

Subchapter 1: GENERAL PROVISIONS

§ 9-101 AUTHORITY

These rules are adopted by the Secretary of the Agency of Natural Resources pursuant to the authority granted by **10 V.S.A. Chapter 59 Section 1929a**.

§ 9-102 PURPOSE AND APPLICABILITY

These rules are intended to protect public health and the environment by establishing standards for the design and installation of aboveground storage tanks.

§ 9-103 EMERGENCY AND CORRECTIVE ACTIONS

(a) Emergency actions

(1) In the event of a release of petroleum from an aboveground storage tank, the owner or operator shall:

(A) Take all appropriate immediate actions to protect human health and the environment including, but not limited to, emergency containment measures and reporting as described in **subsection (a)(2)(A) of this section**; and

(B) Take any further clean up actions as may be required and approved by federal, state, or local officials, or corrective actions as specified under **subsection (d) of this section** so that the released material or substance and related contaminated materials no longer present a hazard to human health or the environment.

(2) Initial reporting

(A) Releases

All releases including spills and overfills, that meet any of the following criteria shall be immediately reported to the Secretary by the owner or operator of the underground storage tank system, or by the person or persons exercising control over the underground storage tank system at the time of the release. To report a release call the Waste Management Division at (802) 241-3888, Monday through Friday, 7:45 a.m. to 4:30 p.m. or the Department of Public Safety, Emergency Management Division at (800) 641-5005, 24 hours/day.

- (i) A release of hazardous material (e.g. - petroleum) or regulated substance that exceeds 2 gallons;
- (ii) A release of hazardous material (e.g. – petroleum) or regulated substance that is less than or equal to 2 gallons and poses a potential or actual threat to human health or the environment; or
- (iii) A release of hazardous material or regulated substance that equals or exceeds its corresponding reportable quantity under CERCLA as specified under **40 CFR § 302.4**.

Note: Under the Federal Water Pollution Control Act, certain spills of “oil” and/or “hazardous substances” are prohibited and shall be reported pursuant to the requirements of **40 CFR Part 110 / Discharge of Oil**. Certain spills of hazardous substances shall also be reported pursuant to CERCLA. In both cases, the National Response Center shall be notified at (800) 424-8802.

- (B) Suspected releases. The owner or operator of an aboveground storage tank system shall report any suspected release to the Secretary immediately upon discovery. Reporting is accomplished by calling the numbers listed in **subsection (a)(2)(A) of this section**. Reasons to report a suspected release include, but are not limited to, any of the following conditions:
 - (i) An unusual loss of product from the aboveground storage tank;
 - (ii) Strong petroleum vapors present in the vicinity of the aboveground storage tank;
 - (iii) Other environmental conditions present in the vicinity of the tank the facility or off the site that suggest a release may have occurred.

(3) Written follow-up report

- (A) A written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (a)(1) of this section**. The report should be sent to: The Vermont Department of Environmental Conservation, Waste Management Division, 103 South Main Street, Waterbury, VT 05671-0404.
- (B) The person responsible for submitting the written report may request that it not be submitted for small releases that were reported pursuant to **subsection (a)(2)(A) of this section**, and that have been entirely remediated within the ten (10) day period immediately following the release.

- (4) All clean up debris and residues that are hazardous waste shall be managed in accordance with the **Vermont Hazardous Waste Management Regulations**.
- (b) Investigation of a release or suspected release
 - (1) The owner or operator of an aboveground storage tank system shall investigate any release or suspected release, as specified by the Secretary:
 - (2) Scope of investigation. The investigation required by **subsection (1) of this section** shall determine if a release to the environment occurred, and if so, the following:
 - (A) The most likely source of the release;
 - (B) The extent and estimated quantity of the release, and whether free product is present;
 - (C) If and how any sensitive receptors have been or are likely to be affected by the release;
 - (D) Pertinent information about the site including information on subsurface soil conditions and the location of any nearby subsurface conduits or preferential pathways; and
 - (E) Any other information required by the Secretary.
 - (3) A report summarizing the investigation shall be submitted to the Secretary within 10 days of the date the release or suspected release was discovered. The information required by this report may be included as part of the written follow-up report required by **subsection (a)(3) of this section**.
 - (c) Corrective actions. If the Secretary determines that a release of hazardous material or regulated substance has not been adequately addressed under **subsection (a) of this section** the Secretary may require that the person or persons responsible pursuant to **10 V.S.A. § 6615** comply with the corrective action procedures of **10 V.S.A. § 6615b**.
 - (d) Soils and debris contaminated with petroleum products or any other regulated substances shall be handled in accordance with the requirements of the **Vermont Hazardous Waste Management Regulations**.
 - (e) Public Notice.
 - (1) The Secretary shall provide notice to the affected public for any confirmed release requiring a plan for corrective action. Such notice may include, but is not

limited to public notice in local newspapers, block advertisements, public service announcements, publication in a State register, letters to individual households or municipal officials or personal contacts by field staff.

(2) Upon request, the Secretary shall make available information to inform the interested public of the nature of the release and the corrective action measures planned or taken.

Subchapter 2: DEFINITIONS

As used in these rules, all terms not defined herein shall have the meaning given them in **NFPA Code 31**.

“Aboveground storage tank” means any tank, other than an underground storage tank, used to store any of the following petroleum products: gasoline, diesel, kerosene, used oil or heating oil.

"Agency" means the Vermont agency of natural resources.

“Bulk storage facility” means any non-transportation related facility with a total aboveground (i.e. not completely buried underground) oil storage capacity of greater than 1,320 gallons, or a total completely buried oil storage capacity greater than 42,000 gallons which required a Spill Prevention Control and Countermeasure (SPCC) Plan pursuant to 40 C.F.R. Section 112.

“Bulk storage tank” means any aboveground petroleum storage tank at a facility required to have a Spill Prevention Control and Countermeasure (SPCC) Plan pursuant to 40 C.F.R. Section 112.

“Business days” means all days except Saturdays, Sundays, and holidays recognized by the State of Vermont.

“Carrier” means a person who transports and transfers a regulated substance from a bulk liquid transport vehicle to an aboveground storage tank.

“CERCLA” means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et. seq. (also known as “Superfund”).

“Empty” when referring to an aboveground storage tank, means a condition in which regulated substance has been removed from the tank to the extent that no more than 1 inch of residue, or 0.3 percent by weight of the total capacity of the underground storage tank, remains in the system.

“Facility” means the property where an aboveground storage tank system is located.

“Farm tank” means a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property. “Farm” includes fish hatcheries, rangeland and nurseries with growing operations.

“Free product” means a regulated substance that is present in the environment as a non-aqueous phase liquid (i.e., liquid not dissolved in water).

“Hazardous substance” means any substance designated as such under §101(14) of CERCLA.

“Motor fuel” means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No.1 or No. 2 diesel fuel or any blend containing diesel fuel, or any grade of gasohol, or any other regulated substance typically used in the operation of an engine.

“Out-of-service” means a condition in which an aboveground storage tank system is temporarily not in service, and the liquid level in the tank has been lowered to or below the lowest draw-off point.

“Owner” means any person who owns an aboveground storage tank used for storage of a regulated substance;

“Person” means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the state of Vermont, or any agency, department or subdivision of the state, federal agency, or any other legal or commercial entity.

“Public building” means a building as defined in 20 V.S.A. §2730.

“Public water source” means any surface water or groundwater intake used, or permitted to be used, as a source of drinking water for a public water system.

“Public water system” means any system(s) or combination of systems owned or controlled by a person, that provides drinking water through pipes or other constructed conveyances to the public and that has at least fifteen (15) service connections or serves an average of at least twenty-five (25) individuals daily for at least sixty (60) days out of the year. A public water system is either a public community water system or a public non-community water system.

“Public community water system” means a public water system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least 25 year-round residents.

“Public non-transient, non-community (NTNC) water system” means a public water system that is not a public community water system and that regularly serves at least 25 of the same persons daily for more than six months per year. Examples: schools, factories, office buildings.

“Public transient, non-community (TNC) water system” means a public non-community water system that is not a non-transient, non-community system. Examples: restaurants, motels, campgrounds.

“Regulated substance” means all petroleum and toxic, corrosive or other chemicals and related sludge including:

- (a) Any substance defined in §101(14) of CERCLA, but does not include any substance regulated as a hazardous waste under Chapter 159 of Title 10;
- (b) Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute);
- (c) Any other motor fuel which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute); and
- (d) Any other substance as designated by the Secretary in rule.

“Release” means any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an underground or aboveground storage tank into groundwater, surface water or soils.

“Secretary” means the Secretary of the Vermont Agency of Natural Resources or the Secretary’s duly authorized representative.

“Sensitive receptor” means any natural or human-constructed feature which may be adversely affected when contacted by a regulated substance. Examples of sensitive receptors include, but are not limited to, public or private water supplies, surface waters, wetlands, sensitive ecological areas, outdoor and indoor air, and enclosed spaces such as basements, sewers, and utility corridors.

"Underground storage tank" or "underground storage tank system" means any one or combination of tanks, including underground pipes and secondary containment components connected to it or them, which is or has been used to contain an accumulation of regulated substances, and the volume of which, including the volume of the underground pipes connected to it or them, is 10 percent or more beneath the surface of the ground. The following are excluded from the definition of "underground storage tanks:"

- (a) Septic tanks and manure storage tanks;
- (b) Flow through process tanks permitted under 10 V.S.A. chapter 47 and tanks regulated by under 10 V.S.A. chapter 159;
- (c) Stormwater or wastewater collection systems;

- (d) Storage tanks situated in an underground area if the tank is upon or above the area floor;
- (e) Pipeline facilities regulated by the federal Natural Gas Pipeline Safety Act (49 U.S.C. App. 1671 et seq.), the Hazardous Liquid Pipeline Safety Act (49 U.S.C. App. 2001 et seq.) or an intrastate pipeline regulated under state laws similar to the foregoing;
- (f) Liquid petroleum gas storage tanks, used predominantly for the storage of propane, propylene, butane, and butylenes, regulated by the Vermont fire prevention and building code;
- (g) Reservoir tanks containing hydraulic fluid for a closed loop mechanical system such as elevators or lifts; and
- (h) Oil water separators.

"Used Oil" means any petroleum product that has been refined from crude oil (in whole or in part), or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point of greater than 100 degrees (F). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived from crude or synthetic oils that are fuels (e.g., gasoline, jet fuel and diesel fuel) or as cleaning agents or solvents (e.g., naphtha or mineral spirits).

Subchapter 3: DESIGN AND INSTALLATION STANDARDS FOR ABOVEGROUND STORAGE TANK SYSTEMS

§ 9-301 APPLICABILITY

- (a) This subchapter applies to commercial and residential petroleum aboveground storage tank systems.
- (b) In addition to the requirements of this subchapter, the Secretary may review aboveground storage tanks that store regulated substances other than motor fuel or heating fuel on a case-by-case basis to ensure that the design of the tanks meets the appropriate industry standards for the substance stored and the design, manufacture, and installation of the tanks protect public health and the environment.

§ 9-302 PROHIBITIONS

- (a) No new aboveground bulk storage facility shall be located:
 - (1) Within the Source Protection Area of a public community water system or public non-transient, non-community (NTNC) water system using a groundwater source;
 - (2) Within Zone 1 or Zone 2 of a Source Protection Area of a public community water system or NTNC water system using a surface water source except that the Secretary may, on a case-by-case basis make a determination that an aboveground storage tank may be sited in the zone 2 of a source protection area of a water system using a surface water source;
 - (3) Within 200 feet of a public transient, non-community (TNC) water system source;
 - (4) Within 100 feet of any private drinking water supply source;
 - (5) Within 25 feet of any public water distribution line; or
 - (6) In any area designated as a Class I or Class II groundwater zone.

§ 9-303 GENERAL REQUIREMENTS

All aboveground storage tank systems shall be made of or lined with materials that are compatible with the substance(s) stored in them.

§ 9-304 TANK AND PIPING STANDARDS

Construction standards for new aboveground storage tank systems. New aboveground storage tank systems must be designed and constructed in accordance with a code of practice developed by nationally recognized associations or independent testing laboratories such as UL80 or UL 142 or similar methods approved by the agency.

§ 9-305 INSTALLATION STANDARDS

(a) Installation standards for new aboveground storage tank systems. New or **substantially altered** aboveground storage tank systems must be installed or repaired in accordance with a code of practice developed by nationally recognized associations as follows:

- (1) Uniform Fire Code (IFC) published by the International Fire Code Institute (IFCI);
- (2) National Fire Protection Association (NFPA) 30 & 31;
- (3) Building Officials and Code Administrators (BOCA) National Fire Prevention Code;
- (4) Southern Building Code Congress International (SBCCI) Standard Fire Prevention Code; or
- (5) A similar method approved in writing by the Agency.

(b) Installation of aboveground storage tanks inside buildings

- (1) Tanks shall be installed on the lowest floor of a building unless the installation meets the exceptions detailed by code identified in 9-405(a) above;
- (2) All tanks must be installed with a shutoff valve;
- (3) All tanks shall have a vent line that terminates outside the building. The vent line shall have a minimum diameter size of 1-1/4 inches;
- (4) The vent line shall have a minimum diameter size of 1-1/4 inches for tanks less than 600 gallons in size. For tanks greater than 600 gallons in size, the vent line must be sized to prevent abnormal pressure in the tank during filling, and be in accordance with code identified in 9-405(a) above ;
- (5) Tanks shall be equipped with a gauging device; and
- (6) All tanks shall be installed with a drip tray to contain small leaks due to overfills, leaking valves or fittings, filter replacement, or other small fuel releases;

(c) Installation of aboveground storage tanks outside buildings:

- (1) Outside tanks shall be protected from weather and from physical damage incident to outside use. The tank shall be installed in a separate shelter that includes a roof that protects the tank from falling snow and ice;
- (2) When possible, all tanks shall be installed on the gable end of the building;

- (3) All tanks shall be installed on a stable foundation such as a concrete pad to prevent the tank from tipping over;
- (4) All tanks must be installed with a shutoff valve;
- (5) Outside tanks can include flat bottom tanks which limit potential for tank tipover.

(d) Notice requirements for the installation of all aboveground storage tanks.

Prior to the completion of the installation, the tank installer shall provide a copy of the guidelines for the operation of an aboveground storage tank (Appendix A) or other guidelines provided by the Secretary to the tank installer. The tank installer shall ensure that the tank owner has reviewed these guidelines and the owner shall certify to having read the guidelines prior to the completion of the installation.

§ 9-306 PROPER REMOVAL OF EXISTING ABOVEGROUND STORAGE TANK SYSTEMS

- (a) Prior to the installation of a new aboveground storage tank system, the installer shall ensure that the existing system is taken out-of-service in accordance with a code of practice developed by nationally recognized associations as follows:
 - (1) Uniform Fire Code (IFC) published by the International Fire Code Institute (IFCI);
 - (2) National Fire Protection Association (NFPA) 30 & 31;
 - (3) Building Officials and Code Administrators (BOCA) National Fire Prevention Code;
 - (4) Southern Building Code Congress International (SBCCI) Standard Fire Prevention Code; or
 - (5) A similar method approved in writing by the Agency.
- (b) Any aboveground storage tank system which is out-of-service for more than one year shall be removed from operation. This shall include the removal and proper disposal of the tank as well as all piping.
- (c) Upon written request, the Secretary may allow an aboveground storage tank system that meets the design and installation standards of **sections 9-304 and 9-305** to remain out-of-service for more than one year provided all other applicable requirements are met.
- (d) The fill pipe to an aboveground storage tank system located inside a building must be permanently removed from the structure to prevent an accidental delivery to a discontinued system. Removing the tank and merely cutting off the piping is strictly forbidden.
- (e) When removing an aboveground storage tank system the site shall be assessed for the presence of a release wherever contamination is likely to exist.

- (f) In the event that a release is discovered, the owner shall comply with the reporting and corrective action requirements of § 9-103.

§ 9-307 ADDITIONAL INSTALLATION REQUIREMENTS FOR ABOVEGROUND STORAGE TANKS AT BULK FACILITIES.

- (a) Prior to the completion of the installation or significant modification of an aboveground storage tank system at a bulk facility, an installer shall submit a **Vermont Aboveground Storage Tank Form** (provided by the Secretary) completed in accordance with the form's instructions. Installers of aboveground storage tank systems at more than one bulk facility location shall file a separate form for each location.

Note: An installer may register several aboveground storage tank systems at one location using one form.

- (b) Prior to the completion of the installation, any aboveground storage tank system at a bulk storage facility shall submit to the Secretary, the municipal recording fee required by **32 V.S.A. § 1671**.
- (c) Payment of the recording fee required in **subsection (b) of this section** shall be made by check payable to the municipality in which the aboveground storage tank system is located.

Appendix A: OPERATING GUIDELINES FOR ABOVEGROUND STORAGE TANKS

These guidelines apply to both commercial and residential aboveground storage tank systems.

GENERAL REQUIREMENTS FOR ALL TANK OWNERS

- Any suspected release of regulated substance shall be reported to the Secretary in accordance with the requirements of § 9-103(a)(2).
- Any aboveground storage tank system or system component from which regulated substance has been released or that is leaking shall be taken out-of-service immediately, and remain out-of-service until the system or system component is repaired in accordance with § 9-405, or the aboveground storage tank system is permanently closed.

SPILL PREVENTION AND INSPECTION REQUIREMENTS FOR ALL TANK OWNERS

- All aboveground storage tank systems should be visually inspected by the owner on a regular basis , not less frequently than monthly.

Note: The purpose of these inspections is to discover potential problems and correct them before they affect tank longevity, system performance and to prevent a release of product.

- All aboveground storage tank systems should be checked annually for the presence of tank-bottom water. Any excess amount of tank bottom water should be removed from the tank system and disposed of properly. The oil filter shall be cleaned and replaced as appropriate.
- All liquid and debris removed from the aboveground tank system including drip pans and oil filters shall be managed in accordance with all applicable state and federal requirements.

Note: This liquid and debris may be a hazardous waste under the Vermont Hazardous Waste Management Rules. If the materials are disposed of by a homeowner at his or her residence they may not be considered a Hazardous Waste and may be managed as a solid waste.

ADDITIONAL SPILL PREVENTION AND INSPECTION REQUIREMENTS FOR FUEL SUPPLIERS

- All tank systems should be inspected by a fuel supplier prior to the initial delivery to the system and when the tank owner switches fuel suppliers. The system should be

inspected for any noticeable flaws in the tank system including checking to ensure the fill and vent pipes are identified correctly, legs and pad or foundation are in satisfactory condition.

- During fuel delivery, the vent alarm should be properly working. If the vent alarm does not whistle the delivery should stop immediately and not resume until the reason is determined and corrected.
- After fuel delivery, the visible components of tank system should be visibly inspected to ensure no product has been released from the system.

ADDITIONAL SPILL PREVENTION AND INSPECTION REQUIREMENTS FOR BULK FACILITIES

- Aboveground Bulk Storage Facility. All aboveground bulk storage facilities shall have an up-to-date Spill Prevention Control and Countermeasure (SPCC) plan as required by EPA.