and non-corrosive detergents no less frequently than once every six months. The water tank shall be rinsed with water from an acceptable source to remove dirt and detergent residues and disinfected.
- All internal areas of the water tank and all water delivery equipment on the tanker truck shall be cleaned by a pressure sprayer which provides cleaning solution with sufficient velocity to remove all dirt from the tank interior. The water tank shall be rinsed with water from an acceptable source to remove dirt and detergent residues and disinfected no less frequently than once every six months.
- Disinfection shall be carried out by adding household bleach (5.25% sodium hypochlorite) to a full tank of water from an acceptable source at a rate of 1 imperial gallon of household bleach per 1000 imperial gallons of water. The solution shall be discharged through the intake and delivery hoses until they are full of solution, at which time the

valves shall be closed and the solution shall be left to sit in the tank and hoses for a minimum of 12 hours before draining and flushing with water from an acceptable source. The solution and rinse water shall be disposed of in a manner that does not adversely affect aquatic life or habitat.

- In addition to regular disinfection discussed above, disinfection shall be carried out when a water tank has not been in regular use, any part of the water tank or related water delivery equipment has been repaired or replaced or if the sanitation of the water tank and/or delivery system is known or suspected to have been compromised.

Testing

- The potable water hauler, or designated representative shall, no less frequently than once per month during months that the potable water hauler is in operation, collect a sample of water from the fill line and water truck delivery hose and submit the sample to an approved laboratory for bacteriological analysis.
- Samples shall be labeled and immediately placed in a chilled cooler for transportation to the laboratory.
- Samples shall be collected according to laboratory procedure. Guidance is also available in appendix a and b of the NSE's Guidelines for Monitoring Public Drinking Water Supplies.
- Samples submitted to an approved laboratory shall be accompanied by a completed request for bacteriological analysis form provided by the laboratory.

Records

- Every potable water hauler should maintain records for a minimum of two years that show the following:
 1. location of the source of each load of water;
 2. date and time at which the water was loaded and by whom;
 3. free residual chlorine concentration in the water at the time of loading and at the time of delivery;
 4. address, date, time and volume of each delivery and by whom;
 5. free residual chlorine concentration in the water at the time of last delivery of the load.