



# **REGULATIONS**

## for On-Farm Storage Tanks in Georgia

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**T**he rules and regulations concerning storage tanks on Georgia farms are very difficult to understand. This is partly because of the number of state and federal agencies involved with the regulations and because the many different types of tanks could contain any number of substances. The regulations also tend to change over time, which further complicates this process.

This publication provides a brief overview of the major regulatory agencies and highlights the rules that Georgia farmers should be aware of concerning storage tanks on their farms. This is in no way a complete description of every regulation. More detailed questions concerning these regulations should be addressed to the appropriate agencies.

### **Substances Commonly Stored in Tanks**

The majority of storage tanks on farms in Georgia contain fuel. A few tanks may contain pesticides, fertilizers, or mixing residuals and rinsate. These tanks are primarily regulated through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and will not be discussed in this publication. Certain pesticides, when mixed with other substances, may be classified as hazardous wastes. These substances could be regulated under the Resource Conservation and Recovery Act (RCRA). Refer questions concerning these acts or safe handling and storing of pesticides to the Cooperative Extension Service entomology department.

The National Fire Protection Association (NFPA) defines flammable or combustible liquids in one of three classes. These classes are based on the flashpoint of the liquid — the minimum temperature at which vapors from the liquid will ignite. Class I liquids are considered flammable and have flashpoints below 100

degrees F. Gasoline is a common example of a Class I flammable liquid. Combustible liquids have flashpoints above 100 degrees F and are regulated if the flashpoint is lower than 200 degrees F. Class II combustible liquids have flashpoints between 100 degrees F and 140 degrees F, while Class III combustible liquids range from 140 degrees F to 200 degrees F. Diesel fuel is a common example of a Class II combustible liquid.

### **Above-Ground Storage Tanks**

Above-ground storage tanks in Georgia are regulated by the State Fire Marshall and by the EPA if surface water is at risk. Above-ground tanks containing 1,100 gallons or less do not require any secondary containment, according to NFPA Code 395. The EPA does, however, require secondary containment for tanks that hold more than 660 gallons that could possibly spill into waters of the United States. Many diesel-powered irrigation systems could fall into this category. The State Fire Marshall recommends that some sort of secondary containment be used with all fuel storage tanks. This could include the use of double walled tanks, diking around the tank for impoundment, or remote impoundment facilities.

Tanks of greater than 60 gallons and less than 1,100 gallons that store flammable or combustible liquids on farms or in rural areas are covered under the NFPA Code 395. This code essentially covers most of Georgia's farm fuel tanks. The code outlines details concerning the construction and venting of these tanks as well as a few other regulations. Provisions in this code that Georgia farmers should be aware of include:

1. Locate the tank and storage area at least 40 feet away from any building. Although not stated, it would also be beneficial to place the tank as far

away from surface water, wells and property lines as possible.

2. Keep the storage area free of weeds and other combustible materials.
3. Conspicuously mark the tank with the name of the product it contains and **“FLAMMABLE – KEEP FIRE AND FLAME AWAY.”**
4. Support the bottom of the tank with concrete blocks approximately 6 inches above the ground surface to protect the bottom of the tank from corrosion.
5. If a pumping device is used, it should be tightly and permanently attached and meet NFPA approval. Gravity discharge tanks are acceptable, but they must be equipped with a valve that will automatically close in the event of a fire.
6. Submit plans for the installation of all storage tanks that will contain more than 60 gallons of Class I liquids or 120 gallons of Class II or Class III liquids to the State Fire Marshall for approval.
7. Report all tanks that catch on fire to the State Fire Marshall within 72 hours of the fire.

Tanks that hold more than 1,100 gallons of combustible liquid are regulated under NFPA code 30. These tanks require secondary confinement in the form of dikes, secondary impoundments, or clay-lined holding areas. This code provides pertinent details on the fabrication, venting, location, monitoring and registration of these tanks and also information on allowable types of secondary containment systems. Anyone with tanks that fall into this category is strongly encouraged to obtain a copy of NFPA code 30 for review. Questions regarding Georgia above-ground storage tanks or information on registering new tanks may be referred to the State Fire Marshall at the Georgia Safety Fire Commissioner's office. (Alan Shuman: **Alan.Shuman@mail.oci.state.ga.us**)

One final category of tanks that fall under different jurisdiction includes tanks exceeding 660 gallons singly or groups of tanks with more than 1,320 gallons of total capacity that could pollute surface waters of the United States. These tanks are controlled by the EPA under the Spill Prevention, Control and Countermeasures Act (SPCC). This act only addresses tanks in which a spill of a total volume could be “reasonably expected” to reach any navigable body of surface water. It requires that tanks that meet both criteria prepare a spill prevention plan, implement spill prevention practices including secondary containment, and be liable for the damages caused as a result of any spill.

The mission of the SPCC program is to promote and enforce measures designed to effectively prevent oil spills and contain those that occur before they reach any surface body of water. If a spill does occur, whatever the type of tank it is from, the EPA's Clean Water Act requires that the National Response Center be notified immediately at 305-536-5651. For more information on the SPCC or spill prevention methods that could be beneficial to any farm, contact the United States EPA Emergency Response and Removal Branch.

## Underground Storage Tanks

Underground storage tanks are defined as containing more than 10 percent of their total volume beneath the soil surface. More than 22,000 facilities representing more than 48,000 underground storage tanks exist in Georgia. These tanks are regulated by the Georgia Department of Natural Resources Environmental Protection Division (EPD) under the Underground Storage Tank Act in Chapter 391-3-15.

This act is an extension of the United States Environmental Protection Agency rules covered in Title 40 of the Code of Federal Regulations Part 280. The primary purpose of this act is to protect and enhance the quality of Georgia's environment and protect public health and safety by instituting and maintaining a comprehensive statewide program for maintaining regulated substances stored in underground tanks. Underground tanks represent more of a problem than above-ground tanks because leaks can often go on for long periods of time without being detected. This poses a serious threat to ground water sources near the tank.

While this act is quite comprehensive, a key provision was made to protect Georgia's farmers. Farm or residential tanks of 1,100 gallons or less capacity and used for noncommercial purposes are exempt from the act. Underground tanks used to store heating oil for consumption on the premises are also exempt. This means that these types of underground tanks are unregulated unless they contain a hazardous or flammable substance, in which case they are covered under the Hazardous Waste Management Act, or NFPA 395.

One final note concerning these exemptions: Underground tanks connected with piping systems are considered a single tank. Therefore, if two 750-gallon tanks are connected, the total volume would be 1,500 gallons, and the tanks would be subject to regulation.

If an underground storage tank is covered under these regulations (holds more than 1,100 gallons), then the owner is required to register the tank with the EPD. They want the following information:

1. Name and address of the facility where the underground storage tank is located.
2. Name and address of the owner/operator of the tank.
3. Size and identification of the storage tank.
4. Information on the substances to be stored in the tank.
5. Certification of financial responsibility in case of leaks or spills.

In addition, these regulations will require the owner to:

1. Notify the EPD of changes in the tanks or substances held in the tanks.
2. Require a leak detection procedure depending on the type of tank.
3. Require the owner to notify the EPD within 24 hours of the detection of any leak.
4. Give the EPD the right to inspect the tank at any time if they reasonably believe that any violations are occurring.

The appropriate paperwork for registering an underground storage tank may be obtained from the Georgia EPD's underground tank division. (Visit their web site at <http://www.epa.gov/swerust1/>)

If you have an underground storage tank and wish to avoid this annual process, or you have an underground storage tank that is no longer in use, you may want to permanently close this tank. This process is also regulated by the EPD. It essentially involves sub-

mitting additional paperwork regarding how you intend to close the tank and will require some soil and possibly ground water tests. The EPD has an excellent reference that answers many commonly asked questions concerning the closure of an underground storage tank: *Closing Underground Storage Tanks – Brief Facts* (Download the publication at <http://www.epa.gov/swerust1/pubs/clo.pdf>) For more information on closing underground tanks, contact Georgia EPD's Underground Storage Tank Management Program.

After discussing many of these regulations with each of the agencies involved, the general consensus is that none of these programs are specifically designed to target farm fuel tanks. While tanks that meet the criteria are expected to follow the regulations, the agencies will more than likely not be actively inspecting farm tanks. Nevertheless, the farmer or tank owner is liable in the event of a fire or spill, and he will be responsible for the damages associated with it. As little as 1 gallon of gas can contaminate as much as 2-10 million gallons of water, and cleanup from single tank spills typically cost \$10,000 to \$100,000. By observing safe practices and using common sense, most accidents can be avoided. If you are interested in finding out how you can avoid ground water contamination and potential liability, then contact the University of Georgia Extension Biological and Agricultural Engineering Department for an in-depth review of how you can prevent contamination from your fuel storage tanks.

**Table of Additional Resources**

<b>Organization</b>	<b>Responsibilities</b>	<b>Address</b>	<b>Phone Number</b>
National Fire Prevention Association (NFPA)	Regulations concerning storage of flammable liquids	NFPA 1 Battery March Park Quincey, MA 02269	(404) 656-9636
State Fire Marshall	Registration of tanks that hold more than 1,100 gallons of combustible liquids	Georgia Safety Fire Commissioner 620 West Tower 2 Martin Luther King Jr. Dr. Atlanta, GA 30334	(404) 656-9636
National Response Center (NRC)	Spills that could drain into waters of Georgia	S.P.C.C. Department U.S. EPA 345 Courtland St., NE Atlanta, GA 30365	(305) 536-5651 *Notification required within 24 hours
U.S. Environmental Protection Agency	Tanks that could drain into waters of the United States	U.S. EPA Emergency Response and Removal Branch 345 Courtland St., NE Atlanta, GA 30365	(404) 347-3931
Georgia Environmental Protection Division	Underground storage tanks and removal assistance	Underground Storage Tank Management Program Georgia EPD 4244 International Parkway Suite 104 Atlanta, GA 30354	(404) 362-2687
University of Georgia Extension Entomology Dept.	Questions about FIFRA or on-farm storage of pesticides	UGA Extension Entomology Biological Sciences Building Athens, GA 30602	(706) 542-8954
University of Georgia Extension Bio & Agricultural Engineering Dept.	Questions about regulation or pollution prevention practices	UGA Extension Engineering Driftmier Engineering Center Athens, GA 30602	(706) 542-2154



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