

**Readopt Env-Or 300, effective 2-7-14 (Document #10487), to read as follows:**

CHAPTER Env-Or 300 ABOVEGROUND PETROLEUM STORAGE FACILITIES

Statutory Authority: RSA 146-A:1-3, 4, 5, & 11-c, I, I-a, III, IV, V, V-a; RSA 541-A:16, I(b)

PART Env-Or 301 PURPOSE AND APPLICABILITY

Env-Or 301.01 Purpose. The purpose of these rules is to prevent and minimize contamination of the land and waters of the state due to the improper storage and handling of oil as defined in RSA 146-A:2, III, which includes motor fuels, heating oils, lubricating oils, insulating oils, used oils, other petroleum products, and petroleum-contaminated liquids, by establishing criteria and procedures for the registration of aboveground oil storage facilities and standards for the design, installation, operation, maintenance, and monitoring of such facilities.

Env-Or 301.02 Applicability.

(a) Subject to (b) through (d), below, and the exemptions in Env-Or 301.03, the rules in Env-Or 302 through Env-Or 308 and Env-Or 310 shall apply to the following aboveground oil storage facilities:

(1) Any facility having a single aboveground storage tank (AST) system with an oil storage capacity of more than 660 gallons that is used or intended for use in the storage, transfer, or distribution of oil; and

(2) Any facility having more than one AST system with a combined oil storage capacity of more than 1,320 gallons that is used or intended for use in the storage, transfer, or distribution of oil.

(b) The storage capacities of the systems, tanks, cargo trucks, and pipelines that are exempted under Env-Or 301.03 shall not be included when determining applicability under (a)(1) or (2), above.

(c) Any AST system that was subject to any extended compliance deadline under Env-Wm 1402 as effective May 28, 2005, as noted in Appendix E, shall comply with all requirements in this chapter that apply to that type and size of system.

(d) The rules in Env-Or 302, Env-Or 310, and the specific rule identified in Env-Or 309.01 are the only rules in this chapter that shall apply to:

(1) Any AST system designed and used to store oil in the solid phase at atmospheric temperature and pressure;

(2) Any location where any oil-filled electrical equipment individually contains more than 660 gallons of oil;

(3) Any AST system with an oil storage capacity of more than 660 gallons but not more than 1,320 gallons that:

a. Is included in (a)(1), above, but not in (a)(2), above;

b. Is located at a construction site; and

c. Is installed and exists only for the specific duration of the construction contract for which it is used, not to exceed one year;

(4) Any AST having a capacity of not more than 330 gallons that:

a. Contains heating oil for on-premise heating only; and

b. Is at an AST facility that is included in (a), above; and

(5) Use of cargo trucks by commercial/industrial enterprises and the military.

Env-Or 301.03 Exemptions. The rules in Env-Or 300 shall not apply to the following:

(a) Any AST systems with a combined oil storage capacity of 1,320 gallons or less that contain heating oil used only for on-premise heating;

(b) Any storage tank designed to contain any liquid that is gaseous at atmospheric temperature and pressure, provided the tank is not used to contain oil that is used or intended for use in the storage, transfer, or distribution of oil;

(c) Any flow-through process system that is integral to the operation of equipment, such as manufacturing process equipment, elevators, trash compactors, and vehicle lifts, through which there is a steady, variable, recurring, or intermittent flow of oil during the operation of the equipment, exclusive of any tank or tank system used for the storage of oil prior to the introduction of the oil into the production process or equipment or for the storage of finished products or by-products that contain oil;

(d) Oil-transmission pipelines subject to the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979;

(e) Any stormwater or wastewater collection, treatment, or discharge system;

(f) Any oil storage system that is subject to RSA 146-C and Env-Or 400 relative to underground storage tank facilities;

(g) Any storage tank that is regulated under the Atomic Energy Act of 1954 because it contains radioactive material;

(h) Any tank that is used in any emergency spill or overflow containment system, provided the tank is emptied at or otherwise taken to a facility that is legally authorized to receive such oil within 48 hours after the emergency use has ended;

(i) Any non-stationary equipment that contains oil for operational purposes; and

(j) Any cargo truck engaged in transporting oil from one facility to another that is required to meet applicable requirements of the United States Department of Transportation and the New Hampshire department of safety.

## PART Env-Or 302 DEFINITIONS

Env-Or 302.01 “Aboveground Storage Tank (AST)” means a tank that is a component of an aboveground storage tank system.

Env-Or 302.02 “AST facility” means a facility having one or more AST systems that are subject to this chapter.

Env-Or 302.03 “AST system” means an AST and all connected piping that is used or is intended to be used to store or dispense oil where 90 percent or more of the total volume of the system is:

(a) Above the surface of the ground; or

(b) Visible for inspection within an underground vault.

Env-Or 302.04 “Calculated maximum safe fill height” means the fill height corresponding to the rated capacity of a tank minus the volume that can be filled at the maximum possible system fill rate multiplied by the time it takes to completely stop product flow into the tank or 2 minutes, whichever is greater.

Env-Or 302.05 “Cargo truck” means any motor vehicle or towed trailer that is designed or used to transport oil.

Env-Or 302.06 “Cathodic protection system” means the totality of components used to reduce the corrosion of a metal surface by making that surface the cathode of an electrochemical cell, using either a sacrificial anode or impressed current system.

Env-Or 302.07 “Cathodic protection tester” means an individual who is certified by NACE International, the Steel Tank Institute, or the International Code Council as being qualified to evaluate the effectiveness of cathodic protection systems.

Env-Or 302.08 “Certified AST inspector” means:

- (a) An individual who is certified by API or STI as qualified to conduct AST system inspections; or
- (b) A New Hampshire-licensed professional engineer with knowledge of AST system inspection and testing procedures.

Env-Or 302.09 “Certified tank installer” means an individual who is certified:

- (a) By the International Code Council in AST system installation/retrofitting; and
- (b) By the equipment manufacturer as being qualified in the installation of the manufacturer’s equipment or individual system components, as applicable.

Env-Or 302.10 “Closure” means the process of permanently taking an AST or AST system out of service with the intent to not re-introduce oil to or otherwise use the AST for dispensing or storage of oil.

Env-Or 302.11 “Combined oil storage capacity” means the sum total of the capacity of each AST system at an AST facility that has a nominal oil storage capacity of 55 gallons or more that is used or intended for use in the storage, transfer, or distribution of oil.

Env-Or 302.12 “Compatible” means the ability of 2 or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the AST system in which they come in contact, under conditions likely to be encountered in the AST system.

Env-Or 302.13 “Connected piping” means the entirety of a piping system that is attached to a tank through which oil can flow.

Env-Or 302.14 “Corrosion expert” means an individual who is:

- (a) Accredited or certified by NACE International at the cathodic protection specialist level as a corrosion specialist or cathodic protection specialist; or
- (b) A New Hampshire-licensed professional engineer with certification or licensing that includes education and experience in corrosion control on buried metal piping systems and metal tanks.

Env-Or 302.15 “Department” means the New Hampshire department of environmental services.

Env-Or 302.16 “Discharge” means “discharge” as defined in RSA 146-A:2, I-a, as reprinted in Appendix C.

Env-Or 302.17 “Facility” means “facility” as defined in RSA 146-A:2, IX, as reprinted in Appendix C.

Env-Or 302.18 “Field-erected AST” means an AST that is constructed by assembling tank components on-site at a facility.

Env-Or 302.19 “Fittings” means all components and materials used to connect pipes to each other or to a tank or dispenser, including but not limited to valves, elbows, joints, flanges, flexible connectors, gaskets, and sealants.

Env-Or 302.20 “Floodway” means “regulatory floodway” as defined in 44 CFR 59.1, as reprinted in Appendix D.

Env-Or 302.21 “Heating oil” means oil that is:

- (a) No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, or No. 6 technical grade of fuel oil;
- (b) Any other residual fuel oil, such as Navy Special Fuel Oil and Bunker C; or
- (c) Used engine, transmission, gear, or hydraulic oil that is burned for on-premise heating in compliance with Env-Hw 807.10.

Env-Or 302.22 “Impermeable” means a characteristic of a material that prevents oil from moving through the material from one side to the other.

Env-Or 302.23 “Impressed current system” means a type of cathodic protection system that uses a power source called a rectifier connected to buried metal anodes that are connected to the metal being protected by a wire.

Env-Or 302.24 “Leak monitoring system” means all of the equipment installed to detect any escape of oil from an AST system before the oil can reach the ambient environment, including but not limited to sensors, consoles, and all associated connections.

Env-Or 302.25 “Listed test method” means a test method that has been evaluated in accordance with a nationally approved protocol by an independent testing laboratory and demonstrated to meet the specified detection criteria at the specified probability of detection and probability of false alarm.

Env-Or 302.26 “Monthly” means once every calendar month, with at least one test or inspection, as applicable, occurring not sooner than 15 days after and not later than 45 days after:

- (a) The date in the prior month on which the corresponding test or inspection occurred, if only one test or inspection, as applicable, occurred in the prior month; or
- (b) The date in the prior month on which any corresponding test or inspection occurred, if an owner or operator performed the test or inspection more frequently than once in the prior calendar month.

Env-Or 302.27 “Motor fuel” means oil or an oil-based substance that can be used to power an engine. The term includes but is not limited to gasoline and reformulated gasoline, aviation gasoline, diesel fuel and diesel fuel blends such as bio-diesel, and jet or other aviation fuel.

Env-Or 302.28 “Oil” means “oil”, as defined in RSA 146-A:2, III, as reprinted in Appendix C.

Env-Or 302.29 “Oil-filled electrical equipment” means devices that are used in the generation, transmission, or distribution of electrical power, such as transformers, oil circuit breakers, capacitors, and voltage regulators, and that contain oil.

Env-Or 302.30 “On-premise heating” means use only to heat the structures at the facility at which the AST system is located.

Env-Or 302.31 “Operate” means to manage an AST system in which oil is or is intended to be stored.

Env-Or 302.32 “Operator” means a person who has responsibility for the care, custody, and control of the daily operation of an AST facility. The term includes any entity that is under agreement with the owner to operate the facility and, where the context so requires, the individual who is on-site and immediately responsible for managing facility operations, including responding to alarms or other unusual operating conditions.

Env-Or 302.33 “Out of service” means that an AST system or portion thereof is not in use but is intended to be returned to use. AST facilities and AST systems that are used periodically, such as for seasonal storage, surcharge storage, or standby storage, are not “out of service” even when they do not actually contain oil.

Env-Or 302.34 “Owner” means the person having legal ownership of a facility.

Env-Or 302.35 “Permeability” means the ease with which oil can move through a material and is measured by the rate of flow in suitable units.

Env-Or 302.36 “Person” means “person” as defined in RSA 146-A:2, VI, as reprinted in Appendix C.

Env-Or 302.37 “Pipe” means an impermeable hollow cylinder or tubular conduit that conveys or transports liquids or vapors, or that is used for venting, filling, or removing liquids or vapors from a tank.

Env-Or 302.38 “Piping system” means pipes and all connected fittings, pumps, monitors, auxiliary tanks, and secondary containment associated with the conveying, venting, filling, or dispensing of oil or vapors in an AST or AST system.

Env-Or 302.39 “Public water system” means “public water system” as defined in RSA 485:1-a, XV, as reprinted in Appendix C.

Env-Or 302.40 “Qualified facility” means “qualified facility” as defined in RSA 146-A:2, XIV, as reprinted in Appendix C.

Env-Or 302.41 “Release detection” means the process and equipment used to determine whether a release of oil has occurred.

Env-Or 302.42 “Release prevention” means a program of routine, documented, visual inspections designed to identify the potential for a discharge of oil to the environment and the taking of subsequent action(s) to ensure a release does not occur.

Env-Or 302.43 “Repair” means to restore a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other AST system component to its original design function.

Env-Or 302.44 “Sacrificial anode system” means a type of cathodic protection system that uses an anode made of a metal having a lower electrochemical potential than that of the metal component being protected, that is buried in the ground close to the metal surface being protected and electrically connected to the surface being protected.

Env-Or 302.45 “Secondary containment” means a release prevention and leak monitoring system for a tank or piping that prevents oil that has escaped from the primary containment system from reaching the ambient environment.

Env-Or 302.46 “Shop-fabricated AST” means an AST that is constructed at a tank manufacturer’s plant and transported as a whole to a facility for installation.

Env-Or 302.47 “Significant corrosion” means corrosion evidenced by a shedding or leafing product or scaling, or by pitting corrosion, regardless of whether the corrosion is progressing at the time of discovery.

Env-Or 302.48 “Special flood hazard area” means the area of land that has a one percent or greater chance of being flooded in any given year, commonly called the 100-year flood zone. The term includes those areas delineated on a Flood Insurance Rate Map as Zone A for non-coastal areas and as Zone V for coastal areas.

Env-Or 302.49 “Spill Prevention, Control, and Countermeasure Plan (SPCC Plan)” means a written plan that specifies the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge, as described in 40 CFR Part 112.

Env-Or 302.50 “Storage system” means one or more tanks with all connected piping in which any oil is or is intended to be stored.

Env-Or 302.51 “Substantial design change” means any alteration to the location, materials, or configuration of any components of a proposed AST system.

Env-Or 302.52 “Substantial modification” means the construction or installation of any addition to a facility or any restoration or renovation of a facility that 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. The term does not include on-site abandonment of a facility.

Env-Or 302.53 “Surface waters of the state” means “surface waters of the state” as defined in RSA 485-A:2, XIV, as reprinted in Appendix C.

Env-Or 302.54 “Tank” means a stationary device constructed of impermeable material(s) that is designed to, or that actually does, contain oil.

Env-Or 302.55 “Transfer operator” means the individual who is controlling the flow of oil being transferred into an AST system.

Env-Or 302.56 “Underground piping” means any pipe that is in contact with the ground or is located below the surface of the ground.

Env-Or 302.57 “Unusual operating condition” means any condition, equipment deficiency, or occurrence that results or could result in a release of oil, indicates the possibility of a system leak, or creates a reasonable expectation that a system leak is imminent. Examples of unusual operating conditions are listed in Env-Or 306.07(a).

Env-Or 302.58 “Used oil” means an oil that, through use or handling, has become unsuitable for its original purpose due to the presence of physical or chemical impurities or loss of original properties.

#### PART Env-Or 303 REFERENCE STANDARDS

##### Env-Or 303.01 Availability and Applicability of Reference Standards.

(a) The department shall have at least one copy of each reference standard identified in this part available for inspection by the public at its offices at 29 Hazen Drive, Concord, NH.

(b) The reference standards also may be obtained directly from the source, as listed in Env-Or 303.02 through Env-Or 303.06 and Appendix A.

(c) In the event that any of the applicable reference standards conflict with these rules or with each other, the most stringent requirement shall apply.

Env-Or 303.02 American Petroleum Institute. The following standards from the American Petroleum Institute (API), 1220 L Street, NW, Washington, DC 20005-4070, (202) 682-8000, <http://www.api.org>, shall apply as noted in the rules and summarized in Appendix A:

(a) Standard Number 620 - “Design and Construction of Large Welded Low-Pressure Storage Tanks”, eleventh edition, 2008 (API 620);

(b) Standard Number 650 - “Welded Steel Tanks for Oil Storage”, twelfth edition, 2013 (API 650);

(c) Recommended Practice 651 - “Cathodic Protection of Aboveground Petroleum Storage Tanks”, third edition, 2007 (API 651);

(d) Standard Number 653 - “Tank Inspection, Repair, Alteration, and Reconstruction”, fourth edition, 2009 (API 653);

(e) Recommended Practice 1615 - “Installation of Underground Petroleum Systems”, sixth edition, 2011 (API 1615);

(f) Recommended Practice 1632 - “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems” third edition, 1996, reaffirmed June 2002 (API 1632);

(g) Standard Number 2610 - “Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities”, fifth edition, 2005 (API 2610); and

(h) Recommended Practice 2611 - “Terminal Piping Inspection - Inspection of In-Service Terminal Piping Systems”, first edition, June 2011 (API 2611).

Env-Or 303.03 NACE International. The following standards from NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, (281) 228-6223, <http://www.nace.org>, shall apply as noted in the rules and summarized in Appendix A:

(a) Standard Number SP-0169-2007 (formerly RP-0169-2002) - “Control of External Corrosion on Underground or Submerged Metallic Piping Systems” (NACE SP-0169); and

(b) Standard Number SP-0285-2011 (formerly RP-0285-2002) - “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection” (NACE SP-0285).

Env-Or 303.04 National Fire Protection Association. The following standards from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (800) 344-3555, <http://www.nfpa.org>, shall apply as noted in the rules and summarized in Appendix A:

(a) NFPA 30 - “Flammable and Combustible Liquid Code”, 2012 Edition (NFPA 30);

(b) NFPA 30A - “Code for Motor Fuel Dispensing Facilities and Repair Garages”, 2012 Edition (NFPA 30A);

(c) NFPA 31 - “Standard for the Installation of Oil-Burning Equipment”, 2011 Edition (NFPA 31); and

(d) NFPA 110 - “Standard for Emergency and Standby Power Systems”, 2013 Edition (NFPA 110).

Env-Or 303.05 Petroleum Equipment Institute. The following standards from the Petroleum Equipment Institute (PEI), P.O. Box 2380, Tulsa, Oklahoma 74101-2380, (918) 494-9696, <http://www.pei.org>, shall apply as noted in the rules and summarized in Appendix A:

(a) RP 200 - “Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling”, revised 2013 (PEI RP 200);

(b) RP 300 - “Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Fueling Sites”, revised 2009 (PEI RP 300);

(c) RP 600 - “Recommended Practices for Overfill Prevention for Shop-fabricated Aboveground Tanks”, 2012 (PEI RP 600);

(d) RP 800 - “Recommended Practices for Installation of Bulk Storage Plants”, 2008 (PEI RP 800); and

(e) RP 1300 - “Recommended Practices for the Design, Installation, Service, Repair, and Maintenance of Aviation Fueling Systems”, 2013 (PEI RP 1300).

Env-Or 303.06 Additional Standards.

(a) From the Steel Tank Institute (STI), 570 Oakwood Road, Lake Zurich, Illinois 60047, (847) 438-8265, <http://www.steeltank.com>, STI SP001 “Standard for the Inspection of Aboveground Storage Tanks”, fifth edition, 2011 (STI SP001) shall apply as noted in the rules and summarized in Appendix A.

#### PART Env-Or 304 REGISTRATION; REQUIRED NOTIFICATIONS AND RECORDS

Env-Or 304.01 Registration of AST Systems Required.

(a) The owner of an AST facility that is subject to these rules shall register each AST system at the facility with the department by:

(1) Providing the information specified in Env-Or 304.02 on or with the form provided by the department or in an equivalent format; and

(2) Signing the submission as specified in Env-Or 304.03.

(b) For an AST facility at which some or all of the ASTs at the facility are 55-gallon drums, the owner shall register each storage area for the drums in lieu of registering each individual drum.

(c) No person shall operate an AST facility that is subject to these rules unless it is registered with the department.

Env-Or 304.02 Required AST System Registration Information. To register an AST system, the owner shall provide the following information to the department on the form provided by the department or an equivalent:

(a) The name, mailing address, and daytime telephone number of each owner of the facility and, if available, a fax number and email address for each;

(b) The name, mailing address, daytime telephone number, and email address, if available, of each owner of the property on which the AST facility is located, if other than the owner(s) of the AST facility;

(c) The location of each AST system being registered by street address, municipality, tax map and lot number and, if known, the GPS coordinates;

(d) The name, job title, mailing address, and daytime telephone number of the operator in charge of the AST systems at the facility and, if available, the operator’s fax number and email address;



- (e) A list of all AST systems at the facility and, for each, the following information:
  - (1) The intended use of and the type of enterprise or activity served by the AST system;
  - (2) Whether each AST in the system is a new tank, currently in service, currently out of service, undergoing a substantial design change, or is being or has been removed or dismantled;
  - (3) The date of AST system installation or, if unknown, the best estimate of the age of the tank;
  - (4) The total capacity of each AST in the system;
  - (5) The construction material of each AST in the system;
  - (6) The construction material and location of all piping, whether it is above ground, below ground, or over water, and whether it is suction piping or pressurized piping;
  - (7) The contents of each AST in the system or, if the system is empty, the intended contents or the type of oil last stored, as applicable;
  - (8) A description of all AST system supports, if any, and height above grade;
- (f) Whether any tanks are permanently out of service or have been or are being dismantled and, if so, the following information for each:
  - (1) The tank identification number;
  - (2) The date the tank was emptied of product;
  - (3) Whether the tank will remain in place or be dismantled;
  - (4) Whether a site assessment has been completed; and
  - (5) Whether any site assessment or other inspection has detected evidence of a leak;
- (g) The date of the current SPCC plan as required by Env-Or 306.02;
- (h) Whether the facility is in compliance with the New Hampshire state fire code and NFPA 30, NFPA 30A, or NFPA 31, as applicable;
- (i) Whether there is any underground storage tank (UST) system at this location and, if so, the UST facility identification number; and
- (j) A plan view of the facility, to scale or with dimensions shown, in sufficient detail to locate the ASTs, including any drum storage areas, with respect to property lines and any buildings or other structures on the property.

Env-Or 304.03 Signature on Registration Required.

- (a) The owner shall sign and date all registration submittals.
- (b) The owner's signature shall constitute certification that:
  - (1) The owner has personally examined and is familiar with the information submitted in or with the registration form;
  - (2) Based on the owner's inquiry of those individuals immediately responsible for obtaining the information, the owner believes that the submitted information is true and correct to the best of the individual's knowledge and belief; and

(3) The owner understands that he or she is subject to the penalties specified in RSA 641:3 for making unsworn false statements.

Env-Or 304.04 Registration Updates Required.

(a) The owner shall report any significant change in the information presented on the original registration form to the department in writing within 30 days of the change.

(b) For the purpose of (a), above, “significant change” means:

- (1) Any addition or reduction in the aggregate oil storage capacity at the facility;
- (2) Taking an AST system out of service or removing or dismantling an AST system;
- (3) Any change in use as described in Env-Or 304.05;
- (4) Any change in the name of the facility that is not associated with a transfer of ownership;
- (5) Any time the oil content of a tank is changed from a flammable liquid to a combustible liquid, as defined in NFPA 30, or vice versa;
- (6) Any addition of release prevention or release detection measures to an AST system, such as:
  - a. The replacement of single-walled piping with double-walled piping;
  - b. The installation of high-level alarms;
  - c. Interstitial space monitoring devices;
  - d. The installation of secondary containment;
  - e. The installation of cathodic protection; or
  - f. Any other enhancement to an AST system that would reduce the threat of harm from an oil release to human health, public safety, or the environment; or
- (7) Any other change in the information provided to register the AST.

Env-Or 304.05 Change in Use. The owner of any facility that would become subject to regulation under Env-Or 300 due to a change in the use of any storage system at the facility shall:

- (a) Comply with all applicable requirements before instituting the changed use; and
- (b) Register the facility as specified in Env-Or 304.01 prior to putting any oil into the AST systems.

Env-Or 304.06 Records To Be Maintained.

(a) All records listed in (c) and (d), below, shall be made available to a department inspector during a scheduled inspection.

(b) The owner shall maintain the records identified in (c), below, for not less than 3 years from the date of creation or receipt, as applicable, provided that if the owner has been notified of a pending inquiry into a suspected violation of requirements applicable to the facility, the owner shall retain the records until the later of:

- (1) The date the owner is notified by the department that no action will be taken;
- (2) The date the owner is notified by the department that the action taken has been resolved;

- (3) The date a final decision is issued in an appeal of any action taken by the department, including any appeal under RSA 541; or
  - (4) The date the last appeal period expires without an appeal being filed.
- (c) The following records shall be retained as established in (b), above:
- (1) Results of monthly exterior inspections required by Env-Or 306.07;
  - (2) Copies of all correspondence that relates to the facility from the department, the New Hampshire state fire marshal, or the local fire department;
  - (3) Records of the type of oil stored in each tank and the date of any conversion described in Env-Or 304.04(b)(5);
  - (4) Records of inventory monitoring required by Env-Or 306.03; and
  - (5) Any record required to be maintained by Env-Wm 1402.07(b) or Env-Wm 1402.34(c) that is still within the retention period specified therein.
- (d) Subject to (e), below, the owner shall maintain the following records for the operating life of the facility:
- (1) Dates and description of replacement of permanent components and substantial modification to AST systems;
  - (2) Results of all tightness tests performed on piping associated with the AST systems;
  - (3) A copy of the facility registration(s) and any amendments;
  - (4) Copies of all plans for the facility submitted and approved pursuant to Env-Wm 1402.17 or Env-Or 307.01 through Env-Or 307.05;
  - (5) Closure and other site assessment reports;
  - (6) Results of all insulated tank and insulated piping inspections and interior AST inspections required by Env-Or 306.08 and Env-Or 306.09;
  - (7) Results of all cathodic protection system testing at the facility required by Env-Or 306.11;
  - (8) Equipment maintenance schedules and logs, including frequency, procedure performed, and identification of who performed the maintenance;
  - (9) Repair records, including component repaired, method of repair, and identification of who performed the repair;
  - (10) Records of oil discharges; and
  - (11) Any record required to be maintained by Env-Wm 1402.07(b) or Env-Wm 1402.34(d) that is not subject to a 3-year retention period.
- (e) Any owner who discarded records included in (d), above, prior to the 2013 effective date of this chapter based on a good-faith belief that on-going retention was not required shall not be deemed to be out of compliance with the record retention requirements established in (d), above, with respect to the discarded records.

Env-Or 304.07 Transfer of Facility Ownership. When ownership of an AST facility is transferred, then:

(a) The new owner shall file an amended registration form with the department no later than 30 days after the transfer; and

(b) The owner who is transferring ownership shall:

(1) Notify the department of the transfer of ownership no later than 10 days after the transfer; and

(2) Deliver to the new owner all documents and information related to the facility that are required to be maintained by Env-Or 304.06.

Env-Or 304.08 Owner Liability. The owner of an AST facility may delegate any responsibility imposed by Env-Or 300 to an operator, but any such delegation shall not relieve the owner from liability for non-compliance with the requirements in this chapter.

#### PART Env-Or 305 EQUIPMENT STANDARDS

Env-Or 305.01 Tank Standards for AST Systems Installed On or After April 25, 1997. Any tank installed on or after April 25, 1997 that is part of a facility listed in Env-Or 301.02(a) that does or will contain oil shall:

(a) Be constructed of steel or other materials as applicable fire safety standards allow;

(b) Be certified by its manufacturer as meeting or exceeding the following design or manufacturing standards, as applicable:

(1) UL 142, for shop-fabricated steel tanks;

(2) UL 142 and UL 2080, for fire resistant tanks;

(3) UL 2085, for protected tanks;

(4) UL 2245, for below-grade vaults;

(5) API 620, for field-erected, low pressure steel tanks;

(6) API 650, for shop-fabricated and field-erected atmospheric steel tanks;

(7) PEI RP 200, for motor fuel dispensing facilities;

(8) PEI RP 300, for vapor recovery systems at motor fuel dispensing facilities;

(9) PEI RP 800, for bulk storage plants; and

(10) API 2610, for AST facilities and terminals;

(c) Subject to Env-Or 305.02, be located, designed, and installed in accordance with the following NFPA standards, as applicable:

(1) NFPA 30A, for AST systems used in the storage of oil at automotive and marine service stations;

(2) NFPA 31, for AST systems used in the storage of oil directly associated with on-premise-use heating, as required by RSA 146-E:4, I;

(3) NFPA 110, for emergency and standby power AST systems; or

(4) NFPA 30, for all other AST systems subject to this part;

(d) If designed to be on the ground, be separated from the ground by a barrier that:

(1) Will not deteriorate due to exposure to the elements or soil in the presence of oil; and

(2) Is either:

- a. A separate layer constructed of a material that is at least as impermeable as 60-mil high-density polyethylene; or
- b. A double bottom on the tank itself with interstitial monitoring as specified in Env-Or 305.12; and

(e) Have continuous corrosion protection as specified in Env-Or 305.06 for any steel or other metal that is part of the AST system and that is in contact with the ground.

Env-Or 305.02 Variances Issued by State Fire Marshall. Any AST system for which the State Fire Marshall has issued a variance to NFPA 30, NFPA 30A, or NFPA 31 standards shall be deemed as meeting both the requirements of Env-Or 305.01(c) and the portion of any standard listed in Env-Or 305.01(a) or (b) that specifies the same requirement as the one that has been waived.

Env-Or 305.03 AST Markings Required.

(a) Any tank that is part of a facility listed in Env-Or 301.02(a) shall be marked with information regarding the product stored.

(b) Any tank that is part of a facility listed in Env-Or 301.02(a) other than 55-gallon drums having no connected piping also shall be marked with system specifications, as listed in (d), below.

(c) All lettering shall be at least 2 inches high in a color that contrasts with the color of the tank, so as to be readily discernable from the distance at which the lettering will typically be viewed.

(d) The system specifications information required by (b), above, shall include:

- (1) The appropriate identification of the hazards of materials for emergency response system symbol meeting the requirements of section 21.7.2.1 of NFPA 30;
- (2) The tank number corresponding to the tank number identified on the facility registration(s) as described in Env-Or 304.02 or predecessor rule in Env-Wm 1402.05; and
- (3) The safe fill volume or safe fill height of the tank, which corresponds to the height at which the high level alarm is activated, in the same units as indicated on the tank gauge.

Env-Or 305.04 Piping Standards for AST Systems.

(a) Any piping system installed on or after April 25, 1997 that is not in contact with the soil shall be constructed in accordance with API 2610, NFPA 30, and as recommended by the manufacturer.

(b) No piping system component that will be in contact with the oil, including but not limited to all gaskets and sealants, shall be used as part of an AST system unless:

- (1) The manufacturer of the component has listed the component as being compatible with the oil that will be stored; or
- (2) If the component manufacturer does not maintain a list such as identified in (1), above, the component is made of a material that is generally accepted in the industry as being compatible with the oil that will be stored.

(c) Any fill pipe that is connected to a pump-filled AST installed on or after April 25, 1997 in such a way that backflow from the receiving tank is possible shall be equipped with a properly-functioning check valve or equivalent device that provides automatic protection against backflow.

(d) Each tank connection through which oil can normally flow shall be equipped with an operating isolation valve that is located as close as practicable to the shell of the tank, unless the tank connection is located at a point higher than the highest liquid level in the tank, such as at the top of the tank.

(e) All aboveground piping installed on or after April 25, 1997 that is 12 inches National Pipe Thread (NPT) size or less shall be constructed of:

- (1) Carbon steel, schedule 40 or greater;
- (2) Stainless steel, schedule 40 or greater;
- (3) Galvanized steel, schedule 40 or greater; or
- (4) Type L or K annealed copper tubing, except as noted in (k), below.

(f) All aboveground piping installed on or after April 25, 1997 that is greater than 12 inches NPT size shall be of standard grade according to ASTM A134-96.

(g) All joints on steel piping installed on or after April 25, 1997 that is 2 inches NPT size or greater shall be welded or welded flanged.

(h) All steel or metallic piping in contact with soil shall be cathodically protected by an impressed current system or sacrificial anode system that is designed and installed in accordance with Env-Or 305.06.

(i) Cathodic protection of metal piping shall not be required if the pipe is totally electrically isolated from the soil by:

- (1) Being elevated above the ground surface; or
- (2) Using secondary containment sufficient to place the pipe in a non-corrosive environment.

(j) Copper piping shall not be used in any AST system that requires the use of:

- (1) Piping greater than 1/2 inch NPT size; or
- (2) Piping to transfer oil under pressure, except for a boiler return line that enters the top of the tank and has no valves or obstructions.

(k) Copper tubing that is in contact with soil or that passes through concrete or other building materials shall be contained in a continuous non-metallic sleeve or otherwise protected from damage and corrosion.

Env-Or 305.05 Additional Requirements Specific to Underground Piping.

(a) Underground piping systems installed on or after April 25, 1997 shall be designed, constructed, and installed with access and isolation points that allow independent pressure testing of piping without the need for excavation.

(b) All components of an underground piping system installed on or after April 25, 1997 shall:

- (1) Have secondary containment as specified in (f), below, and Env-Or 305.07; and
- (2) Be constructed of fiberglass reinforced epoxy, flexible thermoplastic extrusions, carbon steel, stainless steel, galvanized steel, or type K annealed copper tubing that meets the applicable standards listed in (c) through (g), below.

(c) Fiberglass reinforced epoxy piping shall be certified by its manufacturer as meeting ASTM Specification D-2996-01, Standard Specification for Filament Wound Fiberglass Pipe, and UL Subject 971,

“Non-Metallic Underground Piping for Flammable Liquids”. Ultimate sheer strength of adhesive and curing agent shall be as specified in ASTM D-2517-05, as approved and supplied by the manufacturer.

(d) Thermoplastic extrusion flexible piping shall be certified by its manufacturer as meeting UL Standard for Non-Metallic Underground Piping for Flammable Liquids, Subject 971.

(e) Steel piping installed on or after April 25, 1997 shall:

(1) Be carbon steel, stainless steel, or have a galvanized coating if the galvanization is compatible with the oil stored;

(2) Be schedule 40 or heavier; and

(3) Be installed as specified in API 1615.

(f) If the secondary containment for steel piping is metal, it shall:

(1) Have a protective wrapping or di-electric coating; and

(2) Be cathodically protected by an impressed current system or sacrificial anode system.

(g) Type K annealed copper tubing shall be used only as allowed by Env-Or 305.04(k).

Env-Or 305.06 Corrosion Protection for Tanks and Piping.

(a) Corrosion protection for AST bottoms that were installed on or after April 25, 1997 and are in contact with the soil shall:

(1) Consist of a sacrificial anode system or an impressed current system designed, fabricated, and installed in accordance with API 651 or NACE SP-0285;

(2) Be designed and installed with oversight by a corrosion expert;

(3) Be designed to provide corrosion protection for the expected active life of the AST system or to allow for the periodic rehabilitation of the anode system; and

(4) Have a test station or other method of monitoring that enables the owner to confirm that the cathodic protection system is operating properly.

(b) Corrosion protection for piping systems shall be designed and constructed in accordance with NFPA 30, API 1615, API 1632, or NACE SP-0169, as applicable.

(c) With the exception of insulated tanks and insulated piping addressed as specified in Env-Or 306.07, 306.08, and 306.10, the exterior surfaces of all tanks and exposed piping shall be painted or coated to prevent corrosion or other deterioration.

Env-Or 305.07 Secondary Containment for AST Systems Required. No person shall construct an AST system without secondary containment for the ASTs as specified in Env-Or 305.08 and for the piping systems as specified in Env-Or 305.09.

Env-Or 305.08 Secondary Containment for ASTs.

(a) Secondary containment for an AST shall be constructed so that spills will not permeate into the soil more than one foot in 72 hours, or infiltrate or otherwise escape to the groundwater or surface waters before cleanup can occur.

(b) Secondary containment for an AST shall consist of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps, receiving tanks, or other equipment capable of containing the product stored, or any combination thereof.

(c) Secondary containment for an AST shall have sufficient storage capacity to contain the full capacity volume of the largest single tank within its enclosure, if it is covered so as to prevent the collection of precipitation.

(d) If the secondary containment is not covered so as to prevent the collection of precipitation, it shall have additional storage capacity to also contain the greater of:

- (1) Ten percent of the full capacity volume of the largest tank within its enclosure; or
- (2) The volume of precipitation that would fall within the containment area in a 24-hour period during a 10-year storm event, as determined by the rational method for determining stormwater runoff as described in the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire, dated August 1992.

(e) If the secondary containment for an AST consists of dikes surrounding the tank, construction of the dikes shall be in accordance with NFPA 30.

(f) Secondary containment and lining materials shall be designed and constructed to meet permeability requirements for the operational life of the AST system.

(g) The provisions of (a) through (f), above, shall not apply to any tank that is located inside a building, provided:

- (1) The installation of the tank complies with NFPA 30 or NFPA 31, as applicable;
- (2) The entire floor of the room in which the tank and its associated piping is located is constructed of concrete or an impervious material;
- (3) The floor does not have any floor drains, cracks, or openings that would permit the migration of oil through the floor; and
- (4) A release of the total contents of the tank would be contained in the room in which the system is situated.

(h) A double-walled tank may be used in lieu of the requirements of (b) through (e), above, if the double-walled tank is installed with all of the following:

- (1) Overfill protection as specified in Env-Or 305.11;
- (2) Interstitial monitoring, as specified in Env-Or 305.12(a) and (b);
- (3) A mechanism that will automatically prevent the flow of oil to the tank when the tank is:
  - a. Filled to 95 percent of the total capacity of the tank, for tanks with a storage capacity of 12,000 gallons or less; or
  - b. Filled to one percent less than the calculated maximum safe fill height, for tanks with a storage capacity of greater than 12,000 gallons.

(i) If the secondary containment area is not covered so as to prevent the collection of precipitation, it shall be equipped with a manually-operated device, such as a manually-controlled pump or siphon or a gravity drain pipe that has a manually-controlled valve, that will allow collected precipitation to be removed when no oil is present.



(j) Gravity drain pipes shall be designed and constructed to prevent a release in the event of fire.

(k) Any opening where piping passes through a secondary containment structure shall be sealed around the outside of the piping with an impervious, compatible material to prevent the discharge of oil from the containment.

(l) With the exception of hand-filled ASTs and ASTs using vent whistles for overfill protection, any AST that has any vent located such that an overfill would not be contained within the secondary containment shall have additional overfill protection as specified in (h)(3), above.

(m) With the exception of ASTs that are hand-filled and ASTs using vent whistles for overfill protection, any AST fill connection point that is not otherwise within secondary containment shall be within a covered spill container with a minimum capacity of 5-gallons in order to prevent the release of oil to the environment when a transfer hose is detached from a fill or transfer pipe.

Env-Or 305.09 Secondary Containment for AST Piping Systems.

(a) All underground piping that is part of an AST piping system shall have secondary containment that is:

- (1) Double-wall piping meeting the requirements of Env-Or 305.04; or
- (2) An engineered piping trench system.

(b) All AST piping system components that extend over the surface waters of the state that are not regulated by the U.S. Coast Guard pursuant to 33 CFR 154 shall have double-wall piping as secondary containment.

(c) Any AST piping system with secondary containment shall be continuously pitched to direct any leakage from the primary piping to a liquid-tight containment sump that has leak monitoring as specified in Env-Or 305.12(d).

(d) Each AST dispenser attached to an AST system that is supplied by underground or over-water piping shall be equipped with a liquid-tight containment sump that has leak monitoring as specified in Env-Or 305.12(d).

Env-Or 305.10 Transfer Pumps.

(a) With the exception of transfer pumps temporarily used for maintenance purposes, no person shall install an oil transfer pump directly on the ground surface.

(b) With the exception of transfer pumps temporarily used for maintenance purposes, an oil transfer pump shall be:

- (1) Secured to and separated from the ground surface by a concrete pad or other impermeable barrier; and
- (2) Firmly secured to a foundation capable of supporting the weight of the pump and the mechanical stresses commonly associated with the operation of the pump.

(c) For purposes of this section, “temporarily used for maintenance purposes” means the pump is:

- (1) Brought to an AST system not more than 5 business days prior to being used; and
- (2) Removed from the site not more than 5 business days after being used.

Env-Or 305.11 Overfill Protection.

(a) Unless excluded under (e), below, each AST system shall be equipped with a gauge or other automated measuring device that accurately shows the level of product in the tank and is accessible to the transfer operator prior to initiating the transfer.

(b) Each AST system shall have a high level warning alarm that:

- (1) Operates independently of the gauge required by (a), above; and
- (2) Is both audible and visible to the transfer operator.

(c) The high level warning alarm required by (b), above shall be activated when:

- (1) The tank is filled to 90 percent of the total capacity of the tank, for tanks with a storage capacity of 12,000 gallons or less; or
- (2) The tank is filled to 3 percent less than the calculated maximum safe fill height, for tanks with a storage capacity of greater than 12,000 gallons.

(d) In any AST system having an oil storage capacity of 660 gallons or less, a vent alarm may be used in lieu of the high level alarm if:

- (1) The delivery hose fits tightly to the fill pipe;
- (2) The opening for the vent pipe is located no more than 10 feet from the fill pipe connection and is visible to the transfer operator; and
- (3) The vent alarm is audible to the transfer operator.

(e) The requirements of this section shall not apply to the following containers when not connected to other containers:

- (1) Drums less than 60 gallons in size; and
- (2) Intermediate bulk containers or overpack drums as identified in NFPA 30.

Env-Or 305.12 Interstitial Leak Monitoring for AST Systems.

(a) Interstitial spaces installed on or after April 25, 1997 in an AST system shall be equipped with interstitial monitoring equipment.

(b) The interstitial monitoring equipment shall be:

- (1) Capable of detecting both a discharge of oil from the inner container and an intrusion of water from the surrounding environment into the interstitial space; and
- (2) Constructed such that the testing or sampling methods used are not rendered inoperative by groundwater, rainfall, or soil moisture.

(c) The requirements of (a) and (b), above, shall not apply to double-walled tanks that:

- (1) Are not in contact with the soil; and
- (2) Are completely surrounded by secondary containment as specified in Env-Or 305.08.

(d) Interstitial monitoring equipment for double-wall piping shall consist of a continuously operating sump sensor with alarm that is both visible and audible to the AST system operator.

Env-Or 305.13 Oil Transfer and Dispensing Areas.

(a) Each area where oil is transferred from a cargo truck or railcar engaged in the transport of oil to an AST system shall be constructed of a concrete pad or other impermeable surface that is of sufficient size for all connection points to be situated over the impermeable area when oil is being transferred.

(b) Each area where oil is transferred from an AST system to a cargo truck or railcar engaged in the transport of oil shall be constructed of a concrete pad or other impermeable surface that is of sufficient size for the entire tank portion of the cargo truck or railcar being filled to be situated over the impermeable area when oil is being transferred.

(c) Each area where oil is transferred from an AST system to the fuel tank of a motor vehicle (dispensing area) that was not used prior to May 28, 2005 shall be constructed of a concrete pad or other impermeable surface.

(d) The concrete pad or impermeable surface required by (c), above, shall be:

(1) Of sufficient size for the entire motor vehicle being fueled, exclusive of any trailers, to be situated over the impermeable area when oil is being transferred; and

(2) Equipped with positive limiting barriers capable of containing a volume of at least 5 gallons for each dispenser in that dispensing area.

(e) Dispensing nozzles shall not extend beyond the positive limiting barriers required by (d)(2), above.

(f) Subject to (g), below, each dispensing area that was in use prior to May 28, 2005 that does not have an impervious surface as specified in (c), above, as of February 7, 2014 shall install a concrete pad or other impermeable surface that complies with (d), above, on or before February 7, 2016.

(g) Political subdivisions shall be exempt from (f), above, unless the local legislative body votes to fund compliance or the state provides full funding.

Env-Or 305.14 Release Detection for AST Systems.

(a) The owner of an AST system installed on or after April 25, 1997 shall provide, as applicable:

(1) Beneath a tank that is not completely raised above ground level, perforated gravity collection pipes or channels that can be monitored for the presence of a release; or

(2) Beneath a vertical tank, a finished concrete pad that extends completely beneath the tank and has a series of channels measuring no more than 1.5 inches wide and 0.75 inches deep extending radially outward from the center of the pad to beyond the edge of the tank.

(b) All pressurized underground and over-water motor fuel dispenser piping systems installed on or after May 28, 2005 shall:

(1) Be equipped with a UL-listed line leak detector capable of detecting a line leakage rate of 3 gallons per hour at 10 pounds per square inch; and

(2) Automatically shut-off or restrict product flow if the leakage rate is exceeded.

PART Env-Or 306 OPERATING, TESTING, AND INSPECTION REQUIREMENTS

Env-Or 306.01 Operation and On-going Maintenance.

(a) No person shall operate an AST system that does not have secondary containment in compliance with Env-Or 305.07.

(b) Secondary containment and lining materials shall be maintained to meet permeability requirements for the operational life of the AST system.

(c) If gravity drain pipes are used in secondary containment, all valves shall be locked in a closed position except when a controlled discharge of stormwater is being conducted.

(d) No person shall operate an oil transfer pump unless it has been installed as required by Env-Or 305.10.

(e) All tanks and connected piping shall be maintained so as to prevent leaks or seeps.

(f) The markings required by Env-Or 305.03 shall be maintained so as to be readily discernable from the distance at which the lettering will typically be viewed.

(g) The paint or other coating required by Env-Or 305.06(c) shall be maintained so as to prevent corrosion of the underlying metal.

(h) The concrete pad or impermeable surface required by Env-Or 305.13(c) for oil transfer and dispensing areas and the positive limiting barriers required by Env-Or 305.13(d)(2) shall be maintained so as to prevent any contained oil from escaping to the environment.

#### Env-Or 306.02 Spill Prevention Control and Countermeasure Plan.

(a) Subject to (f), below, the owner of an AST facility that is subject to this chapter shall prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan to establish release prevention measures and effective response procedures for releases from the AST system(s) at the facility.

(b) The SPCC Plan shall be:

(1) Prepared as described in 40 CFR Part 112 “Oil Pollution Prevention”; and

(2) Certified by a professional engineer authorized under RSA 310-A to work in New Hampshire (PE), except as provided in (d), below.

(c) The owner shall submit a copy of the signed and PE-stamped certification page of the SPCC Plan to the department within 60 days of implementation of any new or revised SPCC Plan.

(d) In accordance with RSA 146-A:11-c, I-a, the owner of a qualified facility may prepare and implement an SPCC Plan for the facility that is not prepared or approved, or certified, by a professional engineer.

(e) The owner of a qualified facility shall submit a copy of the signed self-certification page of the SPCC Plan to the department within 60 days of implementation of any new or revised SPCC Plan.

(f) An SPCC Plan shall not be required for an AST facility having a combined oil storage capacity of 1,320 gallons or less if all of the following criteria are met:

(1) The facility meets all applicable equipment standards specified in Env-Or 305;

(2) The facility is in compliance with Env-Wq 401.04 relative to storage of regulated substances; and

(3) The facility is not used for fueling water craft.

#### Env-Or 306.03 Inventory Monitoring; Investigation of Discrepancies Required.

(a) The owner of an AST facility shall conduct monthly inventory monitoring for each AST system at the facility in which any portion of the AST system’s primary tank shell or primary piping is in contact with the ground, soil, or concrete foundation slab and does not have release detection as specified in Env-Or 305.14.

(b) The owner of an AST system that is subject to inventory monitoring shall:

- (1) Maintain separate written records for each AST or interconnected system; and
- (2) Certify the accuracy of the inventory monitoring by signing the records.

(c) AST inventory control measurements shall be reconciled by comparing product measurements with shipments, deliveries, and internal transfers.

(d) The owner shall investigate and resolve the cause of any unexplained loss in inventory of 2.0 percent or more of throughput in the monitoring period, as indicated by the recording and reconciliation of inventory records.

(e) If the investigation shows that a discharge of oil has occurred or could be imminent, the owner shall proceed as specified in Env-Or 306.10.

Env-Or 306.04 Cargo Truck Oil Transfers.

(a) Oil transfers shall be performed in accordance with 49 CFR 172, Subpart H, also referred to as US DOT rulemaking docket number HM-126F, which requires the operator of the cargo truck effecting the transfer to be periodically trained to transport and handle hazardous materials.

(b) The direct transfer of oil from the cargo tank of a cargo truck to the cargo tank of another cargo truck shall be prohibited, except during an emergency situation as authorized by emergency response personnel.

Env-Or 306.05 Management of Stormwater and Other Precipitation.

(a) Stormwater or other precipitation that collects at an AST facility within a secondary containment area or oil transfer containment area shall be removed by the manually-activated pump or siphon or gravity drain pipe with which the containment area is equipped.

(b) No person shall undertake a controlled discharge of stormwater to the environment from an oil transfer containment area or secondary containment structure unless the stormwater has no oil sheen or known gasoline contamination.

(c) Stormwater that is contaminated with oil shall be discharged to an enclosed container for transport to a location authorized to receive the contaminated water, unless a groundwater discharge permit is obtained in which case the stormwater shall be treated to remove the oil prior to discharge in compliance with the permit.

(d) All stormwater discharges shall be performed in accordance with all applicable local, state, and federal requirements.

(e) Accumulated stormwater shall be drained as soon as practical and frequently enough to ensure that sufficient containment volume is always available to contain a release from the largest tank being contained.

Env-Or 306.06 Inspection Reports: Contents and Signatures.

(a) Each inspection report required by Env-Or 306.07 through Env-Or 306.09 shall contain the following information:

- (1) The date of the inspection;
- (2) The name and position of the individual conducting the inspection;
- (3) The tank registration number of the specific AST system, AST, or piping being inspected, as applicable;

(4) Whether any of the conditions for which the inspection is being conducted, as identified in the applicable section, were observed and, if so, where and on which equipment or structure the conditions existed; and

(5) For each condition noted pursuant to (4), above:

a. A description of the condition in sufficient detail that it can serve as a point of reference for future inspections; and

b. A recommendation either that the condition be monitored or that the component be repaired, replaced, or taken out of service.

(b) Each inspection report required by Env-Or 306.07 through Env-Or 306.09 shall be signed by the individual who conducted the inspection. Such signature shall constitute certification that the information provided is true, complete, and not misleading to the knowledge and belief of the signer.

(c) The signature on an inspection report prepared by a certified AST inspector required by Env-Or 306.08 and Env-Or 306.09 shall include the inspector's API or STI certification number or professional engineer stamp, as applicable.

Env-Or 306.07 Exterior Inspections of AST Systems.

(a) The owner of an AST facility shall conduct an exterior inspection as specified in (b), below, of each AST system at the facility not less than monthly for any unusual operating conditions, such as:

(1) Deficiencies such as leaks, surface wetting, discoloration, blistering, or evidence of corrosion, cracks, chime distortion, or other structural damage; and

(2) Cracks, areas of wear, visible shell thinning, evidence of poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank or piping insulation, malfunctioning equipment, and structural and foundation weaknesses.

(b) The inspection required by (a), above, shall include inspecting:

(1) For insulated tanks and insulated piping, all exterior surfaces of insulation;

(2) For other than insulated tanks and insulated piping, all exterior surfaces of tanks, secondary containment, pipes, valves and other associated equipment;

(3) All exterior surfaces of tank and piping supports; and

(4) All visible system components of each high-level alarm and each leak detection system which is in place at the facility.

(c) The owner shall document each exterior inspection by recording the information required by Env-Or 306.06(a) in a log or other record that is maintained as specified in Env-Or 304.06 and by signing the log or other record as specified in Env-Or 306.06(b).

Env-Or 306.08 Inspection of Insulated Tanks and Insulated Piping.

(a) The owner of an insulated tank or insulated piping shall engage a certified AST inspector to conduct an inspection for exterior corrosion of the tank or piping in accordance with the schedule specified in (b), below, and the procedures specified in (c), below.

(b) Inspections of insulated tanks and insulated piping shall be performed on the following schedule:

(1) An initial inspection shall be performed on or before February 7, 2017 or within 10 years of installation, whichever is later; and

- (2) Following the initial inspection, an inspection shall be performed at least once every 10 calendar years.
- (c) An inspection complying with (a), above, performed prior to February 7, 2014 shall qualify as the initial inspection required by (b)(1), above, provided that the owner maintains a 10-year inspection frequency as specified in (b)(2).
- (d) To inspect an insulated tank or insulated piping, the certified AST inspector shall:
  - (1) Inspect through inspection ports, if available, or remove insulation to the extent necessary to determine the condition of the exterior wall of the tank or piping; and
  - (2) Determine suitability for continued service in accordance with STI SP001, API 2610, or API 2611, as applicable.
- (e) The certified AST inspector shall document each inspection of an insulated tank or insulated piping by:
  - (1) Recording the information required by Env-Or 306.06(a) in a document that is provided to the owner to be maintained as specified in Env-Or 304.06, provided that the information required by Env-Or 306.06(a)(4) shall be whether any conditions that adversely affect the tank or pipe's suitability for continued service as specified in STI SP001, API 2610, or API 2611, as applicable, were observed and, if so, the specific location on the AST or pipe, as applicable, the conditions existed; and
  - (2) Signing the report as specified in Env-Or 306.06(b)-(c).
- (f) Within 60 days of the date of the inspection, the owner shall submit to the department a copy of the inspection results and the certification page signed by the certified AST inspector and including the inspector's API or STI certification number or professional engineer stamp.

Env-Or 306.09 Interior Inspections of ASTs.

- (a) The owner of an AST facility shall have a detailed inspection performed of the interior of each tank at the facility that has a capacity of 5,100 gallons or more in accordance with the schedule specified in (c), below, and the procedures specified in (d), below.
- (b) All detailed interior tank inspections shall be performed by a certified AST inspector.
- (c) Detailed inspections of tank interiors as described in (d), below, shall be performed in accordance with the following schedule:
  - (1) For tanks where any part of the shell is in contact with the ground, the initial inspection for previously uninspected tank systems shall be performed when the tank is 10 years old;
  - (2) For tanks where the tank shell is entirely off the ground, such as tanks on racks or in cradles, the initial inspection for previously uninspected tank systems shall be performed when the tank is 20 years old; and
  - (3) Following the initial inspection, an inspection shall be performed at least every 5 years for tank systems containing gasoline, and at least once every 10 calendar years of the in-service life of the tank for tank systems containing other motor fuels, heating oils, and fuel oils.
- (d) Detailed interior tank inspections shall consist of:

- (1) Cleaning the tank such that all visible evidence of liquids, sludges, by-products, solids, and the like are removed and the interior surface of the tank is completely visible;
  - (2) Removing, transporting, and disposing of sludge in a manner consistent with all applicable state and federal requirements;
  - (3) Entering the tank to determine its suitability for continued service in accordance with API 653 or STI SP001, as applicable; and
  - (4) Performing a tightness test in accordance with NFPA 30 or manufacturer's specifications on any portion of the piping system that is underground.
- (e) The certified AST inspector shall document each interior inspection by:
- (1) Recording the information required by Env-Or 306.06(a) in a document that is provided to the owner to be maintained as specified in Env-Or 304.06, provided that the information required by Env-Or 306.06(a)(4) shall be whether any conditions that adversely affect the tank's suitability for continued service as specified in API 653 or STI SP001 were observed; and
  - (2) Signing the report as specified in Env-Or 306.06(b)-(c).
- (f) Within 60 days of the date of the inspection, the owner shall submit to the department a copy of the inspection results and the certification page signed by the certified AST inspector and including the inspector's API or STI certification number or professional engineer stamp.

Env-Or 306.10 Follow-up for Inventory Monitoring and Exterior and Interior Inspections.

- (a) If inventory monitoring conducted pursuant to Env-Or 306.03 suggests that a leak is occurring or if any inspection conducted pursuant to Env-Or 306.07 through Env-Or 306.09 reveals any condition which suggests that a failure of primary or secondary containment or of monitoring equipment is imminent and could result in a discharge of oil or in a failure to detect a discharge of oil, including that the tank or piping is not fit for service as determined pursuant to API 653, API 2610, API 2611, or STI SP001, as applicable, the owner shall immediately implement measures to prevent a discharge, by:
- (1) Repairing or taking out of service each component that is causing or contributing to the adverse condition; and
  - (2) Conducting additional testing in accordance with Env-Or 306.13 if the cause of the condition is not obvious.
- (b) If inventory monitoring or any inspection reveals that a discharge has occurred, the owner shall:
- (1) Notify the department in accordance with Env-Or 604; and
  - (2) Implement an appropriate preliminary response action in accordance with Env-Or 605.
- (c) If any inspection conducted pursuant to Env-Or 306.07 reveals any deficiency other than those conditions identified in (a), above, or separated or swollen insulation, the deficiency shall be repaired within 30 days and the repair noted on the log or record kept pursuant to Env-Or 306.07(c).
- (d) If an inspection conducted pursuant to Env-Or 306.07 reveals separation or swelling of tank insulation or piping insulation, the inspector shall:
- (1) Remove the separated or swollen insulation;
  - (2) Inspect the underlying tank or piping as specified in Env-Or 306.07(a)(1); and



(3) Repair or replace the insulation, or otherwise protect the underlying tank or piping from exposure to corrosive conditions, within 30 days.

(e) If inspection conducted pursuant to (d), above, or Env-Or 306.08 reveals significant corrosion, the corroded areas shall be evaluated and addressed as specified in STI SP001, API 2610, or API 2611, as applicable.

Env-Or 306.11 Cathodic Protection Testing.

(a) Sacrificial anode systems shall be tested within 6 months of installation and every 3 years thereafter by a cathodic protection tester.

(b) Monitors for impressed current systems shall be checked not less than monthly by verifying that electrical current is continuing to flow through the system.

(c) If at any time the testing or monitor check required by (a) or (b), above, shows that the electrical current necessary to prevent corrosion is not being maintained, the source of the failure shall be investigated and the system restored within 60 days.

(d) For any system at a facility that is subject to 42 U.S.C. 4321-4347 or 36 CFR Part 800, the time in (c), above, shall be increased by 60 days when such review is applicable.

Env-Or 306.12 Annual Testing Requirements.

(a) The owner of an AST facility shall test the AST system components listed in (c) and (d), below, that are used at the AST facility, as specified in (b), below.

(b) The testing required by (a), above, shall be conducted:

(1) Not less than once in each calendar year, with at least one test occurring not sooner than 4 months after and not later than 15 months after the prior annual test, provided that if more than one test was performed in the prior year the owner may choose which test to use for purposes of the time limits; and

(2) As specified for each component.

(c) Each overfill alarm system sensor, automatic fill shutoff device, and interstitial alarm sensor shall be tested:

(1) By removing the sensor or device, as applicable, from the tank and activating it; or

(2) By testing it pursuant to its manufacturer's recommended test procedure.

(d) Each line leak detector shall be tested in accordance with the manufacturer's recommended test procedure.

(e) If any component is determined to be malfunctioning, the owner shall repair or replace the component within 30 days.

(f) The owner shall document component testing in a report that is submitted to the department within 60 days of the testing, as follows:

(1) The date of the testing;

(2) The name and position of the individual conducting the testing;

(3) The component being tested;

(4) The tank registration number of the specific AST with which the component being tested is associated; and

(5) Whether the testing showed that the component was malfunctioning and, if so, the date on which the component was repaired or replaced.

(g) For any system at a facility that is subject to 42 U.S.C. 4321-4347 or 36 CFR Part 800, the time in (e) and (f), above, shall be increased by 60 days when such review is applicable.

Env-Or 306.13 Suspected Discharge and Testing Requirements.

(a) When a discharge of oil from an AST system or a leak in an interstitial space of an AST system is suspected and/or appears probable, the owner shall:

(1) Notify the department by telephone, fax, or email within 24 hours of discovery; and

(2) Verify the integrity of the suspect AST system through observation and testing of the suspected system component as soon as practicable but in any event within 30 days.

(b) The test method used pursuant to (a)(2), above, shall be:

(1) A listed test method for the system or component being tested, except that any component of a field-erected AST system that is covered by API 653 shall be tested in accordance with API 653;

(2) If a listed test method does not exist, the test method recommended by the manufacturer of the component; or

(3) If a listed test method does not exist and there is no manufacturer's recommendation, a test method promulgated by a national tank, standards, or petroleum industry association referenced in Env-Or 303.02 through Env-Or 303.06, such as API 653 or STI SP001 for shop-fabricated ASTs or NFPA 30 for piping.

(c) The owner shall notify the department in writing of any interim actions taken, the results of any testing performed in accordance with (a)(2), above, and any follow-up repairs or replacements within a reasonable amount of time not to exceed 60 days of its being performed.

(d) Notification shall include the following:

(1) A description of interim actions taken;

(2) The location and tank registration number of the tested AST or of the AST with which the tested component is associated;

(3) The date of the test;

(4) The reason for the test;

(5) The type of test used;

(6) The identity and qualifications of the individual performing the test;

(7) The results of the testing; and

(8) A description of all follow-up repairs or replacements.

(e) Testing shall be performed by or under the supervision of an individual certified for that test by industry associations such as API, STI, International Code Council (ICC), or American Society of Mechanical Engineers, as applicable.

(f) If any testing reveals that a discharge has occurred, the owner shall:

- (1) Notify the department in accordance with Env-Or 604; and
- (2) Implement an appropriate preliminary response action in accordance with Env-Or 605.

(g) If any testing reveals a tank or equipment deficiency, the owner shall repair or replace the tank or equipment, as applicable, within 30 days.

Env-Or 306.14 Out of Service AST Systems.

(a) If oil is not introduced to or removed from an AST system designed and intended for the throughput of oil for 36 months, the AST system shall be taken out of service.

(b) Those AST systems intended solely for storage, such as back-up tanks for emergency power generation or long-term energy reserves, shall be considered out of service when the contents of such a tank has remained at the lesser of the following for the previous 36 months:

- (1) One percent of the total system capacity or less; or
- (2) Less than 3 inches in depth.

(c) The owner of an AST system taken out of service shall:

- (1) Remove all oil from the AST and all piping connected exclusively to that AST;
- (2) Secure the AST to prevent unauthorized entrance or tampering so that oil is not accidentally or intentionally introduced into the tank, by means such as securely bolting and locking all tank access points and valves and capping or plugging fill lines, gauge openings, or pump lines;
- (3) Thoroughly clean the interior of the tank and all exclusively connected piping to remove all sludge, solids, and residual oil;
- (4) Dispose of all oily wastes removed from the AST system in accordance with all applicable state and federal requirements; and
- (5) Render the tank free of vapors sufficiently to avoid formation of an explosive atmosphere, and vent the tank to ensure the tank remains vapor free.

(d) Upon taking an AST system out of service, the owner shall:

- (1) Comply with Env-Or 304.04 relative to filing an amended registration form;
- (2) Stencil the words “out of service” on the tank in block letters that are at least 2 inches high and in a color that contrasts with the color of the tank;
- (3) For tanks that are visible from the fill pipe connection, ensure that the stenciling applied pursuant to (2), above, is readily discernable from the fill pipe connection serving the out-of-service tank; and
- (4) Securely affix a tag as described in (e), below, at the fill pipe connection serving the out-of-service tank, or, if the fill pipe is also used to fill active tanks, at the first valve after the fill pipe connection used to divert flow to the out-of-service tank.

(e) The owner shall obtain a tag used to signify an out-of-service tank system from the department. The tag shall remain affixed to the AST system during the entire time the tank is out of service. The owner shall promptly replace any mutilated, lost, illegible, or destroyed tag by contacting the department to obtain another tag.

Env-Or 306.15 Reactivating Out of Service AST Systems.

(a) No person shall place an AST system that has been taken out of service back into service unless and until the owner certifies to the department in writing that the system is in compliance with all applicable requirements.

(b) No person shall introduce oil into an AST system that has been taken out of service unless and until the owner certifies to the department in writing that the system is in compliance with all applicable requirements.

(c) An owner who reactivates an AST system that has been out of service shall notify the department by submitting an amended registration form as required by Env-Or 304.04 prior to putting the AST system back into service.

(d) Prior to placing any AST system back into service, the owner shall:

(1) Thoroughly inspect and test the AST system for evidence of the following conditions:

- a. Corrosion of the interior or exterior of the tank or associated piping;
- b. Abnormal thinning of the tank walls or bottom;
- c. Perforations through the tank walls or bottom; and
- d. Any other condition that could indicate a weakening of the structural integrity of the AST system or identify a situation that could result in a release from the AST system; and

(2) If any of the conditions identified pursuant to (1), above, are found, correct all such deficiencies prior to placing the system into service.

(e) All testing and inspections performed pursuant to (d)(1), above, shall be conducted in accordance with the applicable provisions of this chapter.

PART Env-Or 307 INSTALLATION REQUIREMENTS

Env-Or 307.01 Application for Approval of AST Systems and Piping Systems.

(a) Effective April 25, 1997, at least 45 days prior to commencing construction or installation of a new or replacement AST system having an oil storage capacity of more than 660 gallons that is subject to these rules or that was subject to Env-Wm 1402, the owner of the existing or proposed facility shall submit the application materials specified in (c), below, to the department.

(b) Effective May 28, 2005, at least 45 days prior to commencing construction or installation of any new or replacement underground or over-water piping systems, the owner of the existing or proposed facility shall submit the application materials specified in (c), below to the department.

(c) The application materials required to be submitted by (a) and (b), above, shall be:

- (1) A completed application form as specified in Env-Or 307.02, signed as specified in Env-Or 307.03;
- (2) Complete plans and specifications as specified in Env-Or 307.04 that have been prepared and stamped on each page by a New Hampshire-licensed professional engineer; and
- (3) A spill prevention control and countermeasure plan as specified in Env-Or 306.02.

Env-Or 307.02 Required Applicant Information.

(a) The owner shall provide the following information on an application form obtained from the department:

- (1) The name, mailing address, daytime telephone number, and email address of each owner of the AST facility;
- (2) The name and street address, with municipality, zip code, and county, of the AST facility;
- (3) The name, mailing address, daytime telephone number, and email address, if available, of each owner of the property on which the AST facility is located, if other than the owner(s) of the AST facility;
- (4) The name, title, mailing address, daytime telephone number, and email address of the individual who can be contacted by the department regarding the application; and
- (5) Whether the property already has any AST system(s) and, if so, the existing facility number.

(b) The owner shall sign and date the application form. The owner's signature shall constitute certification that:

- (1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer;
- (2) The signer understands that any permit issued based on false, incomplete, or misleading information shall be subject to revocation; and
- (3) The signer understands that he or she is subject to the penalties specified in RSA 641:3 for making unsworn false statements.

Env-Or 307.03 Plans and Specifications. The plans and specifications required by Env-Or 307.01(c)(2) shall include the following information, as applicable, on the application form or on separate sheets that are legible but no larger than 22 inches by 34 inches:

(a) An accurate scaled diagram showing a plan view depiction of the site, which includes:

- (1) A north arrow;
- (2) All existing and proposed tanks, piping systems, and transfer areas;
- (3) All existing and proposed structures and appurtenances;
- (4) All existing and proposed water wells, surface waters, and source water protection areas on the site or within 500 feet of the proposed work; and
- (5) Any special flood hazard areas on the site;

(b) Complete, detailed engineering designs of all existing and proposed secondary containment, leak detection, oil type, piping including slope and backfill requirements if underground, transition and dispenser sumps, piping termination details, flex connectors, foundations and cradles, atmospheric and emergency vents, gauges, high level alarms, automatic fill shut off devices, spill boxes, valves, transfer pads with positive limiting barriers, and marking and coating requirements;

(c) Complete, detailed engineering designs of the proposed cathodic protection system, if applicable;

(d) A locus showing the relation of the proposed AST system site to the surrounding area, which identifies all water wells, surface water bodies, and source water protection areas within 500 feet of the site;

(e) Any other information that will accurately convey the intended AST system configuration and show compliance with Env-Or 305;

(f) A complete description of each AST to be installed, including:

- (1) The height, length, and diameter of the tank, and its capacity, in gallons;
- (2) Whether the tank is or will be installed in a horizontal or vertical configuration;
- (3) Whether the tank is new or used and, if used, the certification required by Env-Or 308.01(b);
- (4) Whether the tank is or will be shop-fabricated or field-erected;
- (5) What product that will be stored in the tank;
- (6) The name and address of the manufacturer, and the manufacturer's model number for the tank;
- (7) The type of foundation for the tank, and whether the tank is or will be in contact with soil, concrete, or other material;
- (8) Whether the tank is double-walled;
- (9) The UL rating or API designation of the tank;
- (10) Whether the tank will be installed in a below-grade vault;
- (11) The tank supplier's name and address; and
- (12) Any other information needed to describe the AST;

(g) A complete description of all piping, including:

- (1) Whether the piping is pressurized or suction;
- (2) For piping other than schedule 40 steel aboveground piping, the name of the pipe manufacturer;
- (3) For flexible piping, the name of the pipe manufacturer and the manufacturer's part number;
- (4) The composition of the pipe, as listed in Env-Or 305.04(f) or (g), as applicable;
- (5) The size of pipe, or the range of sizes if more than one size is proposed;
- (6) The pipe schedule;
- (7) The method of assembly of the piping system;
- (8) The type and average spacing of pipe support to be used;
- (9) The number and type of valves to be used;
- (10) The method by which siphoning will be prevented; and
- (11) Any other information needed to describe the piping system;

(h) A complete description of all containment and dispenser sumps, including:

- (1) The name of the sump manufacturer and the manufacturer's model number;
- (2) The material of construction of the sump; and

- (3) The name of the sump sensor manufacturer and the sump sensor model number;
- (i) A complete description of all cathodic protection systems, including:
  - (1) The type of cathodic protection system, including the type and spacing of anodes and the source of rectifier power; and
  - (2) The name, address, daytime telephone number, and certifying organization and certification number of the designer of the cathodic protection system;
- (j) A complete description of all secondary containment, including:
  - (1) The type of secondary containment;
  - (2) Whether the tank will be inside a building;
  - (3) The volume of the secondary containment;
  - (4) Whether the secondary containment is covered so as to preclude the accumulation of precipitation and if so, a description of the cover; and
  - (5) How the accumulated precipitation will be managed;
- (k) A complete description of all overflow protection, including:
  - (1) The type of gauges to be used, together with the name of the gauge manufacturer and the model number of the gauge;
  - (2) The type of high-level alarm to be used, together with the name of the alarm manufacturer and the model number of the alarm;
  - (3) Where the audible/visual alarm will be located;
  - (4) The height, measured from the bottom of the tank, at which the high-level alarm will be activated;
  - (5) If applicable, the type of the automatic fill shut-off system to be used, together with the name of the system's manufacturer and the model number; and
  - (6) The height, measured from the bottom of the tank, at which the automatic fill shut-off system will be activated;
- (l) A complete description of all interstitial leak monitoring, including the location, manufacturer, and model number of each monitoring device;
- (m) The name, company, mailing address, daytime telephone number, email address, and New Hampshire PE license number of the engineer of record; and
- (n) The name, company, mailing address, daytime telephone number, email address, and ICC certification number of the certified installer of record.

Env-Or 307.04 Completeness Review.

- (a) Upon receipt of an application, the department shall determine whether the application meets the requirements of Env-Or 307.01.
- (b) If the application meets the requirements of Env-Or 307.01, the department shall process the application in accordance with Env-Or 307.05.

(c) Except as provided in (f), below, if the application does not meet the requirements of Env-Or 307.01, the department shall notify the applicant in writing of:

(1) What is missing; and

(2) The deadline for submitting the missing components, established based on the type and volume of the missing component(s).

(d) Upon notifying an applicant that the application does not contain everything required by Env-Or 307.01, the department shall suspend further processing of the application pending receipt of the information missing from the application.

(e) No portion of the time between the date a notice is provided pursuant to (c), above, or (f), below, and the date the applicant responds shall be included in computing the time limit for acting on the application.

(f) The department shall notify the applicant by telephone in lieu of providing a written notice pursuant to (c), above, if:

(1) The anticipated time required of the applicant to supply the missing information is less than the anticipated time required of the department to notify the applicant in writing; and

(2) The department is able to contact the applicant by telephone.

(g) If the department provides notice pursuant to (f), above, the department shall specify in the oral notice the same information required by (c)(1)-(2), above.

Env-Or 307.05 Decision on Application.

(a) Within 45 days of receipt of a complete set of plans and specifications, the department shall send the applicant written notice approving or denying the application.

(b) The department shall approve the application if the application demonstrates compliance with all applicable requirements of this chapter.

(c) The department shall deny the application if the application does not demonstrate compliance with all applicable requirements of this chapter. If the department denies the application, the written notice sent pursuant to (a), above, shall specify the reason(s) for the denial.

(d) The department shall include such terms and conditions in the approval as are necessary to ensure compliance with applicable requirements.

(e) Department approval for installation of an AST system shall not eliminate the need to obtain applicable approvals and/or permits from the authority(ies) enforcing the state fire code, the state building code as defined in RSA 155-A:1, IV, and any applicable local building codes.

Env-Or 307.06 Approval to Operate Required.

(a) The owner shall notify the department to arrange for an inspection prior to introducing oil into a newly constructed AST system and prior to backfilling an underground piping system.

(b) The department shall grant approval to operate the new AST system only if the department:

(1) Determines that the newly-constructed AST system or piping system has been installed in accordance with the approved plans and the terms and conditions of the approval issued pursuant to Env-Or 307.05; and

(2) Receives the report from the certified installation supervisor as required by Env-Or 307.09.



Env-Or 307.07 Approval Duration; Extensions.

(a) An approval to construct issued pursuant to Env-Or 307.06 shall be valid for one year from the date the approval is issued.

(b) If construction pursuant to the approval has not commenced within one year, the approval shall be void.

(c) If construction of the AST system has been initiated but has not been completed within one year of the date of approval issued pursuant to Env-Or 307.06, the owner shall notify the department and request an extension of the approval. The department shall grant a one-year extension if:

(1) Any tank(s) and any underground portion of the piping system(s) that have already been installed conform with the approved plan; and

(2) For any tank(s) and any underground portion of the piping system(s) that have not yet been installed, the approved plans conform to all then-current applicable requirements.

(d) If the owner does not request or qualify for an extension under (c), above, but still wishes to pursue the project, the owner shall submit a new application as specified in Env-Or 307.01.

Env-Or 307.08 Construction Pursuant to Approval; Design Changes.

(a) No person shall commence construction unless written approval has been received from the department in accordance with Env-Or 307.06(b).

(b) During construction, the owner shall not cause or allow a substantial design change without first obtaining approval of the change from the department.

(c) All substantial design changes shall be approved in writing by the design engineer of record and resubmitted for department approval.

Env-Or 307.09 Requirements for AST System Installers.

(a) Effective May 28, 2007, only an individual who is certified for AST installation and retrofitting by the International Code Council (ICC) shall supervise the installation of an AST system or AST system component.

(b) Following the installation, the certified installation supervisor shall prepare a written report that contains the following information:

(1) The installation supervisor's name and ICC AST certification number;

(2) An explanation of how the supervisor oversaw the installation of the AST system or AST system component(s); and

(3) The results of all pressure tests conducted on the installed system and components.

(c) The department shall not grant operation approval under Env-Or 307.06 unless the report documents that the requirements of this chapter have been met.

(d) Individuals who wish to obtain information on obtaining certification for installation and retrofitting may contact the International Code Council (ICC), Los Angeles District Office, 5360 Workman Mill Road, Whittier, California 90601-2298, (800) 423-6587 ext. 3419, <http://www.iccsafe.org>.

Env-Or 307.10 AST System Design Standards.

(a) AST systems installed on or after April 25, 1997 shall be located and spaced as specified in Env-Or 305.01(c).

(b) AST systems installed on or after April 25, 1997 shall not be constructed within the floodway portion of the special flood hazard area.

(c) AST systems and associated pipes and distribution equipment installed on or after April 25, 1997 shall not be located along highway curves or otherwise exposed to traffic hazards without suitable protection. For the purposes of this rule, suitable protection means a barrier that will protect the AST system against an impact equal to the design speed of the roadway.

(d) AST systems installed on or after April 25, 1997 shall be physically protected from vehicular collision by fencing, barriers, or bollards, subject to the following:

- (1) Bollards shall be spaced no more than 4 feet apart; and
- (2) All barriers shall be painted with a reflective paint or be partially covered with a reflective tape.

(e) At any site that did not have an AST system prior to January 21, 2009 at which construction of an AST system is proposed on or after January 21, 2009, no AST system shall be located closer than the applicable distance specified in Table 307-1:

Table 307-1: Minimum Distance from AST System to Water Supply Sources

<b>Contents of AST</b>	<b>PWS Source</b>	<b>Non-Public Water Supply Well</b>
Gasoline	at least 500 feet	at least 250 feet
Heating oil used only for on-premise heating	outside of protective radius	at least 75 feet
Oil other than gasoline used only for on-premise emergency electrical generation	outside of protective radius	at least 75 feet
All other contents	at least 400 feet	at least 75 feet

(f) No AST system shall be added, substantially modified, or replaced within the sanitary protective area of a public water system source.

(g) At any site that did not have an AST system prior to January 21, 2009 at which construction of an AST system is proposed on or after January 21, 2009, no AST system shall be located within 75 feet of surface waters of the state unless it is at a marina, hydro electric facility, or the facility receives oil by way of waterborne transportation.

(h) At any site that had an AST system prior to January 21, 2009, if the minimum separation distance specified in (e) or (g), above, are not met, the addition, substantial modification, or replacement of an AST system shall not decrease the separation distance.

Env-Or 307.11 Installation of AST Systems.

(a) AST systems installed on or after April 25, 1997 shall be installed in accordance with the manufacturer’s requirements and national and industry codes as reflected in the plans and specifications approved by the department pursuant to Env-Or 307.05.

(b) Items installed on or after April 25, 1997 for which no manufacturer’s requirements are provided shall be installed according to:

- (1) PEI RP 200 for the installation of ASTs used for the refueling of motor vehicles;
- (2) PEI RP 300 for the installation of vapor recovery systems;
- (3) API 2610 for the installation of bulk oil storage facilities;

- (4) API 620 and API 650 for field-erected tanks;
- (5) PEI RP 600 for the installation of overfill prevention systems.
- (6) PEI RP 800 for the installation of bulk plants; and
- (7) PEI RP 1300 for the installation of aviation fueling systems.

(c) Before being placed in service, all tanks and piping, whether new or reconditioned, shall be tested for tightness and inspected in accordance with the requirements specified in API 653 or NFPA 30. Secondary containment for underground piping shall maintain the tightness test pressure for a minimum period of 2-hours after the backfill process has been completed.

(d) Secondary containment liners constructed of natural materials shall be certified as meeting the permeability standard specified in Env-Or 305.08(a) by a New Hampshire-licensed professional engineer based on testing conducted in accordance with ASTM D2434-68, ASTM D2922-04, ASTM D5084-03, or equivalent method.

#### PART Env-Or 308 REMOVAL; CLOSURE; REUSE

##### Env-Or 308.01 Removal of AST Systems Required If Not Being Used.

(a) Subject to (b), below, the owner of an AST system shall clean the AST system as specified in Env-Or 306.14(c) and remove the AST system from the property no later than:

- (1) The date on which a shop-fabricated AST system has not had oil introduced to or removed from it for 10 years; or
- (2) The date on which a field-erected AST system has not had oil introduced to or removed from it for 15 years.

(b) Removal shall not be required if the owner provides written certification from a certified tank inspector to the department certifying that the AST system meets all standards for new AST systems.

(c) An owner who has dismantled and removed an AST system shall notify the department not later than 30 days after beginning the planned removal, by submitting an amended registration form as described in Env-Or 304.04.

(d) If evidence of soil or groundwater contamination from oil is detected by assessment, observation, or analysis during or as a result of the tank closure, the owner shall notify the department immediately and comply with all applicable requirements of Env-Or 600.

##### Env-Or 308.02 Site Assessment After Removal.

(a) After dismantling and removing an AST system, the owner shall assess the site to determine whether there is soil or groundwater contamination, or both, attributable to the AST system if:

- (1) Any tank, valve, pump, or section of piping was in contact with the ground and did not have secondary containment; or
- (2) There is evidence that oil has been released from the AST system.

(b) The assessment to determine if any contamination is present shall be performed using the following investigative methods, as applicable:

- (1) Test pits shall be excavated or soil borings advanced in the immediate vicinity of the AST system, and representative soil or groundwater samples shall be obtained;

- (2) Soil or groundwater samples shall be obtained from the ground surface immediately beneath the tanks, the test pits or soil borings, and beneath the adjacent system piping; and
  - (3) All existing release detection devices or subsurface monitoring locations shall be sampled.
- (c) The soil or groundwater samples shall be screened for the presence of contamination in the field using sensory observation and an organic vapor analyzer.
- (d) A subset of those soil and groundwater samples screened which are representative of the conditions found in the vicinity of the AST system that was dismantled and removed, which includes a sample obtained from the same location as the screened sample that contained the highest concentration of volatile organics, shall be submitted to a laboratory accredited pursuant to Env-C 300 for analysis.
- (e) The soil and groundwater samples collected pursuant to (d), above, shall be analyzed for:
- (1) Volatile organic compounds (VOC) in the water matrix, and VOC and total petroleum hydrocarbons (TPH) as gasoline in the soil matrix, if the system stored gasoline or similar weight product(s);
  - (2) VOC and polycyclic aromatic hydrocarbons (PAH) in the water matrix, and VOC, PAH, and TPH as fuel oil in the soil matrix, if the system stored diesel fuel, fuel oils, used oil, or similar weight product(s); and
  - (3) Arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver using the toxicity characteristics leaching procedure (TCLP) as defined in method 1311 of SW-846, "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" in the soil matrix if the system stored used oil.
- (f) Laboratory analysis methods for the analyses described in (e), above, shall be as specified in Env-Or 600.
- (g) Results of the assessments performed under (b) and (c), above, and the laboratory analysis of samples performed under (d) and (e), above, shall be submitted to the department within 60 days of the AST system dismantling.

Env-Or 308.03 Re-Use and Disposal of Used ASTs.

- (a) An AST that has been removed shall not be reinstalled for the purpose of oil storage unless it meets all applicable standards for new tanks specified in Env-Or 305 at the time the tank is to be installed.
- (b) A used AST that meets the standards for new tanks specified in Env-Or 305 may be reinstalled for oil storage only after it has been:
  - (1) Thoroughly cleaned, both internally and externally;
  - (2) Inspected after cleaning to determine that it has no pinholes, cracks, structural damage, or corrosion; and
  - (3) Determined to be structurally sound by a certified AST inspector.
- (c) If a shop-fabricated AST is to be disposed of as scrap, the owner shall first:
  - (1) Test the AST for vapors;
  - (2) Render the AST vapor free, if necessary; and
  - (3) Punch holes in the AST to make it unfit for storage of liquids.

(d) ASTs and AST systems shall not be reused for the storage of food or potable water.

(e) A tank that was designed for installation as an underground storage tank shall not be installed or used as an AST.

#### PART Env-Or 309 SPECIAL SYSTEMS

Env-Or 309.01 Applicability. The rules in this part shall apply as follows:

(a) Env-Or 309.02 shall apply to any AST system designed and used to store oil in the solid phase at atmospheric temperature and pressure;

(b) Env-Or 309.03 shall apply to any location where any oil-filled electrical equipment individually contains more than 660 gallons of oil;

(c) Env-Or 309.04 shall apply to any AST system with an oil storage capacity of more than 660 gallons but not more than 1,320 gallons that:

(1) Is included in Env-Or 301.02(a)(1) but not in Env-Or 301.02(a)(2);

(2) Is located at a construction site; and

(3) Is installed and exists only for the specific duration of the construction contract for which it is used, not to exceed one year;

(d) Env-Or 309.05 shall apply to any AST having a capacity of not more than 330 gallons that:

(1) Contains heating oil for on-premise heating only; and

(2) Is at an AST facility that is included in Env-Or 301.02(a); and

(e) Env-Or 309.06 shall apply to use of cargo trucks by commercial/industrial enterprises or by the military.

Env-Or 309.02 AST Systems Containing Oil that is a Solid at Atmospheric Temperature and Pressure.

(a) Any AST system that contains oil that is in the solid phase at atmospheric temperature and pressure shall:

(1) Be registered as specified in Env-Or 304.01;

(2) Be marked as specified in Env-Or 305.03; and

(3) Have a product level gauge as specified in Env-Or 305.11(a).

(b) Any AST facility owner who wishes to construct a new or replacement AST system containing oil that is in the solid phase at atmospheric temperature and pressure shall obtain plan approval in accordance with Env-Or 307.01 through Env-Or 307.05 prior to construction of the AST system.

Env-Or 309.03 Oil-Filled Electrical Equipment.

(a) The owner of any location at which any oil-filled electrical equipment individually contains more than 660 gallons of oil shall:

(1) Register with the department in accordance with Env-Or 304.01; and

(2) Prepare and maintain a spill prevention control and countermeasure plan as specified in Env-Or 306.02.

(b) The owner of any location where any oil-filled electrical equipment that was installed on or after April 25, 1997 individually contains greater than 660 gallons of oil shall have:

- (1) An impermeable barrier in the soil beneath the oil-filled equipment;
- (2) A containment structure, such as a collection sump, that contains and then conveys all liquids to an oil-water separator for collection until treatment can occur;
- (3) Some other engineered solution that will prevent a release of oil from the equipment to surface waters or groundwater of the state; or
- (4) Operational controls sufficient to identify, manage, respond, and prevent a release of oil to the surface waters or groundwater of the state.

Env-Or 309.04 Temporary Construction AST Systems.

(a) The owner of an AST system included in Env-Or 309.01(c) (temporary construction AST system) shall:

- (1) Register the temporary construction AST system as specified in Env-Or 304.01; and
- (2) Include the contract start and completion dates in the registration information.

(b) A temporary construction AST system shall:

- (1) Be marked as specified in Env-Or 305.03;
- (2) Have secondary containment as specified in Env-Or 305.07;
- (3) Be equipped with a gauge as specified in Env-Or 305.11(a); and
- (4) Be equipped with either a high level warning alarm as specified in Env-Or 305.11(b) or a mechanically operated automatic fill shut-off valve as specified in Env-Or 305.08(h)(3).

Env-Or 309.05 Small AST Systems Containing Heating Oil for On-Premise Heating.

(a) The owner of an AST included in Env-Or 309.01(d) (small AST) shall register the AST system as specified in Env-Or 304.01 through Env-Or 304.05, except that the deadline for registering updates specified in Env-Or 304.04(a) shall be 60 days for these systems.

(b) The small AST and any connected piping shall meet the standards for on-premise-use heating oil tanks specified in NFPA 31.

Env-Or 309.06 Cargo Truck Use by Commercial/Industrial Enterprises or the Military.

(a) The use of cargo trucks by a commercial/industrial enterprise or the military shall be authorized, subject to the conditions noted in (b), below, if such use is required to:

- (1) Deliver fuel to the fuel tanks of stationary equipment, off-road earthmoving equipment, military tactical vehicles, parked aircraft, or parked refrigeration trailers, provided the cargo truck or trailer shall not be used for on-site storage of oil except as allowed by (2), below; or
- (2) To hold oil removed from an AST system during maintenance activities, provided the cargo truck or trailer shall not be used for distribution for end use of the oil.

(b) Except as allowed by (c), below, or as approved by the state fire marshal, cargo trucks and trailers shall not be used to deliver fuel to on-road motor vehicles.

(c) The use of cargo trucks by military personnel to support military vehicles in convoy shall be allowed provided there is an applicable oil spill and response plan, prepared pursuant to 49 CFR 130.31, which requires:

- (1) The use of portable flexible containment areas; and
- (2) Proper containment and disposal of any spilled oil.

#### PART Env-Or 310 WAIVERS

Env-Or 310.01 Applicability. An owner who wishes to obtain a waiver from any rule in this chapter shall request a waiver as specified in Env-Or 310.02.

#### Env-Or 310.02 Waiver Requests.

- (a) To request a waiver, the owner shall submit the following in writing to the department:
  - (1) The name, mailing address, and daytime telephone number of the owner and, if available, a fax number and e-mail address for the owner;
  - (2) The name, physical address, and registration number of the facility;
  - (3) The specific rule, by section and paragraph, for which a waiver is being sought;
  - (4) A full explanation of why a waiver is being requested, including an explanation of the economic and operational consequences of complying with the rule as written;
  - (5) Whether the need for the waiver is temporary, and if so, the estimated length of time that the waiver will be needed;
  - (6) If applicable, a complete explanation of the alternative that is proposed to be substituted for the requirement in the rule, including written documentation or data, or both, to support the alternative; and
  - (7) A complete explanation of why the requestor believes that having the waiver granted will meet the criteria in Env-Or 310.03.
- (b) The owner shall sign and date the request.
- (c) The owner's signature shall constitute certification that:
  - (1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and
  - (2) The signer understands that any waiver granted based on false, incomplete, or misleading information shall be subject to revocation.

#### Env-Or 310.03 Waiver Criteria.

- (a) Subject to (b) through (d), below, the department shall grant a waiver if:
  - (1) Granting a waiver will not result in an adverse impact on the environment, public health, or public safety that is more significant than that which would result from complying with the rule; and
  - (2) One or more of the following conditions is satisfied:
    - a. Granting a waiver is consistent with the intent and purpose of the rule being waived; or
    - b. Any benefit to the public or the environment is outweighed by the economic and operational consequences of strict compliance with the rule.

(b) No waiver shall be granted if the effect of the waiver would be to waive or modify any state statute, unless a waiver is expressly allowed by the statute that would be waived.

Env-Or 310.04 Decision on Waiver Requests; Conditions.

(a) The department shall notify the requestor of the decision in writing within 60 days of receipt of a request that meets the requirements of Env-Or 310.02.

(b) If the request is denied, the response shall identify the specific reason(s) for the denial.

(c) The department shall include such conditions in a waiver as are necessary to ensure that the criteria of Env-Or 310.03 will be met.

(d) If the need for a waiver is temporary, the waiver shall specify the date on which it will expire.

### Appendix A: Statutes Implemented

Rule Section(s)	State Statute(s) Implemented	Federal Regulations Implemented
Env-Or 300 (also see specific sections listed below)	RSA 146-A:1-3, 4, & 5; RSA 541-A:16, I(b)	40 CFR Part 112
Env-Or 306.04		US DOT HM 181, part HM-126F
Env-Or 306.11	RSA 485-C:4, VIII	40 CFR Part 112
Env-Or 308.01, Env-Or 308.02	RSA 485-C:4, VIII	40 CFR Part 112
Env-Or 310.04	RSA 541-A:22, IV	

### Appendix B: Incorporation by Reference Information\*

Rule	Title/ Date	Obtain at:
Env-Or 303.02(a) Env-Or 305.01(b)(5) Env-Or 307.11(b)(4)	STD 620 - "Design and Construction of Large Welded Low-Pressure Storage Tanks", eleventh edition, 2008 (API 620)	American Petroleum Institute 1220 L Street, NW Washington, DC 20005-4070
Env-Or 303.02(b) Env-Or 305.01(b)(6) Env-Or 307.11(b)(4)	STD 650 - "Welded Steel Tanks for Oil Storage", twelfth edition, 2013 (API 650)	(202) 682-8000 <a href="http://www.api.org">http://www.api.org</a>
Env-Or 303.02(c) Env-Or 305.06(a)(1)	RP 651 - "Cathodic Protection of Aboveground Petroleum Storage Tanks", third edition, 2007 (API 651)	
Env-Or 303.02(d) Env-Or 306.09(d)(3) Env-Or 306.09(e)(1) Env-Or 306.10(a) Env-Or 306.13(b)(1) Env-Or 306.13(b)(3) Env-Or 307.11(c)	STD 653 - "Tank Inspection, Repair, Alteration, and Reconstruction", fourth edition, 2009 (API 653)	
Env-Or 303.02(e) Env-Or 305.05(e)(3) Env-Or 305.06(b)	RP 1615 - "Installation of Underground Petroleum Systems", sixth edition, 2011 (API 1615)	
Env-Or 303.02(f) Env-Or 305.06(b)	RP 1632 "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems" 1996	
Env-Or 303.02(g) Env-Or 305.01(b)(10)	STD 2610 - "Design, Construction, Operation, Maintenance, and Inspection of	



<b>Rule</b>	<b>Title/ Date</b>	<b>Obtain at:</b>
Env-Or 305.04(a) Env-Or 306.08(d)(2) Env-Or 306.08(e)(1) Env-Or 306.10(a) Env-Or 306.10(e) Env-Or 307.11(b)(3)	Terminal and Tank Facilities”, fifth edition, 2005 (API 2610)	
Env-Or 303.02(h) Env-Or 306.08(d)(2) Env-Or 306.08(e)(1) Env-Or 306.10(a) Env-Or 306.10(e)	RP 2611 – “Terminal Piping Inspection – Inspection of In-Service Terminal Piping Systems”, first edition, June 2011 (API 2611)	
Env-Or 303.03(a) Env-Or 305.06(b)	SP-0169-2007 “Control of External Corrosion on Underground or Submerged Metallic Piping Systems” 0169)	NACE International 1440 South Creek Drive Houston, TX 77084-4906
Env-Or 303.03(b) Env-Or 305.06(a)(1)	SP-0285-2011 “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection” (NACE SP-0285)	(281) 228-6223 <a href="http://www.nace.org">http://www.nace.org</a>
Env-Or 303.04(a) Env-Or 304.02(h) Env-Or 304.04(b)(5) Env-Or 305.01(c)(4) Env-Or 305.02 Env-Or 305.03(d)(1) Env-Or 305.04(a) Env-Or 305.06(b) Env-Or 305.08(e) Env-Or 305.08(g)(1) Env-Or 306.09(d)(4) Env-Or 305.11(e)(2) Env-Or 306.13(b)(3) Env-Or 307.11(c)	NFPA 30 “Flammable and Combustible Liquids Code” 2012 (NFPA 30)	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471  (800) 344-3555 <a href="http://www.nfpa.org">http://www.nfpa.org</a>
Env-Or 303.04(b) Env-Or 304.02(h) Env-Or 305.01(c)(1) Env-Or 305.02	NFPA 30A “Motor Fuel Dispensing Facilities and Repair Garages” 2012 (NFPA 30A)	
Env-Or 303.04(c) Env-Or 304.02(h) Env-Or 305.01(c)(2) Env-Or 305.02 Env-Or 305.08(g)(1) Env-Or 309.05(b)	NFPA 31 “Standard for the Installation of Oil-Burning Equipment” 2011 (NFPA 31)	
Env-Or 303.04(d) Env-Or 305.01(c)(3)	NFPA 110 – “Standard for Emergency and Standby Power Systems”, 2013 (NFPA 110)	
Env-Or 303.05(a) Env-Or 305.01(b)(7) Env-Or 307.11(b)(1)	RP 200 “Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling” 2013 (PEI RP 200)	Petroleum Equipment Institute P.O. Box 2380 Tulsa, OK 74101-2380
Env-Or 303.05(b) Env-Or 305.01(b)(8) Env-Or 307.11(b)(2)	RP 300, “Recommended Practices for Installation and Testing of Vapor-Recovery	(918) 494-9696 <a href="http://pei.org">http://pei.org</a>

Rule	Title/ Date	Obtain at:
	Systems at Vehicle-Fueling Sites”2009 (PEI RP 300)	
Env-Or 303.05(c) Env-Or 307.11(b)(5)	RP 600, “Recommended Practices for Overfill Prevention for Shop-fabricated Aboveground Tanks” 2008 (PEI RP 600)	
Env-Or 303.05(d) Env-Or 305.01(b)(9) Env-Or 307.11(b)(6)	RP 800, “Recommended Practices for Installation of Bulk Storage Plants” 2008 (PEI RP 800)	
Env-Or 303.05(e) Env-Or 307.11(b)(7)	RP 1300 - “Recommended Practices for the Design, Installation, Service, Repair, and Maintenance of Aviation Fueling Systems” 2013 (PEI RP 1300)	
Env-Or 303.06(a) Env-Or 306.08(d)(2) Env-Or 306.08(e)(1) Env-Or 306.09(d)(3) Env-Or 306.09(e)(1) Env-Or 306.10(a) Env-Or 306.10(e) Env-Or 306.13(b)(3)	STI SP001 “Standard for the Inspection of Aboveground Storage Tanks”, fifth edition, 2011 (STI SP001)	Steel Tank Institute 570 Oakwood Road Lake Zurich, IL 60047  (847) 438-8265 <a href="https://www.steeltank.com/">https://www.steeltank.com/</a>

### Appendix C - Statutory Definitions

#### **RSA 146-A:2:**

I-a. “Discharge” or “spillage” means the release or addition of any oil to land, groundwater or surface water;

III. “Oil” means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term “oil” shall not include natural gas, liquified petroleum gas or synthetic natural gas regardless of derivation or source;

VI. “Person” shall mean individual, partnership, joint venture, corporation, association or any group of the foregoing or the United States of America, any agency thereof and any other legal entity;

IX. “Facility” means a location, including structures or land, at which oil is subjected to treatment, storage, processing, refining, pumping, transfer, or collection;

XIV. “Qualified facility” means a facility:

(a) That has had no single discharge exceeding 1,000 gallons or no 2 discharges each exceeding 42 gallons, other than discharges that are the result of natural disasters, acts of war, or terrorism;

(b) That has an aggregate aboveground oil storage capacity of 5,000 gallons or less, of which not more than 660 gallons is for storage of gasoline; and

(c) For which preparation of a spill prevention, control, and countermeasure (SPCC) plan does not necessitate the practice of engineering as defined in RSA 310-A:2, III.

#### **RSA 310-A:2:**

III. "Practice of engineering" means any professional service or creative work requiring education, training, experience, and the application of advanced knowledge of mathematics and physical sciences, involving the

constant exercise of discretion and judgment, to such services or work as consultation, investigation, evaluation, planning, design, responsible oversight of construction, and responsible oversight of operation, in connection with any public or private utilities, structure, buildings, machines, equipment, processes, works, or projects, wherein the public welfare, or the safeguarding of life, health, or property is concerned.

**RSA 485:1-a:**

XV. “Public water system” means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Any water system which meets all of the following conditions is not a public water system:

- (a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
- (b) Obtains all of its water from, but is not owned or operated by, a public water system; and
- (c) Does not sell water to any person.

**RSA 485-A:2:**

XIV. “Surface waters of the state” means perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial.

**Appendix D - CFR Definition**

**44 CFR 59.1:**

*Regulatory floodway* means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Appendix E: Compliance Deadlines Required by Env-Wm 1402 as effective May 28, 2005**

<b>Rule § / ¶</b>	<b>Requirement</b>	<b>Systems with extended compliance deadline</b>	<b>Compliance Deadline</b>
1402.35(a)	Secondary containment for all AST systems and all underground and over water piping	Systems installed prior to May 28, 2005	Within 3 years of effective date of rules ( <i>i.e.</i> , no later than May 28, 2008)
1402.35(d)	All requirements in Env-Wm 1402	On-premise-use heating oil systems that existed on May 28, 2005 that were newly regulated due to the exemption in Env-Wm 1402.02(b)(1) being lowered from 10,000 gallons to 1,320-gallons	Within 3 years of effective date of rules ( <i>i.e.</i> , no later than May 28, 2008)
1402.29(f)	Interior inspections (including means of accessing interior)	Existing ASTs greater than 5,100 gallons that were not equipped with a manhole or other manufactured means of accessing the interior of the tank	Install means of entry and conduct initial inspection by the later of the date determined pursuant to 1402.29(d) or within 3 years of the effective date of rules ( <i>i.e.</i> , no later than May 28, 2008)

