

Application for the Construction of New or Substantially Modified Underground Storage Tank (UST) Systems

New Hampshire Department of Environmental Services
Waste Management Division, Oil Remediation and Compliance Bureau
P.O. Box 95, 29 Hazen Drive
Concord, New Hampshire 03302-0095
(603) 271-3899, FAX (603) 271-2181



APPLICANT INSTRUCTIONS AND GUIDANCE	DES USE ONLY
<ul style="list-style-type: none"> - Refer to the attached "Plan Guidance" to ensure plan submittals include the requested information to facilitate the review process and minimize potential delays. - Per Env-Or 407.01(a), return completed application, engineering plans, and \$100 fee to the above address. Make check payable to: NH State Treasurer. - Per Env-Or 407.01(b), the plans shall have been prepared and stamped by a New Hampshire licensed professional engineer. - The department will respond within 90 days of receipt of a complete application submittal. As needed, revisions or clarifications will be requested until the plans satisfactorily demonstrate compliance with applicable requirements of the UST Rules, Env-Or 400. - Per RSA 146-C:7,I., construction or installation of a new facility or substantial modification of an existing facility shall not commence without written notice of plan approval by the department. 	<p>Date Received _____</p> <p>DES Site # _____</p> <p>UST Facility # _____</p> <p>Fee Required? <i>YES / NO</i></p> <p>Fee Received? <i>YES / NO</i></p> <p>Comments:</p>

CERTIFICATION OF MUNICIPAL NOTIFICATION
<p>To meet the requirements of RSA 485-C:14 and/or 541-A:39, the undersigned certifies that on _____ (date), a copy of this completed application was mailed to the Town/City Clerk of _____ (where the facility is located) and _____ (as applicable, any other municipalities which may be affected by the facility).</p> <p>Signed: _____ Date: _____ <i>(Applicant)</i></p>

<u>UST SYSTEM OWNER</u>
Owner Name _____
Mailing Address _____
City, State, Zip _____
Phone Number _____
E-Mail Address _____
Alt. Ownership Contact (Name) _____

<u>UST FACILITY</u>
Facility Name _____
Facility Address _____
City, State, Zip _____
Facility Contact Person _____
Phone Number _____
E-Mail Address _____

IF THIS IS AN EXISTING UST FACILITY, PLEASE PROVIDE (IF KNOWN) THE UST FACILITY NO. # _____ .

I. UNDERGROUND STORAGE TANKS

ALL TANKS SHALL COMPLY WITH Env-Or 405.01, "TANK STANDARDS FOR UST SYSTEMS."

A. CHECK HERE IF APPLICATION IS FOR PIPING ONLY.

B. NUMBER OF EXISTING TANKS TO BE CLOSED.

C. Tanks	Tank No.	Tank No.	Tank No.	Tank No.
Volume (Nominal/Actual)				
Tank Diameter and Length				
Product to be Stored				
Manufacturer				
Construction Type				
Degree of Wrap (double walled)				
Outer Wall Gauge (steel only)				
Standard of Design				

* Note - If more room is needed to specify additional tanks, include another copy of this page.

II. LEAK MONITORING

LEAK MONITORING SHALL BE INSTALLED IN ACCORDANCE WITH Env-Or 405.08 & Env-Or 405.09.

A. Tank	Manufacturer	Model Number
Wet Interstitial: Hydrostatic Sensor		
Dry Interstitial: Liquid Sensor		
Automatic Tank Gauge		
Console (Tank Monitor)		

B. Piping	Manufacturer	Model Number
Line Leak Detector		

III. PIPING AND SECONDARY CONTAINMENT

PIPING AND SECONDARY CONTAINMENT SHALL COMPLY WITH Env-Or 405.02 "PIPING STANDARDS FOR UST SYSTEMS" AND Env-Or 405.04 "SECONDARY CONTAINMENT AND SUMPS FOR PIPING SYSTEMS".

A. Product Piping	Primary	Secondary	Duct / Chase
Pressure or Suction System		N/A	N/A
Manufacturer			
Model Number			
Pipe Material / Schedule			
Pipe Size(s)			
Min. Bend Radius			

B. Siphon or Return, (circle, if app.)	Primary	Secondary	Duct / Chase
Manufacturer			
Model Number			
Pipe Material / Schedule			
Pipe Size(s)			
Min. Bend Radius			

C. Vapor Piping	Vent	Vapor Recovery	Vent Stack
Manufacturer			
Model Number			
Pipe Material / Schedule			
Pipe Size(s)			
Min. Bend Radius			

III. PIPING AND SECONDARY CONTAINMENT, *continued...*

D. Sumps	Tank	Dispenser	Other:
Manufacturer			
Model Number			
Material			

E. Sump Sensors	Tank	Dispenser	Other:
Manufacturer			
Model Number			

F. Sump Entry Fittings	Product Pipe	Vent / Vapor Pipe	Conduit
Manufacturer			
Model Number			

IV. SPILL CONTAINMENT & OVERFILL PROTECTION

TANKS SHALL BE EQUIPPED WITH SPILL CONTAINMENT & OVERFILL PROTECTION IN ACCORDANCE WITH Env-Or 405.05 and Env-Or 405.06.

A. Spill Containment	Manufacturer	Model Number
Fill Spill Container		
Stage I Spill Container		

Note – For UST systems newly installed on or after the 2013 effective date of the UST rules, the above spill containment equipment shall be of double-walled construction or installed within a liquid-tight sump.

B. Overfill Protection	Manufacturer	Model Number	Restricted Volume (% Full)	Primary Device (Check)
Audible Alarm Level Sensor			(≤ 90 % Full)	<input type="checkbox"/>
Overfill Flow Shut-off Valve			(≤ 95 % Full)	<input type="checkbox"/>
Other (Specify):				<input type="checkbox"/>

Notes - The restricted volume (% Full) must be less than or equal to the regulatory limits shown for the primary overfill protection device. Where multiple overfill protection devices are used, please specify (above, and on the plans) which is to be the primary device. Also, note that flow-restricting overfill protection devices (such as ball floats) located in tank vents shall not be utilized on UST systems newly installed on or after the 2013 effective date of the UST rules.

V. OTHER UST SYSTEM APPURTENANCES

	Manufacturer	Model Number
Fill Swivel Adaptor / Cap		
Fill Submerged Drop Tube		
Stage I Swivel Adaptor / Cap		
Vent / Vapor Extractor Fitting		
Vent Stack Cap (Diesel / Kero)		
Vent Stack Cap (Gasoline)		
Flex Connectors		

VI. SETBACK DISTANCES FROM WATER SUPPLY WELLS AND SURFACE WATERS

IN ACCORDANCE WITH Env-Or 407.06(e), (f), and (g)

Indicate the closest distance from any new or substantially modified UST system component (tanks and piping)		Minimum Separation Distance Required per Env-Or 407.06(e)	
		Gasoline Systems	Other Regulated Systems
Distance from a public water supply well.		At Least 500 ft	At Least 400 ft
Distance from a non-public water supply well.		At Least 250 ft	At Least 75 ft
Distance from "surface waters of the state". (As defined by RSA 485-A:2, XIV)		At Least 75 ft	At Least 75 ft

If any of the above setback distance requirements are NOT MET, proceed to the following:

Was this a UST facility location which existed prior to September 1, 2013? (YES / NO)

If "NO", the UST system location does not meet setback requirements and needs to be reconfigured.

If "YES", a new or substantially modified UST system may only be installed where the separation distance is not decreased to less than that for an existing UST system [per Env-Or 407.06(f)]. If this is the basis for not meeting any of the above setback requirements, please describe below (and show on the plans) the existing UST system and corresponding minimum well separation distance.

(For example, "Product piping for existing UST No. 1 is currently located 150 feet from the on-site public well and existing UST No. 2 is currently located 60 feet from the offsite non-public well. These existing systems and the corresponding wells will be reflected on the site plan. As indicated above, the minimum separation distances for the proposed replacement UST systems are not less than the existing separation distances.")

VII. ENGINEER AND CONTRACTOR / INSTALLER

NH Licensed Professional Engineer
<i>Name</i>
<i>Company</i>
<i>Address</i>
<i>City, State, Zip</i>
<i>Phone Number</i>
<i>E-mail Address</i>
<i>NHPE Number and Expiration Date</i>

UST Installation Contractor (ICC Certified)
<i>Name</i>
<i>Company</i>
<i>Address</i>
<i>City, State, Zip</i>
<i>Phone Number</i>
<i>E-mail Address</i>
<i>ICC Certification Number and Expiration Date</i>

PLEASE REMOVE THESE "PLAN GUIDANCE" SHEETS FROM THE COMPLETED APPLICATION PRIOR TO RETURNING TO NH DES. TO MINIMIZE DELAYS AND FACILITATE THE REVIEW PROCESS, PLEASE ENSURE THAT PLAN SUBMITTALS INCLUDE THE REQUESTED INFORMATION.

PLAN GUIDANCE:

PLAN INFORMATION SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF Env-Or 400 "UNDERGROUND STORAGE TANK FACILITIES" AND Env-Or 500 "RECOVERY OF GASOLINE VAPORS".

A. GENERAL PLAN INFORMATION -

1. Submittal on 22" X 34" sheets. When possible, please limit submittal to only that required to demonstrate compliance with Env-Or 400. Only one set of plans needs to be submitted.
2. NH licensed PE stamp with signature and date on all sheets.
3. UST Facility ID number on all sheets (for existing facilities).
4. Site location (locus) map with sufficient detail for inspector to readily locate facility. For new facilities, include sufficient geographic reference points / information to position the site and UST system for evaluation of water well and surface water setback requirements.

B. SITE PLAN (Plan View) -

1. Clear depiction of proposed equipment and existing equipment to remain.
2. North arrow.
3. Scaled drawing.
4. Buildings / Structures. (Include approximate location of tank monitoring console. Where applicable, include the approximate location of any high level visual and audible overfill alarms.)
5. Location of tank(s).
6. Location of product piping and secondary piping (and duct if applicable).
7. Location of vent piping and vapor recovery piping.
8. Ground surface elevations at tank(s) and end of piping runs.
9. Location of vent stack(s) and bollards at free standing vents.
10. Location of islands and piping terminations.
11. Location of tank appurtenances. (Interstitial, Fill, Vent, Stage I, Tank Level Gauge, Overfill Device, Containment Sumps, etc.)
12. Location and dimension of concrete pads (for tank and dispenser areas) and configuration of positive limiting barrier on dispenser pads.
13. Location of dispensers with statement that nozzles shall not extend beyond positive limiting barrier.
14. Canopy, canopy columns, canopy drainage discharge locations, and roof drainage discharge locations (in the vicinity of tank and dispenser areas, where applicable).
15. For fuel dispensing facilities, include detailed site grading information relevant in demonstrating that storm water will not be directed to flow over tank or dispenser pads. As needed, include contours, spot elevations, flow arrows, and/or drainage system information.
16. For heating oil facilities, indicate the location of any daytanks connected by piping to the UST system.
17. Water wells and surface waters within (or very close to) the regulatory setbacks. If unable to show on the site plan (due to scale), include a bearing line showing the distance from the nearest UST system component.

C. UST SYSTEM DIAGRAMS / DETAILS (Include Manufacturer / Model Information) -

1. Tank specifications (manufacturer, standard of design, material of construction, diameter, length, volume, degree of wrap, outer wall gauge-for steel tanks, and product stored).
2. Cross sectional diagram of tank excavation (bedding, backfill, clearance dimensions between tank(s) and excavation walls, cover depth, and anchoring information, including manufacturer, number and location of straps).
3. Cross sectional diagram of tank and all equipment (sumps and attachment methods, fill, vent, vapor, overfill and monitoring equipment).
4. Sumps (equipment within, pipe penetration / termination information, as applicable.)
5. Tank Fill – Riser pipe material (& coating if applicable), spill containment, swivel adaptor / cap, drop tube showing clearance dimension from tank bottom.
6. Tank Vent / Stage I Vapor Recovery – Riser pipe material (& coating if applicable), spill containment, swivel adaptor / cap, extractor fitting.
7. Overfill protection equipment and associated device setting dimension lines. Where multiple devices are specified, designate which is to be the primary device for overfill protection.

PLAN GUIDANCE (continued):**C. UST SYSTEM DIAGRAMS / DETAILS (continued) -**

8. Leak monitoring equipment (tank interstitial sensors, sump sensors, and line leak detectors).
9. Primary piping (size, manufacturer, model no., material of construction, bend radius/flexibility, specify pressure or suction piping).
10. Secondary containment piping (size, manufacturer, model no., material of construction, bend radius/flexibility). Where applicable, also include this information for any additional duct/chase.
11. Vent piping and vapor recovery piping (size, manufacturer, model no., material of construction, bend radius/flexibility).
12. Pipe trench detail (bedding / backfill material, min. cover depth (s), min. pipe separation (including cross-overs), min. separation from trench sidewalls).
13. Piping termination details (tank sumps, in-line sumps, end-of-line sumps, and building terminations). Include (as applicable) liquid tight sump entry / penetration fittings for all piping (product, vent / vapor recovery, duct, electrical conduit), entry fitting donuts, termination / test fittings, test boots, flex connectors, anti-siphoning devices (if needed), and transitions to above ground piping.
15. Pipe elevations at terminations. Make it clear what the elevations represent (primary, secondary, or duct pipe, invert or top-of-pipe.)
16. Vent stack detail (size, pipe matl., min. stack height, vent caps - model & pressure / vacuum settings, pipe matl. transitions, corrosion protection, means for support / attachment, protection by bollards).
17. Corrosion protection – (for underground metal tanks, metal product and vent/vapor recovery piping, metal tank riser pipes, metal vent stack pipes, metal flex connectors, metal tank anchoring hardware). Indicate corrosion protection test stations. Indicate any corrosion protection coatings / jackets.
18. Daytanks - Relevant information and detail for any daytanks connected by piping to the UST system. (tank capacity, standard of design, overfill protection controls, overflow piping, venting, ...as applicable).

D. UST SYSTEM PLAN NOTES -

1. Relevant closure and site assessment requirements associated with the removal or replacement of tanks or piping, as applicable.
2. Method of filling tanks (gravity drop or pressurized delivery).
3. Indicate whether the tanks are located in a FEMA designated 100-year floodplain area. If so, elaborate on special provisions for tank anchoring and product containment.
4. Seasonal high water table information and dewatering requirements.
5. Separation distances from nearest water supply wells (both public and non-public) and from nearest surface water. For a new UST facility, indicate what water supply will be utilized to serve the facility (as applicable) and discuss how compliance with relevant setbacks will be achieved.
6. Statement on how storm water will be kept from flowing over tank and dispenser pads.
7. Testing requirements for primary piping, secondary piping, vent and vapor recovery piping, sumps, spill containment equipment and line leak detectors. For air tests, specify minimum pressures and durations. For hydrostatic tests, specify minimum water levels and durations.
8. Tank ballasting calculations (on plan or as an attachment to application).
9. Positive limiting barrier calculations (on plan or as an attachment to application).
10. Pipe slope calculations (on plan or as an attachment to application). Include consideration of ground surface elevations, tank elevations, minimum pipe cover, minimum pipe cross-over separation, tank manway height, etc. A pipe elevation profile may be beneficial when there's limited grade and/or multiple cross-overs.
11. Overfill protection dimension setting calculations (on plan or as an attachment to application), including tank manufacturer calibration charts and manufacturer instructions for proper setting of overfill protection devices.

THIS APPLICATION IS REQUIRED FOR INSTALLATION OF A NEW UST FACILITY OR MAKING ONE OR MORE SUBSTANTIAL MODIFICATIONS AT AN EXISTING UST FACILITY. PER RSA 146-C:1, XVI, "SUBSTANTIAL MODIFICATION" MEANS THE CONSTRUCTION OR INSTALLATION OF ANY ADDITION TO A FACILITY OR ANY RESTORATION OR RENOVATION OF A FACILITY WHICH: INCREASES OR DECREASES THE ON-SITE STORAGE CAPACITY OF THE FACILITY; SIGNIFICANTLY ALTERS THE PHYSICAL CONFIGURATION OF THE FACILITY; OR IMPAIRS OR IMPROVES THE PHYSICAL INTEGRITY OF THE FACILITY OR ITS MONITORING SYSTEMS.

PER RSA 146-C:7, I-A, THE APPLICATION FEE OF \$100 APPLIES TO ALL SUBMITTALS EXCEPT FOR THOSE MADE BY STATE AND LOCAL GOVERNMENTS, INCLUDING COUNTIES AND SCHOOL DISTRICTS.

IF THERE ARE ANY QUESTIONS, PLEASE CALL (603) 271-3899 AND ASK TO SPEAK WITH A DESIGN REVIEWER WITHIN THE OIL COMPLIANCE SECTION.