



Improving Fuel Storage

Is your groundwater protected from your home heating fuel storage activities?

Heating the home with heating fuel is one of the most economical and cheapest methods of heating. Home heating fuel burns hotter thus heating your home quicker. This document will cover home heating fuel, also known as Number 2 fuel, and kerosene. Both products are used in many North Carolina homes to safely heat homes. However, storage of home heating fuel products can present a threat to public health and the environment if it is not properly contained. If an underground petroleum tank is more than 15 years old, especially if it is not protected against rusting, the potential for leakage is much greater. Newer tanks and piping can leak, too, especially if they were not installed properly.

A small fuel leak can result in the release of fuel into the groundwater. Even a few quarts of fuel in the ground water may be enough to severely pollute a home's drinking water. At low levels of pollution, water may smell or taste pure, yet be contaminated enough to harm human health. The fuel may contaminate not only your well, but the drinking water for an entire community.

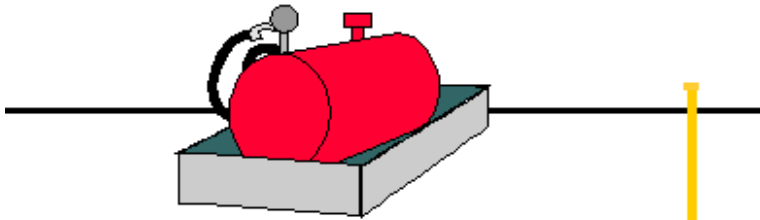
Preventing tank spills and leaks is very important. Home heating fuel oil can move rapidly through surface layers and pollute groundwater before the leak or spill has been noticed. Also, vapors from an underground leak can collect in basements, sumps, or other underground structures and pose risks of explosion.

Petroleum fuels are potentially toxic and can cause contamination. Therefore, it must be treated and handled carefully and safely. These are preventive measures which can help protect you, your family, and the environment from potential pollution problems.

This publication focuses on storage home heating fuels. It does not apply to liquid propane gas, since leaks vaporize quickly and do not threaten groundwater. This document deals with aboveground and underground home heating fuel storage tanks. While there are no state regulations regarding fuel storage tanks for residential homes, **all spills must be reported**. Aboveground storage tank spills are monitored by the North Carolina Division of Environment and Natural Resource's (DENR) Division of Water Quality's (DWQ) Groundwater Section. Underground storage tank spills are monitored by DENR Division of Waste Management (DWM).

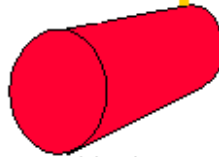
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Aboveground tank



- Heating Oil
- Kerosene

Underground tank



Examples of fuel storage tanks.

Tanks that hold home heating fuels are classified as noncommercial by the North Carolina Department of Environment, Health and Natural Resources, Division of Waste Management (DWM) and Division of Water Quality (DWQ). If you have an underground tank which holds more than 1100 gallons that serves more than 4 households, an aboveground tank of more than 660 gallons, or if the fuel in the tank is for sale, you must meet other requirements. Contact your regional office of the DWQ/DWM, shown on the map. Personnel at the DWQ/DWM can explain these regulations to you. Non resident tanks above 1,100 gallons are considered by DENR DWQ to be commercial tanks and they must be registered and pay a fee.

State Underground Storage Tank (UST) regulations to protect groundwater apply only to tanks greater than 1100 gallons, which are classified as commercial tanks. This publication focuses on storage of home heating fuel for the safety of drinking water. For the safety of your drinking water, make every effort to meet or exceed current regulations wherever possible.

How can we help?

We have prepared this publication to help you focus on potential problems with your drinking water that may be caused by home heating fuel storage tanks. Read this publication before you begin answering the questions. Gather any records you have about your fuel storage facilities. Walk in and around the area where your fuel tank is placed. Also look at the area around your well.

Each of the following sections deals with different topics. Next to each topic is a question for you to answer. Your answers will help you to see where you have potential problems.

- If you answer a question either **a** or **b**, you have few problems with your heating fuel storage and handling.
- If you answer a question either **c** or **d**, there may be potential problems with your heating fuel storage and handling. You will want to consider making changes in the way you store and handle heating fuel in order to protect your drinking water.

North Carolina Home*A*Syst Publications

- *Protecting Water Supply*, #1
- *Improving Fuel Storage*, #2
- *Improving Storage and Handling of Hazardous Waste*, #3
- *Improving Septic Systems*, #4
- *Improving Lawn Care and Gardening*, #5
- *Stormwater Management for Homeowners*, #6
- *Indoor Air Quality: Reducing Health Risks and Improving the Air You Breathe*, #7
- *Lead In and Around the Home: Identifying and Managing Its Sources*, #8

If you would like further help in assessing the condition of your home heating fuel storage and handling, please visit your nearest Cooperative Extension Service Center and talk with your Extension agent.

What is the North Carolina Home*A*Syst Program?

The North Carolina Home*A*Syst program has a series of publications that can help you to be a good environmental steward and also protect the health and well-being of your family. This publication leads you through an evaluation of your home and property to determine the pollution and health risks of your water supply protection practices. If there is a problem or a potential problem, the Home*A*Syst publications have information about how to solve the problems. The publications also list the North Carolina state agencies responsible for helping you solve your particular problem.

The goal of the North Carolina Home*A*Syst program is to help protect your families' and your health and the environment of North Carolina.

How safe is your drinking water?

If you drink water, it comes from a well or spring (groundwater sources) or a river or lake (surface water sources). Drinking water in North Carolina is generally safe, but it can become polluted if we are not careful. Many of the things we do at home can pollute our water and the environment. Poorly maintained or designed septic and animal waste systems can pollute surface and groundwater. Pesticides, fertilizers, fuels, and cleaning products can contaminate our water when they are not stored and handled properly.

It is nearly impossible to get pollutants out of water once they get there. Expensive treatments or new wells would be required to get safe drinking water again. Clearly, it is much more effective to keep pollutants out of water than to try to clean it up afterward.

People who have their own wells or springs for drinking water need to be especially aware of pollution sources because their water is not tested for contaminants as is city water. This is called wellhead protection and involves careful attention to the activities near your well to be sure the water remains safe. However, everyone is responsible for protecting drinking water supplies, whether it is their own or their neighbors'.

This publication only applies to residential underground petroleum storage tanks which hold 1100 gallons or less, or to larger tanks if they contain heating oil used on the premises for four or fewer households. The fuel in the tank must not be for sale.

Storage Tank Location

1. How close is your fuel storage tank to your well?

It is very important that your home heating fuel storage tank location is far enough away from your drinking water well. Existing wells are required by law only to meet separation requirements that were in effect at the time of well construction. For the safety of your drinking water,

make every effort to meet or exceed current regulations whenever possible. Leaks from any size tank can enter the groundwater and contaminate existing wells. Tanks should also be located downslope from the well.

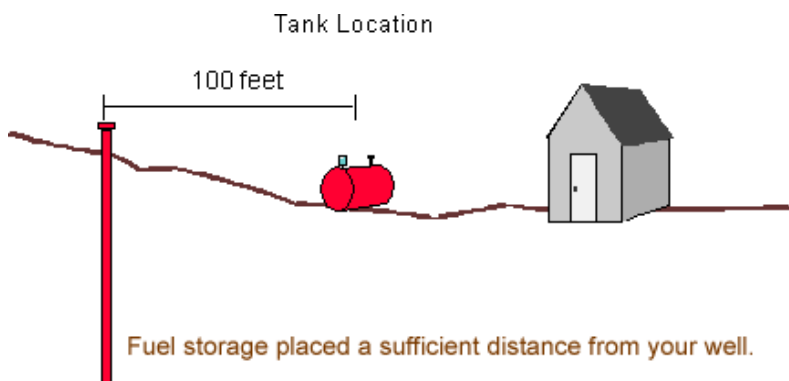
Leaks from aboveground storage tanks can also enter the soil and contaminate groundwater. Regulations for siting aboveground storage tanks have been concerned more with preventing explosion and fires than preventing groundwater pollution. If you have an aboveground tank, follow the recommendations for underground storage tanks as a guide to prevent pollution.

2. What is the location of your aboveground storage tank?

To protect against explosion and fire, aboveground fuel tanks should be located at least 40 feet from existing buildings. Heating oil tanks attached to home heating systems should be at least 5 feet from the building. The distance required may be more than this in some cases, depending on the type of fuel, the design and material of the tank, and the amount of fuel being stored. You should find out from your local fire official if your tank meets fire protection standards. Your local fire official may be a fire marshal, emergency management officer, or a building inspector authorized to enforce the fire code.

3. In what kind of soil are your fuel storage tanks located?

How quickly a spilled petroleum product reaches groundwater will depend upon local soils. The more porous the soil (sands and gravels, for example), the faster the rate of downward movement to groundwater. Every site has unique geologic and hydrologic conditions that can affect groundwater movement. Even though heating fuel oil is more dense than gasoline and moves more slowly through the soil, it, too, will eventually reach groundwater. The figure below illustrates potential causes of petroleum leaks that can move into and through soils.



1. Circle the answer that best describes the position of your storage tank in relation to your drinking water well.

- a. Tank is downslope and more than 100 feet from well.
- b. Tank is at grade or upslope and more than 100 feet from well.
- c. Tank is downslope, less than 100 feet from well.
- d. Tank is at grade or upslope and less than 100 feet from well; OR do not know.

2. Circle the answer that best describes the location of your aboveground tank in relation to fire protection.

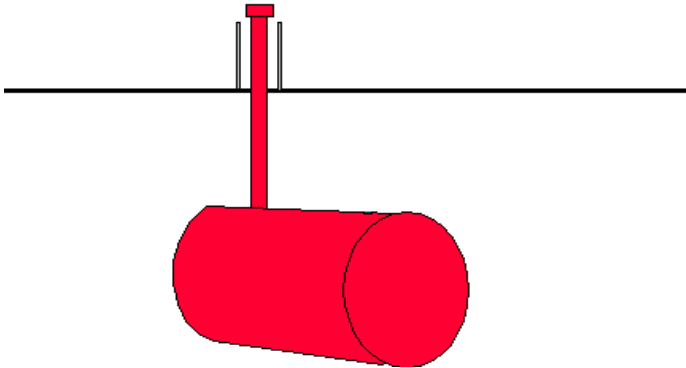
- a. Tank was installed to fire official's recommendations.
- b. Motor fuel tank is at least 40 feet from any building. Heating oil tank that is part of heating system is at least 5 feet from building.
- c. Motor fuel tank is within 40 feet of a building, with no combustible materials close by. Heating fuel tank is outside of building.
- d. Motor fuel tank is within 40 feet of a building or close to combustible materials, or heating fuel tank is in basement; OR do not know.

3. Circle the answer that best describes the soil around your tank.

- a. Tank is in or above fine-textured soils (silty clay, clay) with low permeability (water passes through slowly).
- b. Tank is in or above medium-fine textured soils (silt, silt loam, loam, clay loam, silty clay loam) with medium-low permeability.
- c. Tank is in or above medium-coarse textured soil (sandy clay, sandy clay loam, sandy loam) with medium-high permeability.
- d. Tank is in or above coarse-textured soil (sand, sandy loam, loamy sand) with high permeability; OR do not know.

4. Is your fuel storage tank properly installed?

Whenever you install a fuel storage tank, carefully follow the manufacturer's recommended practices for installation. Proper installation is one sure way to minimize the leakage potential of the tank or the piping connected to it. Even scratches in a metal tank caused by careless installation can increase corrosion and cause leaks. If you hire someone to install your tank, be sure to use an experienced, reputable installer.



A corrosion-protected underground storage tank.

5. What is the type and age of your fuel storage tank?

The type and age of fuel storage tanks often reflect their condition. Older steel tanks have the greatest chance of being rusted, or corroded, and leaking. Newer tanks and piping can also leak, especially if they were not installed correctly.

Corrosion protection helps keep underground steel tanks from leaking. To be protected from corrosion, a tank may have an inside liner, a protective coating on the tank and piping, or a system called cathodic protection in place. Asphalt is not a corrosion-resistant coating. Cathodic protection uses an electric current to protect the tank from the corrosive effect of soil moisture. Most older tanks do not have this protection and are at high risk for leaks. It is expensive to apply corrosion protection to existing tanks and it may be more cost-effective to replace them. New underground tanks should be installed with corrosion protection in place. Fiberglass tanks do not corrode but they are vulnerable to other risks. A double wall tank is a failsafe method that can be used when installing a new underground tank.

6. What are the soil conditions near your tank?

Abandoned pipes and tanks, agricultural drainage tiles, or waste materials can make it difficult to install a new tank properly. Any metal already in the ground at the tank site will increase corrosion rates for the new tank.

4. **Circle the answer that best describes the tank installation.**
 - a. Tank was installed according to manufacturer's recommendations by a reputable, experienced installer.
 - b. Tank was installed according to manufacturer's recommendations.
 - c. No information is available on installation.
 - d. Tank was installed without backfill, setback, secondary containment, anchors, and other protection, or by an untrained individual; OR do not know.



5. **Circle the answer that best describes the type and age of your tank/corrosion protection.**
 - a. Tank is synthetic or protected from rust by a thick layer of non-corrosive material, or a corrosion-resistant coating and cathodic protection.
 - b. Tank is steel, less than 15 years old, and coated with asphalt.
 - c. Tank is coated steel older than 15 years or bare steel less than 15 years old.
 - d. Tank is bare steel 15 or more years old; OR do not know.



6. **Circle the answer that best describes the soil conditions near your tank.**
 - a. No other pipes, drainage tiles, or metal debris in the soil. Well-drained soils. Water table is always beneath tank.
 - b. No other pipes, drainage tiles, or metal debris in soil. Moderately well-drained soils. Water table is only occasionally at tank level.
 - c. May be metal debris in soil, or soils saturate seasonally.
 - d. Other metal materials in soil; or poorly drained soils, often saturated; OR do not know.

Floodways or areas where the water table is close to the surface are poor locations for storage tanks. The water that saturates the soil can carry pollutants, including fuel, from the tank to the groundwater. Moisture can also make the tank and piping corrode faster than if they remain dry.

7. Is the piping from your fuel storage tanks safe?

The pipes, hoses, valves, and fittings connected to a storage tank can be a major source of leaks. They are often overlooked, especially if buried underground. Piping fails because of corrosion, poor installation, accidents, and weather-related factors such as frost heaving. Piping must either be protected from rusting or be made of a noncorrosive material. Galvanized steel is not a noncorrosive material. Steel piping should have a corrosion-resistant coating and cathodic protection. Make sure that pipes cannot twist or break if the tank is bumped or disturbed.

Pipes should also be sloped so that they drain back into the tank. A shut off valve should be as close to the tank as possible to keep fuel in the line from draining onto the soil.

8. Is your tank secure from traffic?

Assess traffic patterns around the tank. Determine whether the location of the tank or dispenser will block movement of vehicles. Be sure there will be no access problems if any work needs to be done on the tank. Piping should be protected from collisions with vehicles. Posts made from 4-inch steel pipe filled with concrete are a good barrier around aboveground tanks. An underground tank should not be installed in a location where vehicles will drive over it.

9. Is your tank secure from accidents?

For either underground or aboveground tanks, be sure the underlying soil can support the tank. For special tank locations, such as hillsides, be sure to properly anchor and hold tanks in place.

Aboveground tanks can leak if they are not protected from damage by other objects. To reduce fire potential and damage to a heating oil tank in your basement, avoid using areas around or under a tank for storage. Heavy objects can also damage pipes.

7. Circle the answer that best describes the piping on your tank.

- a. Piping is protected from rust by cathodic protection and is coated. Pipe sloped back to tank. Check valve is at pump.
- b. Piping is galvanized but not coated with fiberglass or coated tank. Pipe drains back to tank. Check valve is at pump.
- c. Pipe is galvanized; both tank and pipe are bare. Piping is sloped back to tank, but check valve is located at tank.
- d. Piping and tank are both bare of dissimilar materials. The pipe cannot drain freely to the tank. All pipes are pressure pipe systems; OR do not know.



8. Circle the answer that best describes the traffic around your tank.

- a. No vehicles in the area of the tank other than those filling the tank or being refueled; barriers keep vehicles from colliding with pump; vehicles cannot drive over underground storage tank.
- b. Occasional vehicles in area of tank, other than those filling the tank or being refueled; barriers keep vehicles from colliding with pump; vehicles cannot drive over underground storage tank.
- c. Occasional vehicles in area of tank, other than those filling the tank or being refueled; no barriers around pump; or vehicles can drive over underground storage tank.
- d. Other vehicles frequently moving in the area of the tank; no barriers around pump; or vehicles can drive over underground storage tank; OR do not know.



9. Circle the answer that best describes the security of your tank.

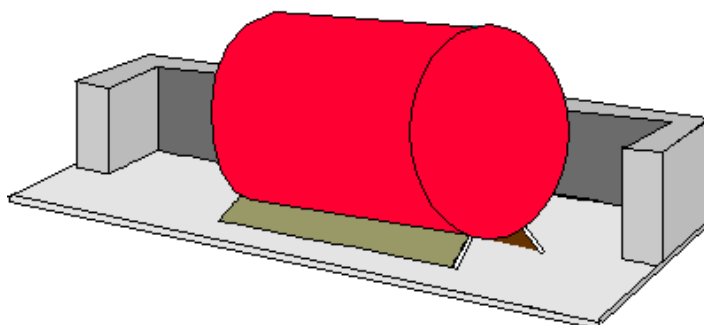
- a. There is a lock on the pump and it is surrounded by a six-foot locked fence. Areas around tank are free of movable objects which could damage the tank. Tank is securely anchored or in stable soil.
- b. There is a lock on the pump. Areas around tank are free of movable objects which could damage the tank. Tank is securely anchored or in stable soil.
- c. There is no lock on the pump, or areas around tank contain movable objects which could damage the tank. Tank is securely anchored or in stable soil.
- d. There is no lock on the pump, or areas around tank contain movable objects which could damage the tank, or the tank is not securely anchored or not in stable soil; OR do not know.

10. Does your fuel storage tank have spill and tank overflow protection?

Fuel storage tanks should have spill and overflow protection if they are inside the building. Spill protection typically consists of a catch basin for collecting spills when the tank is filled. Overflow protection is a warning, such as a buzzer or an automatic shutoff, to prevent overflow when the tank is filled. Spill and overflow protections are important; they can prevent a number of small releases over a long period of time from polluting the groundwater. In order to prevent fuel backflow onto the surrounding land, shut off valves should be placed on the above ground tank or burner. Close supervision of fuel transfers is one of your best methods for protecting against spills and overfills. Always follow the North Carolina Building Code on Installation of Fuel Equipment for above or below ground fuel tanks.

11. Does your aboveground tank have the means to contain spills and any overflow that might occur?

Regardless of soil conditions, locate aboveground tanks over an impermeable liner made of concrete or one of the newer synthetic materials. To decrease pollution potential, the tank should be installed inside a secondary containment structure consisting of a dike and a pad. This structure should be able to hold all of the fuel if it were to leak out, with extra room for any rainfall. Specific guidelines can vary from county to county. Contact your local fire marshal or building inspector to determine how the tank should be located in your county.



Cutaway view of containment structure for above-ground tank.

12. What do you notice in the area of the tank?

Your senses of sight, smell, and taste can alert you to leaks. Is there an oil-like sheen on streams or on wet places near the tank? Is nearby soil stained with petroleum? Is there a strong and constant smell of petroleum near your tank? Have you or your neighbors smelled fuel odors near plumbing or sewer line openings or in basements? If you have smelled or tasted petroleum in your drinking water, there may already be groundwater contamination, and you should contact your local health department or regional DENR Division of Waste Manage-

10. Circle the answer that best describes the spill and tank overflow protection on your tank.

- a. Tank has an impermeable catch basin plus automatic shutoff.
- b. Tank has an impermeable catch basin plus overflow alarm.
- c. Tank has an impermeable catch basin or concrete catch pad, no overflow alarm or shutoff.
- d. Tank has no spill or overflow protection; OR do not know.

11. Circle the answer that best describes the secondary containment (for above-ground tanks only).

- a. Tank is placed within concrete or synthetic dike with a pad able to hold 125% of tank capacity.
- b. Tank is placed within dike and pad made of soil with low permeability (like clay) able to hold 125% of tank capacity.
- c. Tank is placed on pad.
- d. There is no secondary containment; OR do not know.

12. Circle the answer that best describes any observable signs of leaks.

- a. No appearance of petroleum in surrounding soil or water; no taste or odor; pump operating normally.
- b. No appearance of petroleum in surrounding soil or water; pump hesitating or rattling.
- c. Visible sheen on soil or wet areas, or constant odor of petroleum around tank, or water in tank.
- d. Water tastes or smells like petroleum product; OR do not know.

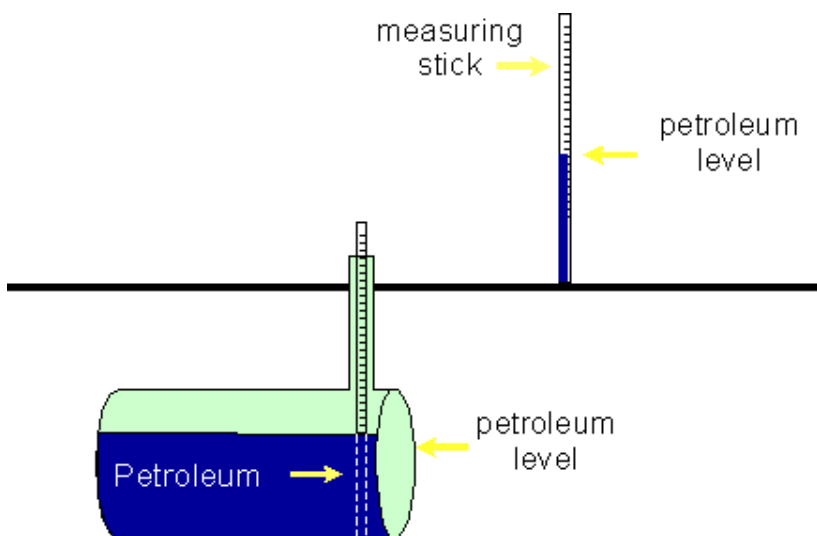
ment (DWM) for underground tanks and DWQ's Groundwater Section for above ground tanks office **immediately**.

Mechanical changes can also signal leaks or damage to the piping. Does your suction pump rattle? Does fuel flow unevenly? Does the pump hesitate too long before dispensing?

13. Are you monitoring the tank for leaks?

The tank and piping system should be tested for leaks. This is done with methods known as precision or tightness testing, or volumetric analysis. After a tank has been tested and shown not to leak, good practice requires that you regularly use a method that will detect new leaks. Your county Extension agent or DWM representative can help you choose the right method for you.

Measuring tank inventories is a way to help detect new leaks. One inexpensive and easy method, manual tank gauging, involves use of a measuring stick which can be read to the nearest eighth inch. The stick is lowered to the bottom of the tank, and the level in the tank is read from the stick when it is removed. It is important not to let the stick puncture or damage the bottom of the tank. This is done twice to get an average reading, then repeated in 36 hours. Measurements must be taken at a time when no fuel is being drawn from or added to the tank. If the fuel level in the tank decreases over time when you are not withdrawing fuel, there is probably a leak. An increase of water in the tank also indicates a leak. Homeowners can also get a water finding paste to put on the stick to determine water levels in the tank. While inventory measurement will not detect very small leaks, it will at least provide a warning that further investigation is necessary.



Manual tank gauging.

13. Circle the answer that best describes any leak detection or tightness testing.

- a. Monitoring for leaks is done on a monthly (or more frequent) basis.
- b. Inventory control is done daily for gasoline tanks, seasonally for heating oil tanks; tank is tested for tightness annually.
- c. Inventory control and tank tightness testing are done occasionally.
- d. No regular inventory control, testing, or monitoring; OR do not know.



REMINDER

If you circle c or d for any question, you may be causing water pollution due to the condition or practice described in the question.

The closer the tank is to the home's drinking water well, the more important it is to have an adequate leak-detection system in place. Measure the tank regularly.

Leak detection is important for all tanks because of the danger to your well water. Test the tank periodically for leaks, and measure the tank inventory regularly to help detect leaks before major problems develop.

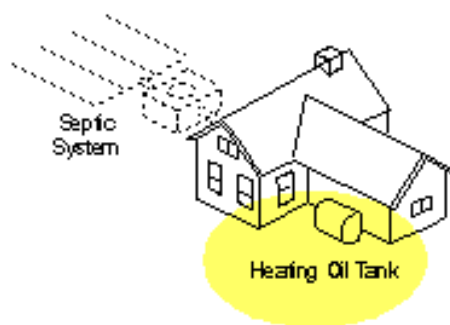
Since most tanks used on homes are bare steel, tank corrosion, or piping problems will cause leaks sooner or later. If your tank is more than 15 years old, or if you don't know its age, make a special effort immediately to determine whether leaks exist.

Cleanup of petroleum leaks is always expensive and is rarely totally effective. This makes it important to constantly monitor underground tanks containing petroleum products. If you already have a petroleum storage tank on your property, be especially aware of the age of your tank as well as the need to establish a leak-detection program. If you install a new tank, select the location carefully to be sure that your chosen leak-detection methods will be reliable and easy to use. Figure 2 shows how groundwater can be contaminated by underground tanks.

14. Are there any unused tanks on your property?

Tanks no longer in use can cause problems for owners and operators many years later and should be removed. They will continue to corrode and, if they still contain gas or oil, will likely contaminate groundwater. Selling property with an old underground tank may also be difficult.

Find out the location of any unused tanks on your property. Also, try to find out whether the tanks still contain petroleum product or have holes. These tanks should be properly closed and your local fire codes may require this. Check with your local fire marshal for details required in your county. Generally, the tank first must be emptied and cleaned, and then removed from the ground or filled with an inert material such as sand. If the tank is removed, it must be disposed of in a landfill or at a scrap dealer.



14. Circle the answer that best describes the way any unused tanks have been closed.

- a. Tank cleaned, emptied, and taken from ground. Surrounding soil checked for evidence of contamination, or no other tank was ever in ground.
- b. Tank cleaned, emptied, and filled with sand, concrete, or other inert material. Soil checked for contamination.
- c. Tank taken from ground or filled with inert material, soil not checked for contamination.
- d. Tank left in ground; OR do not know.

You should notify your regional DWQ/DWM office before you have the tank pulled if a leak is suspected. You should document all steps you take to close your tank. This may be helpful in the future should problems arise. Documentation should include written records of:

- all agencies contacted
- date the tank was filled or removed
- persons or companies who did the work and a copy of your contract with them
- certified records that soil and water contamination were not found
- photographs of the process, if possible

Always notify your local fire department before removing a tank. Some fire departments require that you obtain a permit first. The fire department representative will help you be sure that precautions are taken to prevent an explosion or other problem. Deaths have occurred due to improper closure.

Beware of contractors who say you must remove your tank. This is not a state requirement. Contact the DWM/DWQ or the North Carolina Petroleum Marketers Association for details and to report such contractors.

The Yellow Pages has listings of Environmental Contractors and it is a good idea to check references and ask your neighbors and friends for recommendations. Be sure to employ people experienced in underground storage tank closures. You should have a written agreement with your contractor, outlining his responsibilities and the extent of his liability coverage. Use a reputable, qualified firm to evaluate the site for contamination.

What if a leak or spill has happened?

If you find a leak or spill from any tank, whether it be above or below ground tank, **state law requires that you notify the DWM if it from an underground storage tank or DWQ if it is from an aboveground storage tank.** DWM/DWQ personnel will advise you on what actions are necessary to remedy the problem. If cleanup is required, use the yellow pages and ask friends and neighbors for references. DWM has a document about how to select a qualified contractor. . You may be eligible for reimbursement for some cleanup costs by the state Noncommercial Underground Storage Tank Cleanup Fund. This fund will only reimburse expenses that the DWM has approved as reasonable and necessary.

Related Publications

Prepared by Cooperative Extension Service:

- Regulation of Underground Storage Tanks
- Health Effects of Drinking Water Contaminants
- Protecting Your Water Supply: Proper Well Construction
- Volatile Organic Compounds (VOCs) in Drinking Water

These publications are available at your county Cooperative Extension Service Center. If you order more than one copy of the publication, there will be a small charge. Otherwise, the publications are free. You may also order these publications from Agricultural Publications, Campus Box 7603, North Carolina State University, Raleigh, NC 27695-7603, website: www.ces.ncsu.edu

Prepared by the Division of Waste Management:

- Non-Regulated Underground Storage Tanks
- UST Inspections
- Home Heating Fuel UST
- Leaking Petroleum Cleanup Funds
- Selecting an Environmental Consultant

Prepared by the U.S. Environmental Protection Agency:

- Doing Inventory Control Right, EPA-510-B-93-004
- Manual Tank Gauging, EPA-510-B-93-005

Prepared by the U.S. Environmental Protection Agency:

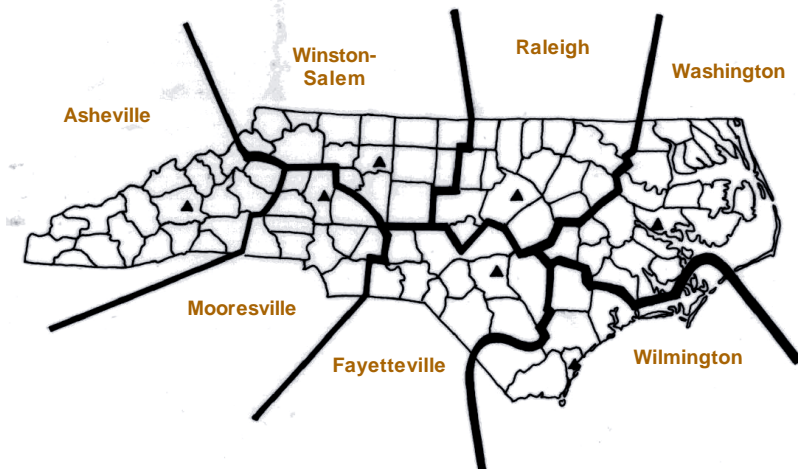
- Doing Inventory Control Right, EPA-510-B-93-004
- Manual Tank Gauging, EPA-510-B-93-005

Prepared by the North Carolina Petroleum Marketers Association:

- Guide to Heating Oil Storage Tanks
- Consumers' Guide to Heating with Oil

Contacts

- Your regional office of the North Carolina Division of Water Quality (see below) or online at <http://h2o.enr.state.nc.us/>



Asheville Regional Office
 Interchange Building
 59 Woodfin Place
 Asheville, NC 28801-2482
 (Courier 12-59-01)
 828/251-6208
 FAX 828/251-6452

Raleigh Regional Office
 1628 Mail Service Center
 Raleigh, NC 27699-1628
 3800 Barrett Drive
 Post Office Box 27687
 Raleigh, NC 27611
 (Courier 52-01-00)
 919/571-4700
 FAX 919/571-4718

Wilmington Regional Office
 127 Cardinal Drive Extension
 Wilmington, NC 28405
 (Courier 04-16-33)
 910/395-3900
 FAX 910/350-2004

Fayetteville Regional Office
 Systel Building,
 225 Green St., Suite 714
 Fayetteville, NC 28301-5094
 (Courier 14-56-25)
 910/486-1541
 FAX 910/486-0707

These documents can be ordered from DWM by calling 919-733-8486 or by going to the website: <http://wastenot.enr.state.nc.us/>

These publications can be ordered from DWQ by calling 919-733-3221 or by going to the website: <http://gw.ehnr.state.nc.us/>

These publications can be ordered from USEPA by calling 573-569-7562 or by going to the website: <http://www.epa.gov>

These publications can be ordered from NCPTA by calling 919-782-4411 or by going to the website: <http://www.ncpma.org>

Washington Regional Office
 943 Washington Square Mall
 Washington, NC 27889
 (Courier 16-04-01)
 252/946-6481
 FAX 252/975-3716

Winston-Salem Regional Office
 585 Woughtown Street
 Winston-Salem, NC 27107
 (Courier 13-15-01)
 336/771-4600
 Main FAX 336/771-4631
 Water Quality
 Main FAX 336/771-4630

Mooresville Regional Office
 919 North Main Street
 Mooresville, NC 28115
 (Courier 09-08-06)
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 FAX 704/663-6040

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