

#### **Overfill Prevention Equipment Operability Check**

This form can be used to comply with SC UST Regulation 280.35(a)(2) and 280.35(b)(2).

| Inspect overfill prevention equipment for ope<br>Prevention Equipment Inspection Procedures<br>must be maintained for at least one year and | " listed on p | age 2 of this | form. Only con |   |              |                 |                                    |              |                |              |
|---|---------------|---------------|----------------|---|--------------|-----------------|------------------------------------|--------------|----------------|--------------|
| UST FACILITY  |               |               |                |   |              |                 |                                    |              |                |              |
| Owner/Operator Name   | Facility Name |               |                |   | Permit       | Permit Number:  |                                    |              |                |              |
| Facility Street Address   | Facility City |               |                |   | Facility     | Facility County |                                    |              |                |              |
| CONTRACTOR/PERSON CONDUCTING INSPECTION   |               |               |                |   |              |                 |                                    |              |                |              |
| Company Name  |               |               | Phone City     |   |              |                 |                                    |              | State          |              |
| I certify, under penalty of law, that the testing<br>guidelines and the applicable national industr   |               |               | orm documents  | s the UST sy                              | stem equipme | nt was cheo     | ked in accordan                    | ce with th   | e manufacturer | 's           |
| Printed Name of Person Conducting Inspectio   |               |               |                | Signature of Person Conducting Inspection |              |                 | Overfill Equipment Inspection Date |              |                |              |
| Overfill Equipment Check  | Tank #        | 1             | Tank #         |   | Tank #       |                 | Tank#                              |              | Tank#          |              |
| Tank chart volume (gallons):  |               |               |                |   |              |                 |                                    |              |                |              |
| Tank diameter (inches):   |               |               |                |   |              |                 |                                    |              |                |              |
| Product:  |               |               |                |   |              |                 |                                    |              |                |              |
| Tank type:  | G FRP Steel   |               | FRP 🗖 Steel 🗖  |   | □ FRP□ Steel |                 | □ FRP□ Steel                       |              | G FRP Steel    |              |
| Drop Tube Shut Off Valve  | Yes           | No or<br>N/A  | Yes            | No or<br>N/A                              | Yes          | No or<br>N/A    | Yes                                | No or<br>N/A | Yes            | No or<br>N/A |
| Tight fill adapter installed and in good condition?   |               |               |                |   |              |                 |                                    |              |                |              |
| Device components and seals in good<br>condition?   |               |               |                |   |              |                 |                                    |              |                |              |
| Current length from tank top to flapper valve (inches)  |               |               |                |   |              |                 |                                    |              |                |              |
| Percent volume when complete shutoff occur  |               |               |                |   |              |                 |                                    |              |                |              |
| Ball Float Valve  | Yes           | No or<br>N/A  | Yes            | No or<br>N/A                              | Yes          | No or<br>N/A    | Yes                                | No or<br>N/A | Yes            | No or<br>N/A |
| Cage & ball intact and in good condition (ball moves freely and seats firmly)   |               |               | _              |   |              |                 |                                    |              |                |              |
| Tank top fittings tight   |               |               |                |   |              |                 |                                    |              |                |              |
| Current length from tank top to ball float set point (inches)   |               |               |                |   |              |                 |                                    |              |                |              |
| 30 minute flow restrictor installed (if ball float<br>set at more than 90%)   | t             |               |                |   |              |                 |                                    |              |                |              |
| Percent tank volume when flow restriction initiates   |               |               |                |   |              |                 |                                    |              |                |              |
| High Level Alarm  | Yes           | No or<br>N/A  | Yes            | No or<br>N/A                              | Yes          | No or<br>N/A    | Yes                                | No or<br>N/A | Yes            | No or<br>N/A |
| Alarm is audible/ visible to delivery driver?   |               |               |                |   |              |                 |                                    |              |                |              |
| Alarm occurs when float is moved to alarm se point?   | t             |               |                |   |              |                 |                                    |              |                |              |
| Percent tank volume when alarm occurs?  |               |               |                |   |              |                 |                                    | ļ            |                |              |
| Inspection Result   | Pass          | Fail          | Pass           | Fail                                      | Pass         | Fail            | Pass                               | Fail         | Pass           | Fail         |
| Check Pass or Fail  |               |               |                |   |              |                 |                                    |              |                |              |

Comments or explanation of failing results:

|  | Overfill Prevention Equipment Inspection Procedure   |  |  |  |  |
|--|--|--|--|--|--|
| Drop Tube Shut Off Valve   | <ol> <li>Remove the tank fill cap and visually confirm that the drop tube device is present and not obstructed.</li> <li>Ensure that the tight fill adapter on fill riser is tight and good condition.</li> <li>Remove the drop tube device and ensure that the drop tube assembly is in good condition and all necessary gaskets and seals are in place.</li> <li>Ensure that the drop tube is installed correctly in accordance with the manufacturer's requirements. Enter the measurement from the tank top to the point that the overfill equipment shuts off flow.</li> <li>Complete the "Tank Tilt Determination" section of this form if the drop tube device is set to completely shutoff flow at greater than 95 % of tank capacity and if the tank is tilted by one inch or more, the drop tube device must be installed in the low end of the tank.</li> </ol>   |  |  |  |  |
| Ball Float Valve<br>High Level Alarm                                     | <ol> <li>Remove fitting/cap and ball float vent valve and visually confirm that ball float valve is present and in good condition.</li> <li>Ensure that all tank top fittings are in good condition and appear to be vapor tight.</li> <li>Ensure that standard drop tubes are properly installed in the tank riser.</li> <li>Ensured that the ball float valve is installed correctly in accordance with the manufacturer's requirements. Enter the measurement from the tank top to the point that the ball float seats to restrict vapor exiting the tank.</li> <li>Complete the "Tank Tilt Determination" section of this form if the ball float valve is set to restrict flow at greater than 90 % of tank capacity and if the tank is tilted by one inch or more, the 30 minute flow restriction ball float valve must be installed in the low end of the tank.</li> <li>Remove the electronic alarm device from the tank and visually inspect for damage or corrosion.</li> <li>Ensure the device functions correctly by causing an alarm condition</li> <li>Reinstall the electronic alarm device in accordance with the manufacturer's requirements.</li> <li>Ensure that the alarm is audible and identifiable by the delivery person as an overfill alarm.</li> <li>Complete the "Tank Tilt Determination" section of this form if the electronic alarm at greater than 90 %</li> </ol> |  |  |  |  |
|  | of tank capacity and if the tank is tilted by one inch or more, the electronic alarm must be installed in the low end of the tank.   |  |  |  |  |
| Flapper Valve/Aut  | Overfill Length Determination Diagram to Shut Off Ball Float Valve   |  |  |  |  |
|  | Top of Tank  |  |  |  |  |
|  | FSP =<br>Point Ball<br>Flow<br>Shuts off   |  |  |  |  |
| <b>FSP</b> = Flapper Shutoff Point<br><b>BFSP</b> = Ball Float Set Point |  |  |  |  |  |
|  | Bottom of Tank   |  |  |  |  |
|  |  |  |  |  |  |

| Overfill Prevention Equipment Operability Check-Page 3  |   |  |   |                              |                            |  |  |  |  |  |
|---|---|--|---|------------------------------|----------------------------|--|--|--|--|--|
| Tank Tilt Determination<br>Tank tilt must be determined if the 30 minute flow restriction ball float valve or electronic alarms are set to restrict flow/alarm at a height greater than 90% capacity or   |   |  |   |                              |                            |  |  |  |  |  |
| drop tube devices are s<br><u>Note:</u> Only certain type<br>than 90 % capacity. Con<br><u>Note:</u> Certain types of<br>complete shut off occu   | et to completely shut off<br>is of ball float valves are on<br>sult with the manufactu<br>drop tube devices are two | flow at a height greater<br>constructed with the cal<br>rer to determine which<br>o stage shut off devices | r than 95% capacity.<br>librated pressure relief c<br>type of ball float valve t<br>. The first stage acts to r | rifice necessary to allow th | ne setting of these device | es at a height greater<br>engages that |  |  |  |  |
| with their instructions.<br>Method of   | Product level gauge   | e at two seperate openir   | ngs Elevation   | of each end of tank survey   | ed with a level            |  |  |  |  |  |
| Determining Tank Tilt   |   |  |   |                              |                            |  |  |  |  |  |
| Results of Tank Tilt<br>Determination   | Tank #  |  |   |                              |                            |  |  |  |  |  |
| Determination   | Tank Tilt cannot be<br>determined ( circle<br>choice)   | Yes No   | Yes No  | Yes No                       | Yes No                     | Yes No                                 |  |  |  |  |
|   | Overall tank tilt<br>(inches)   |  |   |                              |                            |  |  |  |  |  |
|   | Indicate whether  | Low (A)  | Low (A)   | Low (A)                      | Low (A)                    | Low (A)                                |  |  |  |  |
|   | overfill device is<br>installed at center or  | Center (B)   | Center (B)  | Center (B)                   | Center (B)                 | Center (B)                             |  |  |  |  |
|   | high/low end of tank  | High (C)   | High (C)  | High (C)                     | High (C)                   | High (C)                               |  |  |  |  |
| *all ball float valves/electronic alarms (regardless of type) must be set to restrict flow/alarm at 90% capacity<br>*all drop tube devices (regardless of type) must be set to completely shut off flow at 95% capacity. A. Check if overfill installed here B. Check if overfill installed at center C. Check if overfill installed here   |   |  |   |                              |                            |  |  |  |  |  |
|   | ×   |  | Y   | : Z                          |                            |  |  |  |  |  |
| To determine tank tilt, measure the product level at two of the three portions on the diagram above. Write the measurement on the lines beside X, Y and/or Z. If the overfill device is installed at the end where the product level is greatest then mark "A" (low end). If the overfill device is installed in the center then mark "B" (center). If the overfill device is installed at the end where the product level is the least then mark "C" (high end). |   |  |   |                              |                            |  |  |  |  |  |
| Calculate the tank tilt u<br>"Overall Tank Tilt":   | sing one of the following   | formulas, depending or   | n where your measurem   | ents were taken, and ente    | r that value on page 2 of  | f the form indicated as                |  |  |  |  |
| Overall Tank Tilt=X-Z   | OR  | Overall Tank Tilt=2*   | *(X-Y)  | OR Overall Tank              | < Tilt=2*(Y-Z)             |  |  |  |  |  |



# Overfill Prevention Equipment Operability Check for Underground Storage Tanks (USTs)

#### **General Information:**

The primary purpose of this form is meet the overfill prevention testing requirements as outlined by the South Carolina Underground Storage Tank Regulations 61-92.

Please type or print in ink. Also, please be sure that you have signatures in ink.

### Who must complete this form?

Any person that has a UST(s) that requires overfill protection equipment.

### What USTs are included?

An UST system is defined as any one or combination of tanks that is used to contain an accumulation of regulated substances, and whose volume (including connected underground piping) is 10 percent or more beneath the ground. Regulated USTs store petroleum or hazardous substances. This includes UST systems with field-constructed tanks and airport hydrant fuel distribution systems.

What Tanks are Excluded from these Requirements?

- Tanks removed from the ground prior to January 1, 1986;
- Farm or residential tanks of 1,100 gallons or less used to store motor fuel for noncommercial purposes;
- Tanks storing heating oil for use on the premise being stored;
- Septic tanks;
- Certain pipeline facilities regulated under Chapters 601 and 603 of Title 49;
- Surface impoundments, pits, ponds, or lagoons;
- Storm water or wastewater collection systems;
- Flow-through process tanks;
- Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
- Tanks on or above the floor of underground areas, such as basements or tunnels;
- Tanks with a capacity of 110 gallons or less;
- Wastewater treatment tank systems;
- UST systems containing radioactive materials that are regulated under the Atomic Energy Act of 1954;
- UST systems that are part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR part 50.

#### What Substances are Covered?

These requirements apply to USTs containing petroleum or certain hazardous substances. Petroleum includes gasoline, used oil, diesel fuel, crude oil, or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees F and 14.7 pounds per square inch absolute). Hazardous substances are those found in Section 101 (14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980 with the exception of those substances regulated as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

# Instructions for Completing the Overfill Prevention Equipment Operability Check:

I. <u>UST Facility Information</u>: Enter the owner/operator name, the name of the facility, permit identification number of the facility where the tank(s) are located and physical street address (including county).

II. <u>Contractor/Person Conducting the Inspection</u>: Provide the name of the company and its associated telephone number, city and state

III. Overfill Equipment Check (Table- General Information): Complete the general information for each tank. Provide the tank chart volume, tank diameter and product. Check the type of tank.

IV. <u>Overfill Equipment Check (Table)</u>: Complete all boxes in the table. Check yes or no to the questions that relate to the overfill device for each tank. You may answer N/A for any overfill devices that you do not have installed. If you need to determine if tank tilt is required, review page 2 for further information.

V. Inspection Result: For each tank, check whether the overfill device passed or failed. Note: If a ball float vent valve fails and cannot be repaired to manufacturer's standards then it has to be replaced with a different overfill device. Include any comments regarding failing results or other problems that may have been encountered.

VI. <u>Overfill Prevention Equipment Operability Check</u>: Please review the instructions in this section to ensure that testing is being done in the correct manner.

VII. <u>Tank Tilt Determination</u>: You must complete this section to determine tank tilt if any situations at the top of page 3 apply. Please complete the table to include tank number, tank tilt determination (circle one choice), overall tank tilt and indicate the location of the overfill device based on the diagram.

# Office Mechanics and Filing:

After completing the form, retain a copy in your files.

<u>Contact Information</u>: Please contact the UST Division at the number on the front of the form for further information.

**<u>Retention Schedule</u>**: Forms will be retained in DHEC's electronic records for a period of 13 years after tanks are permanently closed under retention schedule 10304.