

Revised: April, 2007

**NEW HAMPSHIRE DEPARTMENT
OF ENVIRONMENTAL SERVICES**



APPLICATION FOR THE CONSTRUCTION OF NEW OR SUBSTANTIALLY
MODIFIED UNDERGROUND STORAGE SYSTEMS (Env-Wm 1401.20)

**PLAN REVIEW AND INSPECTION FEE \$100.00
MAKE CHECK PAYABLE TO: N.H. STATE TREASURER**

<u>STATE USE ONLY</u>	
DATE REC'D:	_____
UST FAC. ID #:	_____
REVIEW FEE REQ'D?	(YES / NO)
FEE REC'D:	_____ CHECK #: _____

CERTIFICATION OF MUNICIPAL NOTIFICATION

To meet the requirements of RSA 485-C:14 and/or 541-A:39, the undersigned certifies that on _____, 20_____, a copy of this completed application was mailed to the Town/City Clerk(s) of _____ (and) _____ (where the facility is located and any other municipalities which may be affected by the installation / modification of this facility).

Signed: _____ Date: _____
(Applicant)

- Per Env-Wm 1401.20(a), at least 90 days prior to commencing construction or installation of a new or replacement underground storage tank system, or a substantial modification of an underground storage tank system, the owner shall submit plans, a completed application provided by the department, and specifications as required by RSA 146-C:7, I with the fee required by RSA 146-C:7, I-a to the department. The plans shall be prepared and stamped by a New Hampshire licensed professional engineer.
- Per RSA 146-C:7,I., no construction or installation shall commence without prior approval of plans and specifications by the New Hampshire Division of Waste Management for new or substantially modified existing facilities.
- Per Env-Wm 1401.28(x), the owner shall notify the department of the completion of installation of a new or substantially modified system at least 5 department business days prior to backfilling the tank top and/or piping, to arrange for an inspection.
- Per Env-Wm 1401.28(y), the owner shall submit to the department a letter prepared and stamped by a New Hampshire licensed professional engineer, stating that the underground storage tank system has received an on-site inspection by a New Hampshire licensed professional engineer verifying it was constructed in accordance with the department's approved plans and specifications, at least 8 department working hours prior to an inspection by the department.
- Per Env-Wm 1401.04 (d), for new systems or substantial modifications of existing systems, a new or amended registration form, respectively, shall be filed with the department at the time of final inspection of the system.
- Per Env-Wm 1401.28(am), prior to the department authorizing an underground storage tank system to be placed into service, the owner shall submit to the department a letter prepared and stamped by a New Hampshire licensed professional engineer stating that the installation has been completed in accordance with the department's approved plans and the requirements of Env-Wm 1401.28(v), (ag), (ak) and (al).

SYSTEM OWNER INFORMATION

Owner Name _____
Contact Person _____
Owner Address _____
City or Town _____
Zip Code _____
Phone Number _____

FACILITY LOCATION INFORMATION

Facility Name _____
Contact Person _____
Facility Address _____
City Or Town _____
Zip Code _____
Phone Number _____

IF APPLICATION IS FOR AN EXISTING UST FACILITY, PLEASE PROVIDE THE **UST FACILITY I.D. # 0 - _____**.

RETURN COMPLETED APPLICATION, ENGINEERING PLANS, AND FEE TO:

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES
OIL REMEDIATION AND COMPLIANCE BUREAU
P.O. BOX 95
CONCORD, NH 03301-0095

I. UNDERGROUND STORAGE TANKS

ALL TANKS SHALL COMPLY WITH Env-Wm 1401.21, "TANK STANDARDS FOR NEW UNDERGROUND STORAGE 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-Wm 1401.26 & Env-Wm 1401.27.

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-Wm 1401.22 "PIPING STANDARDS FOR NEW UNDERGROUND STORAGE TANK SYSTEMS" AND Env-Wm 1401.24 "SECONDARY CONTAINMENT FOR NEW 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-Wm 1401.25.

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

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

* Note - 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.

V. OTHER UST SYSTEM APPURTENANCES

	Manufacturer	Model Number
Fill Swivel Adaptor and Cap		
Fill Submerged Drop Tube		
Stage I Adaptor and 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-Wm 1401.28(ac);(ad);(ae)

Provide the closest distance to any UST System components (tanks or pipes).		Setback Distance Requirements [per Env-Wm 1401.28 (ac); (ae)]	
		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 there a UST system at this facility location prior to February 3, 2005? (YES / NO)

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

If "YES", an attempt shall be made, per Env-Wm 1401.28 (ad), to relocate the system components such that the separation distances are achieved. When not achieved, please indicate below (**and on the plans**) those site constraint(s) which prevented the UST System (or system component) from being configured to meet the setbacks.

VII. ENGINEER AND CONTRACTOR / INSTALLER

NH Licensed Professional Engineer
Name
Company
Address
City / Town
Zip Code
Phone Number
E-mail Address
NHPE Number and Expiration Date

UST Installation Contractor (ICC Certified)
Name
Company
Address
City / Town
Zip Code
Phone Number
Fax Number
ICC Certification Number and Expiration Date

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-Wm 1401 "UNDERGROUND STORAGE FACILITIES" AND Env-Wm 1404 "VOLATILE ORGANIC COMPOUNDS (VOCs): GASOLINE DISPENSING FACILITIES, BULK GASOLINE PLANTS, AND CARGO TRUCKS".

A. GENERAL PLAN INFORMATION -

1. Submittal on 22" X 34" sheets. When possible, please limit submittal to no more than 4 sheets. Also, only 1 set of plans is required.
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 new or substantially modified 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. 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.
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, 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.
14. Diagrams of primary piping if it does not remain above floors inside buildings.
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.

D. UST SYSTEM PLAN NOTES -

1. Method of filling tanks (gravity drop or pressurized delivery).
2. 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.
3. Seasonal high water table information and dewatering requirements.
4. Tank system setback distances from nearest water supply wells (both public and private) and from nearest surface water.
5. Statement on how storm water will be kept from flowing over tank and dispenser pads.
6. 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.
7. For installations with rigid FRP pipe, indicate how flexibility will be achieved at rigid terminations. (For example, specify use of a flex connector and/or a minimum straight length of pipe from rigid terminations.)
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.

PLEASE REMOVE THESE "PLAN GUIDANCE" SHEETS FROM THE COMPLETED APPLICATION.

RETURN COMPLETED APPLICATION, ENGINEERING PLANS, AND FEE TO:

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES
OIL REMEDIATION AND COMPLIANCE BUREAU
P.O. BOX 95
CONCORD, NH 03301-0095