SC DEPARTMENT of ENVIRONMENTAL SERVICES

Application for Permit to Install

(For Use With All Systems Except Field Constructed or Airport Hydrant Systems)

UST Management Division

(This form may be used to comply with SC UST Regulation 280.23(a))

I. LOCATION OF TANK(S)

Facility Name

Physical Street Address

City State Zip Code

Area Code Telephone Number

Contact Person

County Tax Map Identification Number & Latitude/Longitude

II. TANK OWNER INFORMATION

Tank Owner Name (corporation, individual, etc.)

Mailing Address

City State Zip Code

Area Code Telephone Number

Contact Person

III. OPERATOR INFORMATION

Name

Mailing Address

City State Zip Code

Area Code Telephone Number

IV. LANDOWNER INFORMATION

Name

Mailing Address

City State Zip Code

Area Code Telephone Number

Landowner Signature (if different than the tank owner)

V. FACILITY INFORMATION

Were tanks ever present on site? Yes ☐ No ☐ If yes, please indicate the Site ID # associated with the tanks: _____

Will existing tanks be replaced by new tanks? Yes ☐ No ☐

If yes, indicate which tanks will be replaced:

Tanks: _____ Capacity: _____ Substance Stored: _____

VI. INSTALLATION PROCEDURES

All underground storage tank systems must be installed and operated per R.61-92, Part 280: UST Control Regulations; manufacturer's instructions and industry standards. The tank and piping system installation practices and procedures described in the following codes may be used to comply with this requirement. Indicate which standard(s) will be used to oversee the tank system installation:

- ☐ American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems."
- ☐ Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems."
- ☐ Petroleum Equipment Institute Publication RP1000, "Recommended Practices for Installation of Marina Systems."
- ☐ American National Standards Institute Standard B31.3, "Petroleum Refinery Piping," and American National Standards Institute Standard B31.4, "Liquid Petroleum Transportation Piping System."

ANY CHANGES REGARDING THE INFORMATION SUPPLIED ON THIS APPLICATION MUST BE SUBMITTED IN WRITING AND APPROVED BY THE UST MANAGEMENT DIVISION.

SCDES, UST Management Division, 2600 Bull Street, Columbia, SC 29201, PHONE (803) 898-0589 FAX (803) 898-0673 www.des.sc.gov

VII. TANK INFORMATION

Tank Number (**list each compartment separately**)					
Capacity (gallons)					
Construction Material (check one):					
Fiberglass-Reinforced Plastic (FRP)	☐	☐	☐	☐	☐
Steel-FRP Composite	☐	☐	☐	☐	☐
Steel-Polyurethane	☐	☐	☐	☐	☐
Other (specify)	☐	☐	☐	☐	☐
Containment (check one):					
Double Wall-Brine	☐	☐	☐	☐	☐
Double Wall-Vacuum	☐	☐	☐	☐	☐
Double Wall-Dry	☐	☐	☐	☐	☐
Substance to be Stored (check one):					
Gasoline (Regular Unleaded, Plus, Premium, Nonethanol)	☐	☐	☐	☐	☐
Diesel (Off-road, On-road)	☐	☐	☐	☐	☐
Kerosene	☐	☐	☐	☐	☐
Ethanol (indicate blend level such as E10, E85)	☐	☐	☐	☐	☐
Biodiesel (indicate blend level such as B20, B50)	☐	☐	☐	☐	☐
Hazardous Substance Name of Substance: _____ Chemical Abstract Service # (CAS#): _____	☐	☐	☐	☐	☐

Tank Manufacturer: _____

Will tanks be anchored? Yes ☐ No ☐ If yes, please list type of anchoring system to be used: _____

The backfill should be a clean, washed, well granulated, free-flowing, non-corrosive inert material that is free of debris, rock or other organic materials. Examples of accepted materials are sand, crushed rock (no larger than ½ inch), or pea gravel (no larger than ¾ inch).

NOTE: You will be required to submit a receipt indicating delivery of backfill with the Permit to Operate application.

Type of backfill to be used: Sand ☐ Pea Gravel ☐ Crushed Rock ☐ Other ☐ _____

Any tanks and/or compartments to be manifolded? Yes ☐ No ☐ If yes, please list tanks/compartments to be manifolded:

_____

VIII. STORAGE OF BIODIESEL AND ETHANOL BLENDS

Will biodiesel blends greater than B20 but less than B100 be stored? Yes ☐ No ☐
If yes, the Alternative Fuel Checklist (DES form 3885) must be completed and submitted with this application.

Will ethanol blends greater than E10 but less than E100 be stored? Yes ☐ No ☐
If yes, the Alternative Fuel Checklist (DES form 3885) must be completed and submitted with this application.

Please review the potential equipment issues pertaining to the use of alternative fuels before submitting the checklist. **A Permit to Install for alternative fuel systems will not be issued without the submittal of the required checklist and supplemental information.**

IX. PIPING INFORMATION

Line Number **(list each line separately)**					
Material of Construction (check one):					
Flexible	☐	☐	☐	☐	☐
Fiberglass Reinforced Plastic (FRP)	☐	☐	☐	☐	☐
Other (Specify)	☐	☐	☐	☐	☐
Containment (check one):					
Double Wall	☐	☐	☐	☐	☐
Triple Wall	☐	☐	☐	☐	☐
Pumping System (check one):					
Pressurized	☐	☐	☐	☐	☐
Suction – Foot/Angle Valve	☐	☐	☐	☐	☐
Suction – Vertical Check Valve	☐	☐	☐	☐	☐
Other (Specify)	☐	☐	☐	☐	☐

Piping Manufacturer: _____ Model: _____

The backfill should be a clean, washed, well granulated, free-flowing, non-corrosive inert material that is free of debris, rock or other organic materials. Examples of accepted materials are sand, crushed rock (no larger than ½ inch), or pea gravel (no larger than ¾ inch).

NOTE: You will be required to submit a receipt indicating delivery of backfill with the Permit to Operate application.

Type of backfill to be used: Sand ☐ Pea Gravel ☐ Crushed Rock ☐ Other ☐ _____

Any lines to be manifolded? Yes ☐ No ☐ If yes, please list lines to be manifolded: _____

NOTE: All metal components of piping systems (flex connectors, check valves, etc.) must be in containment sumps in order to properly conduct Interstitial Monitoring and must be protected from corrosion. The containment sumps must be liquid tight if used for Interstitial Monitoring.

X. SPILL, OVERFILL PREVENTION AND OTHER EQUIPMENT

Spill and overfill prevention equipment must be used to prevent spills and overfills associated with product transfer to the underground storage tank system unless the system is filled by transfers of no more than 25 gallons at a time.

Spill Prevention Equipment

Manufacturer: _____ Model: _____

Type of spill prevention equipment being installed: Single Wall ☐ Double Wall ☐

If double wall spill prevention is being installed, will the interstice be monitored monthly? Yes ☐ No ☐

If yes, please indicate the monthly monitoring method to be used: _____

If sensors will be located in the interstice, indicate the make and model: _____

X. SPILL, OVERFILL PREVENTION AND OTHER EQUIPMENT (CONTINUED)

Overfill Prevention Equipment

Type of overfill prevention equipment being installed: Drop Tube Shut Off Valve ☐ Alarm ☐ Other ☐ (specify): _____

NOTE: If other is indicated, please attach manufacturer's specifications for approval.

Manufacturer: _____ Model: _____

Will a secondary overfill prevention method be installed? If yes, please indicate type: _____

Tank Top Sumps

Manufacturer: _____ Model: _____

Type of under dispenser containment to be installed: Single Wall ☐ Double Wall ☐

If double wall under dispenser containment will be installed, will the interstice be monitored monthly? Yes ☐ No ☐

If yes, please indicate the monthly monitoring method: _____

Note: The monthly monitoring of the interstice between the primary and secondary wall of a dispenser sump does not constitute release detection for the piping. You must also incorporate monthly interstitial monitoring for the piping (see Section VIII). This only meets the regulatory requirements for the 3 year containment sump testing exemption.

Under Dispenser Containment

Manufacturer: _____ Model: _____

Type of under dispenser containment to be installed: Single Wall ☐ Double Wall ☐

If double wall under dispenser containment is being installed, will the interstice be monitored monthly? Yes ☐ No ☐

If yes, please indicate the monthly monitoring method to be used: _____

If sensors will be located in the interstice, indicate the make and model: _____

Note: The monthly monitoring of the interstice between the primary and secondary wall of a dispenser sump does not constitute release detection for the piping. You must also incorporate monthly interstitial monitoring for the piping (see Section XI). This only meets the regulatory requirements for the 3 year containment sump testing exemption.

Transition Sumps

Will transition sumps be installed? Yes ☐ No ☐ If yes, please indicate location on map.

Indicate the capacity of the transition sump: _____

For emergency generators and marinas only: Will a transition sump be installed at the point where the piping becomes aboveground? Yes ☐ No ☐

Vapor Recovery

Is Stage I vapor recovery going to be installed? Yes ☐ No ☐

Vent Lines

Please indicate the location where vent lines will be installed: _____

Please indicate the number of vent lines to be installed : _____

Will vent lines be manifolded? Yes ☐ No ☐ If yes, indicate which vent lines will be manifolded: _____

Shear Valves

For pressurized systems, please indicate that shear valves will be properly installed and anchored per manufacturer's specifications?

Yes ☐ No ☐

XI. RELEASE DETECTION

Double Wall systems must use interstitial monitoring as the primary method for tank and line release detection. When considering your installation, you must decide whether you will be installing a closed system, open system, or a Department approved combination. Please see the descriptions of the requirements for each below. The system that you choose will be inspected for compliance with the requirements listed below throughout the installation inspection process as well as prior to issuing a permit to operate.

Open System
Submersible turbine pump sump (STP)- the piping interstice must be open at the low point sump of the piping run, with a sump sensor being installed at the lowest point of the containment sump.

Under dispenser containment (UDC)- all interstice access points are open without any obstructions. Monthly visual monitoring or sensor monitoring would be allowed on all sumps because the open access points allow liquid to flow freely from sump to sump reaching the lowpoint sump sensor, typically located at the STP.

Closed System
Submersible turbine pump sump (STP)- the piping interstice must be open at the low point sump of the piping run, with a sump sensor being installed at the lowest point of the containment sump.

Under dispenser containment (UDC)- all interstice access points are closed and are continuous throughout the entire piping run with a sump sensor properly installed at the lowest point of each containment sump. Crossover tubing may be utilized to maintain interstice continuity. Leaks from the buried portions of the piping will be forced under pressure to the low point STP sump via the continuous piping interstice for detection. Because this system isolates other secondary containment sumps (dispenser and transition sumps) from the low point sump, typically at the STP, sensors are required to detect a leak before it exceeds the capacity of any sump.

Release Detection	Tank(s)	Piping	
Indicate if system will be open or closed (you must choose one): Open ☐ Closed ☐ Department Approved Combination ☐			
Interstitial Monitoring with Secondary Containment ***Note: Please also indicate the proposed sensor locations on your attached site map for review and approval.***	Tank Sensor Manufacturer: _____ Tank Sensor Model: _____	**Dispenser End** Will all interstices be open: Yes ☐ No ☐ N/A ☐ OR Will all interstices be closed but continuous: Yes ☐ No ☐ N/A ☐ For open systems only, indicate if visual monitoring or sensors will be used (see definition above):_____ If sensor(s) will be used, will they be connected to an ATG: Yes ☐ No ☐ N/A ☐ If sensors will be used, will they be equipped with positive shut off? Yes ☐ No ☐ N/A ☐ Will an audible alarm be used? Yes ☐ No ☐ N/A ☐ Dispenser Sensor Manufacturer: _____ Dispenser Sensor Model: _____	**Tank End** Will the STP sensor connect to ATG? Yes ☐ No ☐ N/A ☐ Will positive shut off be used? Yes ☐ No ☐ N/A ☐ STP Sensor Manufacturer: _____ STP Sensor Model: _____

XI. RELEASE DETECTION

Release Detection		Tank(s)	Piping
Line Leak Detectors:		Type of Line Leak Detector: Electronic ☐ Mechanical ☐ Location of Line Leak Detector: _____ Manufacturer: _____ Model: _____ Will a high flow STP be installed? Yes ☐ No ☐	**High Flow Systems Only:** If a high flow system will be installed please indicate the correct leak detection option below: Line leak detector on STP (in leak detector port): Yes ☐ No ☐ N/A ☐ Electronic line leak detector in-line: Yes ☐ No ☐ N/A ☐ In-line mechanical line leak detector, sump sensor at lowest point of liquid tight containment sump AND positive shutdown of STP: Yes ☐ No ☐ N/A ☐ In-line mechanical line leak detector, sump sensor at lowest point of liquid tight containment sump AND visual or audible alarm Yes ☐ No ☐ N/A ☐

XII. FINANCIAL RESPONSIBILITY

Owners and operators must demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from petroleum underground storage tanks. Proof of financial responsibility must be submitted using DES form 3472, Certificate of Financial Responsibility. **A Permit to Install will not be issued without a valid financial responsibility certificate and complete information regarding the mechanism chosen.**

☐ Financial responsibility requirements do not apply because 40 CFR Part 280 Subpart H is not applicable for state or federal facilities.

XIII. SITE MAP

An 8 ½" x 11" site map showing the proposed location of the tank system (to include the entire tank basin, associated piping run from start to finish, all sensor locations as applicable, transition sumps as applicable, and dispenser islands) must be attached. **Please do not submit tax plat maps or architectural design maps as a replacement for the required site map.**

XIV. INSTALLATION CERTIFICATION

All owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with Section VI of this application. Check all methods below that will be used to meet this requirement.

☐ The installer is certified by tank and piping manufacturers.
Name of installer:_____
Contact person, email and telephone number: _____

☐ The installation will be inspected and certified by a SC registered professional engineer with education and experience in underground storage tank system installation.

☐ All work listed in the manufacturer's installation checklists will be completed.

☐ The owner and operator will comply with another method for ensuring compliance that is determined by the Department to be no less protective of human health and the environment. Please specify method to be used:_____

XV. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information and installing the UST system, I believe that the submitted information is true, accurate, and complete.

Name of tank owner or owner's authorized representative (print) | Title

Signature | Date

Name of installer (print) | Title

Signature | Date