



Drinking Water & Groundwater Bureau Guidelines for Emergency Bulk Water Supply For Public Water Systems

Guidelines for Emergency Bulk Water Supply

In the event of an equipment failure, water quality or quantity problems, or other unexpected circumstances, a public water system (PWS) may need to purchase bulk water to maintain an adequate water supply. Although the New Hampshire Department of Environmental Services (NHDES) does not encourage this method of supplying water, trucked water may be the only viable alternative in some situations. To ensure that water obtained from bulk water deliveries meets the same water quality standards that are required of public water systems on a regular basis, rules have been adopted to address the transport and use of bulk water for drinking water purposes [see Env-Dw 304 on the [NHDES website](#)]. This document will address the guidelines for receiving an emergency bulk water delivery.

Approved Sources

An approved source of bulk water is defined as finished water from a community water system (CWS) or bottled water source approved by NHDES. Groundwater sources that are not from a CWS can be used as long as they have been inspected, meet specific sampling requirements and are approved by the NHDES Drinking Water and Groundwater Bureau (DWGB). Surface water cannot be used for emergency bulk water unless it is finished water from an approved CWS.

NHDES has a list of approved bulk water haulers and providers which was last updated June 2020. Disclaimer: This list of vendors does not constitute an endorsement of business products or services by NHDES, nor is this list exhaustive. NHDES is publishing a list of vendors in an effort to further raise public awareness of vendors identified as possible contacts for purchase of bulk water for drinking water purposes. Bulk water haulers interested in being on this list may contact NHDES at dwbulkwater@des.nh.gov or (603) 271-0867.

Transport Equipment

Equipment used for the transfer of bulk water must be well maintained and comprised of material that is smooth, impervious, nonabsorbent, corrosion-resistant and nontoxic, such as stainless steel. Vents on tanks should be protected to prevent bulk water contamination during filling and emptying. Bulk water must be stored, transported and unloaded in a way that prevents contamination.

Tank Sanitation

Hauling tanks and other equipment that have transported water from an approved source will need to be properly cleaned and disinfected using methods specified in Administrative Rule *Env-Dw 304.06 Tank and Water Sanitation Practices* before they can be used to transport emergency bulk water to a public water supply.

Tanks that were previously used to carry petroleum products, toxic substances, or any non-food products may not be used unless the tank is properly sanitized and shown to be free of contaminants by using the following procedures:

- ◆ Rinse and flush previous tank products using appropriate sanitation methods.
- ◆ Fill tank with water from an approved source.
- ◆ Test the tank water for presence of contaminants associated with the products previously stored in the tank and the cleaners used to sanitize the tank.
- ◆ Repeat as often as necessary until the testing shows no trace of contaminants.

- ◆ Replace pipes, hoses, fittings and valves associated with tanks that have hauled these substances.
- ◆ DWGB must approve the tank prior to its use.

Handling & Delivery

A certified operator representing the PWS must be present at the time of the delivery. Before allowing delivery of bulk water into the PWS, the certified operator must measure the free chlorine residual of the bulk water to ensure a concentration between 0.2 mg/l to 4.0 mg/l. If the free chlorine residual is not within this range, the certified operator will need to add the appropriate amount of sodium hypochlorite to produce the required concentration (see Figure 1).

If the bulk water is from an approved source that is not a CWS, the bulk water hauler will need to provide the certified operator with a copy of the most recent analytical results.

Notification & Record-Keeping

A PWS must notify the DWGB within two business days after emergency bulk water is delivered to customers using the [Bulk Water Delivery Notification Form](#).

The form should be signed by the certified operator representing the PWS. In addition, the form should include (but is not limited to) the following information:

- ◆ Dates and times of delivery.
- ◆ Written records of the names and contact numbers.
- ◆ The quantity delivered per truck.
- ◆ Free chlorine residual per truckload.
- ◆ Description of tank inspections and sanitation.

Additionally, a CWS shall list any bulk water deliveries in their annual consumer confidence reports.

Resources

[Bulk Water Notification Form](#)

[Env-Dw 304 Emergency Bulk Water Supply for Public Water Systems](#)

[Bulk Water Fact Sheet](#)

For More Information

Drinking Water and Groundwater Bureau
 New Hampshire Department of Environmental Services
 29 Hazen Drive, PO Box 95
 Concord, NH 03302-0095
 (603) 271-0867
 (603) 271-5171 (fax)
dwbulkwater@des.nh.gov
des.nh.gov

Amount of Liquid Sodium Hypochlorite (5.25% Available Chlorine) to Obtain Resulting Chlorine Solution			
Resulting Solution Concentration (mg/l) ↓	Amount of Water		
	500 gal.	1,000 gal.	5,000 gal.
1	7.5 tsp.	2.5 oz.	12.5 oz.
50	2 qts.	1 gal.	5 gal.
100	1 gal.	2 gal.	10 gal.

Figure 1. table showing amount of liquid sodium hypochlorite needed to obtain resulting chlorine solution