

WHAT IS A HAULED WATER SYSTEM?

Monroe County Health Department receives proposals from property owners who wish to use a hauled water system (HWS) to provide potable water for single-family dwellings. These systems include a storage tank that is filled with water from a source located off of the premises. Water from this tank is then pumped into a pressure tank and into the home's distribution system. Among the reasons for proposing a hauled water system are: the on-site well or vicinity wells do not produce an adequate quantity of ground water, have contaminants exceeding public health standards (e.g. nitrates or coliform bacteria), or have levels of inorganic compounds which make the water aesthetically objectionable and/or corrosive (e.g. hydrogen sulfide or chlorides).

There are many potential problems with hauled water systems including:

- The space requirements for a system
- The expense of installation
- Locating a potable water source or licensed water hauler
- Access to the water storage tank in inclement weather,
- Expense and inconvenience of limited water supply

A hauled water system should be used only as a last resort alternative for an existing single-family dwelling where sulfides or chlorides cannot be feasibly treated. New development in areas known to have inadequate ground water resources is not recommended until municipal water is available.

When a hauled water system must be installed for an existing home, it is required that the lack of a conventional well on the property be disclosed to potential buyers by recording such information with the deed.

HEALTH CONCERNS OF HWS

In general, water storage tanks run a much higher risk of contamination than a properly constructed water well. **These tanks require routine maintenance by the homeowner to ensure the water being consumed is safe.** It is highly recommended that hauled water systems be disinfected on a quarterly basis.

Disinfection of the water tank involves first removing any debris that accumulates in the bottom of the tank, adding chlorine to the empty tank and then filling it with water. In order to achieve the recommended 2 parts per million (ppm) solution, no more than 5 ounces (about 2/3 cup) of liquid household bleach should be added for every 1,000 gallons of water. **It is recommended that the homeowner purchase the appropriate chlorine test kit to monitor chlorine concentrations. Check chlorine through all faucets before adding more chlorine.**

Samples should be collected and tested for coliform bacteria (in between disinfections). Coliform bacteria are intestinal organisms that come from septic systems, animal waste or surface water runoff. These indicator bacteria normally do not cause illness in healthy individuals, but they signal the possible presence of harmful bacteria. Unless homeowners disinfect and sample on a quarterly basis, it is recommended a hauled water system not be used for human consumption.

RECOMMENDATION FOR QUARTERLY WATER MONITORING OF BULK STORAGE TANK

The MCHD *recommends* that a water sample be collected by the homeowner from the bulk storage tank and analyzed for total coliforms four (4) times per year.

Step one: Obtain a sterilized water sample bottle from the MCHD or Michigan Department of Environmental Quality.

Step two: Collect a water sample from the water holding tank. The sampling tap should be located before any additional treatment of the water system.

Step three: Water samples may be mailed to the Drinking Water Laboratory in Lansing for the cost of mailing and the lab fee.

If you presently use a hauled water system, ask yourself the following questions:

- Does the system meet these construction standards?
- Is the tank accessible for draining, cleaning and disinfection?
- Is the tank properly protected from surface water entrance?

WARNING

Never enter your storage tank – this space is considered a confined space.

If you answered “no” to any of these questions, it is recommended that the hauled water system not be used for potable purposes. An alternate source (e.g. bottled water) should be used for drinking.

WHAT YOU SHOULD KNOW ABOUT WATER HAULERS

Persons engaging in the business of hauling bulk water for drinking or household purposes and their water transport tanks are licensed annually under Act 399, PA 1976, and Administrative Rules (Safe Drinking Water Act). Licensed water haulers must adhere to the following rules:

1. All hauled water shall meet state drinking water standards and shall be from an approved public water supply.
 2. Chlorine shall be added when receiving water from a source.
 3. A residual of 1 ppm is required at the point of delivery.
 4. All transportation tanks, outlets, manhole covers and openings, fill connections, pumps, transfer hoses and piping shall be maintained in a sanitary manner, readily cleanable, and be used in such a manner to prevent contamination of the water and to prevent cross-connections.
 5. If a licensed water hauler is not operating in an approved manner, is hauling water that does not meet state drinking water standards, or is operating his business or vehicles under conditions which may cause a hazard to the public health, the license may be suspended or revoked.
- To verify the status of your water hauler, please visit the Michigan Department of Environmental Quality link below:

http://www.michigan.gov/documents/deq/deq-wb-dwehs-nc-licwaterhaulers_206177_7.pdf

When hauled water is delivered, homeowners should ask the water hauler the following:

- Where do you get your water?
- How often do you check the quality of the water?
- How long has the water been in the truck?
- How often do you clean the water tank?

In addition, the homeowners should ask themselves the following:

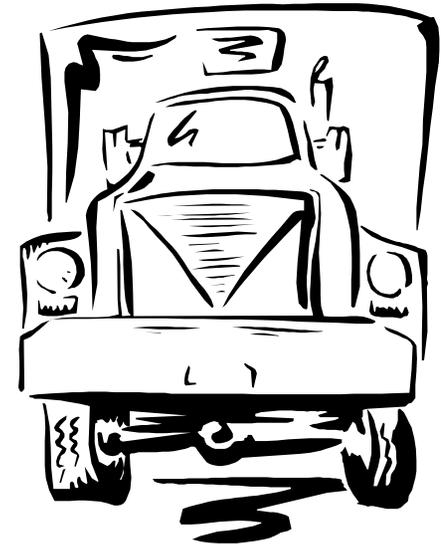
- What is the condition of the equipment?
- Are the truck and equipment clean?
- Is the delivery person using proper sanitary practices when filling the tank?

If you see your water hauler using unsafe practices, or are interested in the approved construction requirements for hauled water systems, please contact the Monroe County Health Department at (734) 240-7900.

For Monroe County Health Department Reference Only:
G:/Forms/Hauled Water/What is a Hauled Water System Pamphlet May 2011

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MONROE COUNTY



HEALTH DEPARTMENT

(734) 240-7900

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