9 VAC 25-91-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"Aboveground storage tank" or "AST" means any one or combination of tanks, including pipes, used to contain an accumulation of oil at atmospheric pressure, and the volume of which, including the volume of the pipes, is more than 90% above the surface of the ground. This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC §60101 et seq.).

"Alteration" means any cutting, burning, welding, or heating operation on a tank that changes the physical dimensions and/or configuration of the tank.

"Annually" means once per calendar year.

"Best available technology" means state of the art equipment, materials, and technology, that are cost effective, proven effective, reliable, and compatible with the safe operation of the facility and that are designed, installed, operated, and maintained according to good engineering practices and industry standards.

"Board" means the State Water Control Board.

"Change in service" means a change from previous operating conditions involving either properties of the stored product such as specific gravity or corrosivity and/or service conditions of temperature and/or pressure.

"Containment and cleanup" means abatement, containment, removal and disposal of oil and, to the extent possible, the restoration of the environment to its existing state prior to an oil discharge.

"Corrosion professional" means a person who by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Department" means the Department of Environmental Quality (DEQ).

"Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

"Double walled AST" means an AST having an inner and an outer wall with an interstitial space (annulus) between the walls and having means for monitoring the interstitial space for a discharge.

"EPA" means the United States Environmental Protection Agency.

"Facility" means any development or installation within the Commonwealth that deals in, stores or handles oil and includes a pipeline.

"Flow-through process tank" means (as defined in 40 CFR Part 280) a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Local building official" means the person authorized by the Commonwealth to enforce the provisions of the Uniform Statewide Building Code (USBC).

"Local director or coordinator of emergency services" means any person appointed pursuant to §44-146.19 of the Code of Virginia.

"Major repair" means any alterations that refer to operations that requires cutting, additions to, or removal or replacement of the annular plate ring, the shell-to-bottom weld or a sizable portion of the AST shell. Within this context, major repairs and major alterations would include without limitation: (a) The installation of any shell penetration beneath the design liquid level larger than 12 inches nominal pipe size (NPS), or any bottom penetration located within 12 inches of the shell; (b) The removal and replacement or addition of any shell plate beneath the design liquid level, or any annular plate ring material where the longest dimension of the replacement plate exceeds 12 inches; (c) The complete or partial (more than one-half of the weld thickness) removal and replacement of more than 12 inches of vertical weld joining shell plates, or radial welds joining the annular plate ring; (d) The installation of a new bottom; (e) The removal and replacement of any part of the weld attaching the shell to the bottom or to the annular plate ring; and (f) Partial or complete jacking of a tank shell.

"Oil" means oil of any kind and in any form, including, but not limited to, petroleum and petroleum by-products, fuel oil, lubricating oils, sludge, oil refuse, oil mixed with other wastes, crude oils, and all other liquid (60° F at 14.7 pounds per square inch absolute)

petroleum hydrocarbons regardless of specific gravity.

"Operator" means any person who owns, operates, charters by demise, rents, or otherwise exercises control over or responsibility for a facility or a vehicle or a vessel.

"Person" means an individual; trust; firm; joint stock company; corporation, including a government corporation; partnership; association; any state or agency thereof; municipality; county; town; commission; political subdivision of a state; any interstate body; consortium; joint venture; commercial entity; the government of the United States or any unit or agency thereof.

"Pipes" or "piping" means a pressure-tight cylinder used to convey a fluid or to transmit a fluid pressure and is ordinarily designated "pipe" in applicable material specifications. Materials designated "tube" or "tubing" in the specifications are treated as pipe when intended for pressure service. This term includes piping and associated piping which is https://dispersion.org/remaintesing from or feedsing an ASTs or transfers oil from or to or from an AST (e.g., dispensing systems, including airport hydrant fueling systems, supply systems, gauging systems, auxiliary systems, etc.). This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC §60101 et seq.).

"Pipeline" means all new and existing pipe, rights of way, and any equipment, facility, or building used in the transportation of oil, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe; pumping units; fabricated assemblies associated with pumping units; metering and delivery stations and fabricated assemblies therein; and breakout tanks.

"Reconstruction" means the work necessary to reassemble a tank that has been dismantled.

"Repair" means any work necessary to maintain or restore a tank to a condition suitable for safe operation.

"Release prevention barrier (RPB)" means a nonearthen barrier that is impermeable; is composed of material compatible with oil stored in the AST; meets proper engineering strength and elasticity standards; and functions to prevent the discharge of stored oil to state lands, waters and storm drains. It must contain and channel any leaked oil in a manner that provides for early release detection through the required daily and weekly inspections.

"Relocation" means the movement of an AST from one location to another location.

"Retrofitted" means the AST has been reconstructed or has had the bottom replaced.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"Storage capacity" means the total <u>volumetric</u> capacity of an AST or a container, whether filled in whole or in part with oil, a mixture of oil, or mixtures of oil with nonhazardous

substances, or empty. An AST that has been permanently closed in accordance with this chapter has no storage capacity.

"Tank" means a device designed to contain an accumulation of oil and constructed of nonearthen materials, such as concrete, steel, or plastic, that provides structural support. This term does not include flow-through process tanks as defined in 40 CFR Part 280.

"Tank vessel" means any vessel used in the transportation of oil as bulk cargo.

"Upgrade" means an alteration of the performance, design, equipment or appurtenances of an AST or facility to meet a higher, new, or current standard.

"Vaulted tank" means any tank situated upon or above the surface of the floor in an underground area (such as an underground room, basement, cellar, mine-working, drift, shaft, tunnel or vault) and providing enough space for physical inspection of the exterior of the tank.

"Vehicle" means any motor vehicle, rolling stock, or other artificial contrivance for transport whether self-propelled or otherwise, except vessels.

"Vessel" includes every description of watercraft or other contrivance used as a means of transporting on water, whether self-propelled or otherwise, and shall include barges and tugs.

9 VAC 25-91-20. Applicability.

A. The operator shall comply with all applicable requirements pursuant to this chapter.

The operator as defined in this chapter can be more than one person and each operator shares joint responsibility for compliance.

- B. The requirements of this chapter <u>apply</u>may vary in their applicability to any given AST or facility depending on the part in which the requirement appears. The <u>applicability of Parts II, III, IV, and V are differentiated</u> as follows:
- 1. The provisions of Part II (9 VAC 25-91-100 et seq., Registration, Notification and Closure Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity greater than 660 gallons of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity greater than 1,320 gallons of oil, unless otherwise specified within this chapter.
- 2. The provisions of Part III (9 VAC 25-91-130 et seq., Pollution Prevention Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the

Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter.

- 3. The provisions of Part IV (9 VAC 25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter.
- 4. The provisions of Part V (9 VAC 25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this regulation; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this chapter.

9 VAC 25-91-30. Exclusions.

A. The requirements of this chapter do not apply to:

- 1. Vessels;
- 2. Licensed motor vehicles, unless used solely for the storage of oil;
- 3. An AST with a storage capacity of 660 gallons or less of oil;
- 4. An AST containing petroleum, including crude oil or any fraction thereof, which is liquid at standard temperature and pressure (60°F at 14.7 pounds per square inch absolute) subject to and specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of §101(14) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC §9601 et seq.);
- 5. A wastewater treatment tank system that is part of a wastewater treatment facility regulated under §402 or §307(b) of the federal Clean Water Act (33 USC §1251 et seq.);
- 6. An AST that is regulated by the Department of Mines, Minerals and Energy under Chapter 22.1 (§45.1-361.1 et seq.) of Title 45.1 of the Code of Virginia;
- 7. An AST used for the storage of products that are regulated pursuant to the federal Food, Drug, and Cosmetic Act (21 USC §301 et seq.);
- 8. An AST that is used to store hazardous wastes listed or identified under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Solid Waste Disposal Act) (42

USC §6901 et seq.), or a mixture of such hazardous wastes and other regulated substances;

- 9. An AST that is used to store propane gas, butane gas or other liquid petroleum gases;
- 10. An AST used to store nonpetroleum hydrocarbon-based animal and vegetable oils;
- 11. A liquid trap or associated gathering lines directly related to oil or gas production, or gathering operations;
- 12. A surface impoundment, pit, pond, or lagoon;
- 13. A stormwater or wastewater collection system;
- 14. Equipment or machinery that contains oil for operational purposes, including but not limited to lubricating systems, hydraulic systems, and heat transfer systems;
- 15. An AST used to contain oil for less than 120 days when: (i) used in connection with activities related to the containment and cleanup of oil; (ii) used by a federal, state or local entity in responding to an emergency; or (iii) used temporarily on-site to replace permanent capacity storage;

- 16. Oil-filled electrical equipment, including, but not limited to, transformers, circuit breakers or capacitors;
- 17. A flow-through process tank;
- 18. Oily water separators;
- 19. An AST containing dredge spoils;
- 20. An AST located on a farm or residence used for storing motor fuel for noncommercial purposes with an aggregate storage capacity of 1,100 gallons or less; or
- 21. Pipes or piping beyond the first valve from the AST that connects an AST with production process tanks or production process equipment.
- B. In addition to the complete exclusions listed in subsection A of this section, tThe following are partially excluded from this chapter in that they need not comply with the requirements contained in Part III (9 VAC 25-91-130 et seq., Pollution Prevention Requirements) of this chapter:
- 1. An AST with a capacity of 5,000 gallons or less used for storing heating oil for consumptive use on the premises where stored;

- 2. An AST storing asphalt and asphalt compounds which are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute); and
- 3. Line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC §60101 et seq.).
- C. In addition to the exclusions listed in subsections A and B of this section, aAsphalt and asphalt compounds which are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute) are excluded for the purposes of from any requirement to install groundwater monitoring wells or groundwater protection devices or to conduct groundwater characterization studies under Part IV (9 VAC 25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) and Part V (9 VAC 25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter.

9 VAC 25-91-40. Compliance dates.

A. Every operator shall comply with this chapter on its effective date unless a later date is otherwise specified.

- B. Operators of facilities exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., facilities not engaged in the resale of oil) having an aboveground storage capacity of 25,000 gallons or greater of oil shall comply with Part III (9 VAC 25-91-130 et seq., Pollution Prevention Requirements) of this chapter on or before October 22, 1998within 120 days after the effective date of this chapter unless otherwise specified in this chapter. If compliance with Part III of this chapter necessitates extensive upgrades to the existing facility design, these exempted operators may submit a proposed extended compliance schedule and supporting explanation to the board no later than September 22, 199890 days after the effective date of this chapter. The board may approve an extended compliance schedule where the circumstances so warrant.
- C. Operators of existing ASTs and facilities previously registered in accordance with the requirements of §62.1-44.34:19.1 of the Code of Virginia shall not have to resubmit the registration form until five years from the date of the initial registration unless title to that AST or facility is transferred (i.e., change of ownership) or the AST is converted or brought back into use after permanent closure, whichever occurs first.
- D. Operators of facilities subject to Part IV (9 VAC 25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter that are brought into use after the effective date of this chapter shall submit a complete application meeting all applicable requirements of this chapter no later than 90 days prior to before commencement of operations.

- 1. The operator must receive <u>the department's approval</u> of the ODCP by DEQ prior <u>tobefore</u> commencement of facility operations.
- 2. The operators of facilities that <u>previously</u> have <u>previously metsatisfied</u> the provisions of §62.1-44.34:15 of the Code of Virginia for ODCP submittal shall not be required to resubmit the ODCP until 90 days <u>prior tobefore</u> the date that plan's approval expires. <u>No later than Nninety days prior tobefore</u> the expiration of approval of the ODCP, the facility operator shall submit an updated plan or certification of renewal of an existing plan according to 9 VAC 25-91-170 F.

E. As of July 1, 1997, an operator having obtained approval of the ODCP shall operate, maintain, monitor, and keep records pertaining to 9VAC25-91-170 A 18 of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter and under the provisions of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter.

9 VAC 25-91-50. Statement of purpose.

The purpose of this chapter is to: (i) establish requirements for registration of facilities and individual ASTs located within the Commonwealth; (ii) provide the board with the information necessary to identify and inventory facilities with an aggregate storage capacity of greater than 1,320 gallons of oil or individual ASTs with a storage capacity of

greater than 660 gallons of oil; (iii) develop standards and procedures for operators of facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil relating to the prevention of pollution from new and existing aboveground storage tanks; (iv) provide requirements for the development of facility oil discharge contingency plans for facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil that will ensure that the applicant can take such steps as are necessary to protect environmentally sensitive areas, to-respond to the threat of an oil discharge, and to contain, clean up and mitigate an oil discharge within the shortest feasible time and that the plans address, where plans must address concerns for the effect of oil discharges on the environment and as well as considerations of public health and safety; and (v) provide requirements for operators of facilities and individual ASTs with an aggregate aboveground storage capacity of one million gallons or greater of oil to conduct a groundwater characterization study (GCS) within the geographic boundaries of a facility; to submit the GCS as part of the oil discharge contingency plan; to conduct a-monthly gauging and inspection of GCS monitoring wells, monitoring of well headspace and sampling and laboratory analysis of GCS monitoring wells; and to gather all observations and data maintained at the facility and compile and submit them as an annual report to the board.

9 VAC 25-91-60. Administrative fees.

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A. Fees are assessed for review of oil discharge contingency plans-and for registration of

an AST or a facility according to the schedules contained in subsections B-and C of this

section. A registration form or a An application for review of a contingency plan-will not

be accepted unless must include the required fee. has been received by the department.

1. Fees shall be paid in United States currency by check, draft, or postal money order

made payable to the Treasurer of Virginia.

2. The fee, together with the form or plan, shall be sent to the department at the

following mailing address:

Department of Environmental Quality

Office of Financial Management

P.O. Box 10150

Richmond, VA 23240

3. Notifications and correspondence for which a fee is not applicable shouldshall be

mailed to the department as specified in 9 VAC 25-91-70.

B. Facility and AST registration.

1. Registration fees shall be submitted for the following: a. Initial registration; b. New installations; c. Conversion (i.e., UST to an AST, storing a nonoil to an oil product, etc.); d. AST brought back into use after permanent closure; e. Registration renewal (every five years); or f. When title to a facility or AST is transferred (change of ownership). 2. Registration fees are as follows: a. An individual AST (new, existing, replaced or brought back into use after permanent elosure = \$25;b. One facility with one AST = \$25; c. One facility with two or more ASTs = \$50;

- d. Two facilities with one AST at each facility = \$50;
- e. Two facilities with one AST at the first facility and two or more at the other = \$75;
- f. Two or more facilities with two or more ASTs each = \$100;
- g. Three facilities with one AST each = \$75; or
- h. Three facilities with two or more ASTs at the first facility and one AST at each other facility = \$100.
- 3. An operator of an AST subject to the registration requirements of this chapter shall submit a fee of \$25 to the board for each such AST up to a maximum of \$50 per facility. An operator of a single facility shall submit a maximum of \$50 for the facility and all ASTs. An operator of multiple facilities shall submit a maximum fee of \$100 to the board to register all of their facilities and ASTs.
- 4. Registration forms will not be accepted by the board as complete unless the applicable fee has been paid. No fee is required for a "notification" of an AST replacement (i.e., relocation of existing AST), upgrade, repair, or closure.
- **C**B. ODCP application.

- 1. ODCP application fees are as follows:
- a. For a facility with an aggregate aboveground maximum storage or handling capacity from 25,000 gallons up to and including 100,000 gallons of oil the fee is \$718;
- b. For a facility with an aggregate aboveground maximum storage or handling capacity from 100,001 gallons up to one million gallons of oil the fee is \$2,155;
- c. For a facility with an aggregate aboveground maximum storage or handling capacity of one million gallons or greater of oil the fee is \$3,353; or
- d. For a pipeline, the ODCP application fee shall be based on the average daily throughput of oil. Once that volume is determined, the ODCP application fee will be calculated per subdivisions a, b and c of this subdivision.
- 2. The fee for approval of a contingency plan encompassing more than one facility as described in 9 VAC 25-91-170 D shall be based on the aggregate aboveground storage capacity of the facilities.
- 3. Fees shall only be paid upon initial submittal of an oil discharge contingency plan by an operator. Renewals, additions, deletions, or changes to the plan are not subject to the administrative fee.

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4. Application fees are refundable upon receipt of a written request to withdraw the

ODCP application provided the request is received no later than 30 days after submittal

and prior to the department's review of the contingency plan.

5. Overpayments of application fees are refundable upon written request.

9 VAC 25-91-70. Notices to the Department of Environmental Quality (DEQ).

All written correspondence to the Department of Environmental Quality related to the requirements of this chapter, with the exceptions of (i) the correspondence which

contains fees and therefore must be paid directly to the Treasurer of Virginia as specified

in 9 VAC 25-91-60 A and (ii) variance petitions as specified in 9 VAC 25-91-160 shall

be addressed to the cognizant-DEQ regional office servicing the facility that is the subject

of the correspondence. A list of regional offices and their addresses are available from

the central office at the following address:

Mailing Address:

Department of Environmental Quality

Office of Spill Response and Remediation

P.O. Box 10009 Richmond, VA 23240-0009 Street Address: Department of Environmental Quality Office of Spill Response and Remediation 629 E. Main Street Richmond, VA 23219 9 VAC 25-91-80. Delegation of authority. The executive director, or his designee, may perform any act of the board under this chapter, except as limited by §62.1-44.14 of the Code of Virginia.

9 VAC 25-91-90. Evaluation of chapter.

A. Within three years after the effective date of this chapter, the department shall perform an analysis on this chapter and provide the board with a report on the results. The analysis shall include (i) the purpose and need for the chapter; (ii) alternatives which would achieve the stated purpose of this chapter in a less burdensome and less intrusive manner; (iii) an assessment of the effectiveness of this chapter; (iv) the results of a review of current state and federal statutory and regulatory requirements, including identification and justification of requirements of this chapter which are more stringent than federal requirements; and (v) the results of a review as to whether this chapter is clearly written and easily understandable by affected entities.

B. Upon review of the department's analysis, the board shall confirm the need to (i) continue this chapter without amendments, (ii) repeal this chapter or (iii) amend this chapter. If the board's decision is to repeal or amend this chapter, the board shall authorize the department to initiate the applicable regulatory process to carry out the decision of the board.

9 VAC 25-91-100. Registration requirements.

A. Section 62.1-44.34:19.1 of the Code of Virginia requires an operator of a facility located within the Commonwealth with an aggregate aboveground storage capacity of more than 1,320 gallons of oil or an oOperators of an individual ASTs located within the

Commonwealth with a storage capacity of more than 660 gallons of oil toshall register such the facility-or and ASTs with the board and with the local director or coordinator of emergency services unless otherwise specified within this chapter.

- B. Although the term "operator" includes a variety of persons who may share joint responsibility for compliance with this chapter, in fixing responsibility for compliance with the registration requirements, DEQ-the department shall look first to the operator who is the owner. or a duly authorized representative of the facility or AST.
- C. A duly authorized representative may submit the registration on the owner's behalf.
- 1. A person is a duly authorized representative only if:
- a. The authorization is made in writing by the owner and indicates that the representative has signatory authority for the registration;
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity (e.g., the plant manager, the operator of a facility or an AST, the superintendent, or a position of equivalent responsibility), or specifies an individual or a position having overall responsibility for environmental matters for the facility or company. A duly authorized representative thus may be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department along with the registration form.

2. Changes to authorization. If an authorization previously submitted is no longer accurate because a different individual or position has assumed responsibility for the overall operation of the facility or for environmental matters, a new authorization satisfying the requirements shall be submitted to the department prior to or together with any reports or information signed by that duly authorized representative.

3 Certification. Any person signing a registration document shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

D. The <u>operator who is the</u> owner-or a duly authorized representative of a new facility or AST, a <u>converted facility or AST</u>, or a facility or AST brought back into use after

permanent closure shall register such facility or AST with the board and local director or coordinator of emergency services within 30 days after being brought into use.

- E. Registration shall include the following information and other information that may be required if approved by the board:
- 1. Facility and AST owner and operator information (e.g., name, address, and phone numbers);
- 2. Facility information (e.g., name, type, address, contact person and phone numbers, and aggregate storage capacity);
- 3. Tank and piping information (e.g., storage capacity, product stored, type of design and construction standards); and
- 4. Other information that may be reasonably requested by the board; and
- 5. Owner certification of information.
- F. The <u>operator who is the owner or a duly authorized representative</u> of the facility or AST shall renew the registration required by this section every five years or whenever title to the facility or AST is transferred (change of ownership), whichever occurs first.

G. The operator who is the owner of Aa facility or AST installed after the effective date of this chapter, including an AST or facility operated by the federal government, shall submit with its registration of the registered without either (i) a review by the department of the permits, records of inspections, and certification of use required in accordance with the provisions of the Uniform Statewide Building Code and its referenced model codes and standards., the BOCA%2F National Building Code and NFPA Code and obtained by the owner or a duly authorized representative from the local code officials or their designee or (ii) an inspection by the department. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with §36-98.1 of the Code of Virginia

9 VAC 25-91-110. Notifications.

A. An The operator who is the owner or a duly authorized representative of the facility or AST shall notify the board within 30 days after any AST:

- 1. Upgrade;
- 2. Major repair;
- 3. Alteration;

34. Retrofit,

- 5. Relocation placement (i.e., relocating or repositioning of an existing AST); or;
- 4.6. Change in service; or (i.e., change in operation, conditions of the stored product, specific gravity, corrosivity, temperature or pressure that has occurred from the original that may affect the tank's suitability for service).

7. Closure.

- B. Notifications do not require a fee. The operator who is the owner shall submit with the notification copies of the permits and records of inspection required in accordance with the provisions of the Uniform Statewide Building Code and its referenced model codes and standards.
- 9 VAC 25-91-120. Aboveground storage tank closure.
- A. Where a permit is not issued by the local building official or his designee for the closure or relocation of a facility or AST, the operator who is the owner shall provide After the effective date of this chapter, a facility or AST, including a facility or AST operated by the federal government, shall not be permanently closed without being registered and the fee paid and either (i) having a review performed by the department of

the permits and inspections required in accordance with the provisions of the Uniform

Statewide Building Code, the BOCA %2F National Building Code, and NFPA Code

obtained by the owner or a duly authorized representative from the local code official or

his designee or (ii) being inspected by the department.

- 1. For inspections by the department (e.g., where a permit is not issued by the local code official or his designee), at least 14 days notice to the department is required prior tobefore the commencement of closure or relocation operations. Notice shall be made by the owner or a duly authorized representative.
- <u>1</u>2. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with §36-98.1 of the Code of Virginia.
- <u>23</u>. If the closure is in response to containment and cleanup actions that necessitate AST removal, the <u>operator who is the</u> owner-or a duly authorized representative of the facility or AST shall immediately notify the local code official and the department.
- B. Closure operations shall be reported to the department by the owner or a duly authorized representative within 30 days after the permanent closure operation is completed.

C. To close an AST or a facility, the operator who is the owner shall perform all activities contained in this section B. To relocate an AST, the operator who is the owner shall perform the activities contained in subsections 1, 3 and 4 of this section B. Closure operations shall include the following:

- 1. Removeal of all liquids, sludges, and vapors from the AST and associated piping and dispose of Aall wastes removed shall be disposed of in accordance with all applicable state and federal requirements.
- 2. For tanks being closed in place, the tank shall be rRendered all tanks being closed in place vapor free: and Provisions must be made provide for adequate ventilation to ensure that the tank remains vapor free: ensure that Vyent lines shall remain open and are maintained in accordance with the applicable codes; . All secure all access openings shall be secured (normally with spacers to assist ventilation); escure Tthe AST-shall be secured against tampering and flooding; stencil in a readily visible location on the AST Tthe name of the product last stored, the date of permanent closure and the words "PERMANENTLY CLOSED"; shall be stenciled in a readily visible location on the AST, disconnect all Ppiping-shall be disconnected; and ensure that A all pipes being closed in place shall be are vapor free and capped or blind flanged.
- 3. An assessment of Assess the AST site shall be conducted prior to before completion of permanent closure operations.

- a. In conducting the assessment, the <u>operator who is the</u> owner or a duly authorized representative shall sample and test for the presence of petroleum hydrocarbons at the AST site in any area where contamination is likely to have occurred. These locations shall be subject to the <u>reviewapproval</u> of the board. Sampling and testing shall be conducted in accordance with established EPA-approved analytical methods or other methods approved by the board.
- (1) The <u>operator who is the</u> owner-or a duly authorized representative shall submit copies of the laboratory results, a description of the area sampled, a photograph of the site indicating sampled areas, and a site map indicating the location of the closed AST and associated piping as attachments to the closure form.
- (2) If contaminated soils, contaminated groundwater, free product as a liquid or vapor, or other evidence of a release is discovered, the <u>operator who is the</u> owner-or a duly authorized representative shall immediately notify the board and conduct the cleanup in accordance with department requirements.
- b. The department may consider an alternative to the soil sampling requirements of this subsection if the <u>operator who is the</u> owner or a duly authorized representative of the AST demonstrates to the board's satisfaction that:
- (1) There is no evidence of present or past contamination by providing records of monthly leak detection monitoring for the previous 12 months; and

- (2) The facility or AST has operated an approved leak detection system.
- 4. Obtain Aan elosure inspection conducted by either the department or the local building official, as discussed in subsection A of this section.
- <u>DC</u>. When deemed necessary by the board, the <u>operator who is the owner-or a duly</u> authorized representative of a facility or an AST that was permanently closed prior to the effective date of this chapter shall assess the site and close the AST in accordance with the requirements of this section.
- <u>ED</u>. The <u>operator who is the owner-or a duly authorized representative</u> shall maintain all records relating to compliance with this section for a period of not less than five years from the date the board receives notice of the completed closure. These records and shall be mademake these records available to the board upon request.
- 9 VAC 25-91-130. Pollution prevention standards and procedures.
- A. Section 62.1-44.34:15.1 of the Code of Virginia provides the following requirements for existing This subsection applies to above ground storage tanks at a facility with an aggregate above ground storage capacity of one million gallons or greater of oil or for an

existing individual aboveground storage tank with a storage capacity of one million gallons or greater of oil, unless otherwise exempted.

- 1. Inventory control and testing for significant variations.
- a. The following aboveground storage tanks shall not be subject to inventory control and testing for significant variations:
- (1) Aboveground storage tanks totally off ground with all associated piping off ground;
- (2) Aboveground storage tanks with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil; and
- (3) Aboveground storage tanks containing No. 5 or No. 6 oil for consumption on the premises where stored.
- b. Each operator shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1.0% of the storage capacity of each individual AST. For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output. Reconciliations of inventory measurements shall be conducted monthly for each AST. If thea significant variation persists for two consecutive reconciliation periods, the operator shall conduct an

physical measurements to 60°F at 14.7 pounds per square inch absolute. The operator shall complete this investigation shall be completed within five working days of the end of the second reconciliation period. If this investigation does not reveal the cause of the inventory variation, the operator shall notify the board and the local director or coordinator of emergency services and shall conduct additional testing to determine the cause of the inventory variation. The operator shall submit the testing method, schedule, and results of this additional testing shall be submitted to the board for review.

- c. The operator shall keep Finventory records shall be kept of incoming and outgoing volumes of oil from each tank. The operator All tanks shall be gauged all tanks no less frequently than once every 14 days and on each day of normal operation. Physical measurements shall be reconciled to 60°F at 14.7 pounds per square inch absolute.
- 2. Formal inspections.
- a. The operator shall perform Each AST shall undergo-formal external and internal tank inspections for each AST. The operator shall complete initial formal internal and external inspections for an existing AST-shall be completed on or before June 30, 1998, unless otherwise specified within this chapter.
- (1) The operator shall perform the initial formal inspection of Aall newly installed ASTs shall have initial formal inspections within five years after the date of installation.

- (2) Operators of facilities exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall complete the initial formal inspections on or before June 24, 2003 within five years of the effective date of this chapter.
- (3) An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal inspection unless the integrity of the AST is in question and the board deems an inspection is deemed necessary by the board.
- b. The operator shall conduct Finspections shall be conducted in accordance with the provisions of API Standard 653 or another procedure approved by the board. If construction practices allow external access to the tank bottom, the operator may perform a formal external inspection utilizingusing accepted methods of nondestructive testing or another procedure approved by the board may be allowed in lieu of the internal inspection. The operator shall internally inspect Aan AST with a release prevention barrier or liner installed shall be internally inspected in accordance with the applicable provisions of API Standard 653 or API Recommended Practice 652 or another procedure accepted by the board.
- c. The operator shall promptly remedy unsatisfactory facility and equipment conditions observed in the inspection. The operator shall make repairs, alterations, and retrofits in

accordance with the findings of the API 653 inspections, industry standards, and methods approved by the board.

- d.e. The board may accept Aan API Standard 653 inspection conducted between January 1, 1991, and the effective date of this chapter may be accepted by the board if the operator provides supporting documentation to the board for review and approval.
- 3. Formal reinspections.
- a. <u>The operator shall perform an external reinspection of Ee</u>ach AST-shall undergo an external reinspection every five years in accordance with the provisions of API Standard 653 every five years after the initial formal external inspection has been conducted.
- b. The operator shall perform an internal reinspection of Eeach AST with a storage capacity of 12,000 gallons of oil or greater shall undergo an internal reinspection in accordance with the provisions of API Standard 653 every 10ten years after the initial formal internal inspection has been conducted.
- (1) The board may require the internal reinspection sooner than 10-ten years if there is an indication that the corrosion rate established by the initial internal inspection or a subsequent reinspection has increased.

- (2) The <u>board may extend the internal reinspection period may be extended beyond</u>

 10 ten years if the operator can demonstrate to the board that an extension of the reinspection period is warranted. The operator shall provide supporting documentation to the board for review and approval at least six months prior to the date the reinspection is due.
- c. An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal reinspection unless the integrity of the AST is in question and the board deems an inspection is deemed necessary by the board.
- d. The operator shall promptly remedy unsatisfactory facility and equipment conditions observed in the inspection. The operator shall make repairs, alterations, and retrofits in accordance with the findings of the API 653 inspections, industry standards, and methods approved by the board.
- 4. Secondary containment.
- a. Each AST shall have secondary containment or another method approved by the board to contain a discharge of oil for detection and cleanup. Each secondary containment dike or berm or approved method shall be maintained, and evaluated, or and certified with respect to its be in compliance with the applicable requirements of 40 CFR Part 112 (1997), NFPA 30the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106.

- <u>b.</u> The operator shall have this evaluation <u>or and</u> certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted.
- c. If secondary containment cannot be certified to be in compliance, the containment must be upgraded, repaired, or replaced to meet the applicable requirements listed in paragraph a of this subsection.
- d. The operator shall have the evaluation and certification performed on or before June 30, 1998 and every 10 years thereafter, unless otherwise exempted, by a professional engineer (PE) licensed in the Commonwealth of Virginia or other state having reciprocity with Virginia or by a person approved by the board.
- e. At a minimum, the certification statement for the secondary containment must contain the PE's signature, seal, and the following "Based on my evaluation, I certify that each secondary containment structure is in compliance with the applicable requirements of 40 CFR 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106."
- <u>fa</u>. Operators of facilities exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have this evaluation completed

on or before June 24, 2003 within five years after the effective date of this chapter and every 10 years thereafter.

- gb. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter.
- 5. Safe fill and shutdown procedures.
- a. Each operator shall institute <u>and keep records of safe fill</u>, shutdown and transfer procedures, or equivalent measures <u>the board establisheds</u>, that will ensure that spills resulting from tank overfills or other product transfer operations do not occur.
- (1) All receipts of oil shall be authorized by the operator or facility personnel trained by the operator who-shall ensure the volume available in the tank is greater than the volume of oil to be transferred to the tank before the transfer operation commences. The operator shall ensure the transfer operation is monitored continually, either by manual or automatic means, until complete and shall keep records of each transfer, documenting the volume available in the tank, the volume to be transferred, the signature of the personnel monitoring the transfer and the date of the transfer. The operator shall ensure that all tank fill valves not in use are secured and that only the tank designated is receiving oil.
- (2) If <u>an AST is</u> unattended during transfer operations, the <u>operator shall equip the AST shall be equipped</u> with a high level alarm or other appropriate mechanism approved by

the board that will immediately alert the operator to prevent an overfill event. _Activation of the high level alarm or other appropriate mechanism shall initiate an immediate and controlled emergency shutdown of the transfer, either by manual or automatic means. Each operator shall include this emergency shutdown procedure in the facility records and shall ensure that all facility personnel involved in the transfer operation are trained in this procedure. _The alarm shall consist of a visual and audible device capable of alerting the operator, both by sight and hearing, to prevent an overfill-situation. _If the operator is in a control station, this alarm shall cause a warning light and audible signal in that station to activate. _In addition, this system shall alarm on failure, malfunction, or power loss._ _The operator shall test _Tthis high level alarm-shall be tested prior to each receipt of oil. _The operator shall maintain Rrecords of this testing-shall be maintained at the facility.

- b. The operator shall equip Aall oil transfer areas where filling connections are made with vehicles shall be equipped with a spill containment system capable of containing and collecting those spills and overfills. The containment system shall be designed to hold at least the capacity as required by 40 CFR Part 112 (1997) (e.g., the maximum capacity of any single compartment of a vehicle loaded or unloaded in the transfer area).
- c. If installed, an automatic shutdown system <u>utilizedused</u> during transfers of oil shall include the capability to direct the flow of oil to another tank capable of receiving the transferred oil or the capability to shut down the pumping or transfer system. The

operator shall test <u>Tt</u>his automatic shutdown system <u>shall be tested prior to before</u> each receipt of oil and <u>maintain records</u> of testing <u>shall be maintained</u> at the facility.

- d. The operator shall equip Aall ASTs shall be equipped with a gauge that is readily visible and indicates the level of oil or quantity of oil in the tank. In addition, the operator must mark the storage capacity, product stored and tank identification number shall be clearly marked on the tank at the location of the gauge. The operator shall calibrate Tthese gauges shall be calibrated annually.
- 6. Cathodic protection of piping and pressure testing of piping.
- a. The requirement for cathodic protection of piping shall apply to buried piping only.

 The operator shall install and maintain Ccathodic protection shall be installed and maintained in accordance with the following applicable publications: API 1632, NFPA 30the Uniform Statewide Building Code and its referenced model codes and standards, NACE 0169, or NACE 0285. The operator shall protect Aall piping above ground shall be protected from corrosion using methods and procedures referenced in NFPA 30the

 Uniform Statewide Building Code and its referenced model codes and standards, Chapter 2, Section 2-4.3 or a procedure the board approvesd by the board. The operator shall protect Ppiping that passes through the wall of the containment berm or dike or under road crossings shall be protected from corrosion and damage using practices recommended in the publications listed in this subdivision.

- b. The operator shall pressure test Aall piping shall be pressure tested as specified in this subsection or using an equivalent method or measure the board approvesd by the board at intervals not to exceed five years. The operator of an existing facility or AST shall complete the initial test on or before June 30, 1998, except operators of existing facilities or ASTs for which compliance was exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil). These excepted operators shall complete the initial test on or before June 24, 2003 within five years after the effective date of this chapter. The operator shall test Aall newly installed or repaired piping shall be tested before being placinged it into service.
- (1) A pressure test may be a hydrostatic test at 150% maximum allowable working pressure (MAWP) or an inert gas test at 110% MAWP.
- (2) A test conducted and certified by an API authorized piping inspector to be in conformity with the API 570 Piping Inspection Code is deemed an equivalent method of testing approved by the board.
- (3) The board may consider on a case-by-case basis requests for approval of other equivalent methods or measures_which that conform to industry recommended practices, standards and codes. The operator shall submit a request for approval of a proposed equivalent method or measure to the board as specified in 9 VAC 25-91-160.
- 7. Visual daily inspection and weekly inspections.

- a. The operator or a duly authorized representative shall conduct a daily visual inspection foron each day of in which normal operation occurs, but no less frequently than once every fourteen days, in the areas of the facility where this chapter applies. The facility personnel conducting the inspection shall document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection shall include the following:
- (1) A complete walk-through of the facility property in the areas where this chapter applies to ensure that no hazardous conditions exist;
- (2) An inspection of ground surface for signs of leakage, spillage, or stained or discolored soils;
- (3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;
- (4) A visual inspection of the exterior tank shell to look for signs of leakage or damage; and
- (5) An evaluation of the condition of the aboveground storage tank and appurtenances.

- b. The operator or a duly authorized representative shall conduct a weekly inspection each week in which normal operation occurs, but no less frequently than once every fourteen days, of the facility in the areas where this chapter applies, using a checklist that contains at least the items found in the weekly inspection checklist subdivision of this section. The checklist is not inclusive of all safety or maintenance procedures but is intended to provide guidance toon the requirements within this chapter. The operator shall maintain the weekly checklist shall be maintained at the facility and provided it to the board upon request. The facility personnel conducting the inspection shall sign and date Tthis checklist, shall be signed and dated by the facility person or persons conducting the inspection and the checklist shall become part of the facility record.
- (1) The operator of a new AST/facility shall develop the checklist within 90 days after the date of installation.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall develop the checklist on or before September 22, 1998. within 90 days after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a checklist within 90 days after June 30, 1993, shall be deemed to be in compliance with this checklist requirement as of the effective date of this chapter.

c. Sample—At a minimum, the operator shall include the following items in the weekl	y
inspection checklist for aboveground storage tank systems:	
(1) Containment dike or berm in satisfactory condition.	
(2) Containment area free of excess standing water or oil.	
(3) Gate valves used for emptying containment areas secured.	
(4) Containment area/base of tank free of high grass, weeds, and debris.	
(5) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, are foundation, visually inspected for areas of rust and other deterioration.	nd
(6) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage.	
(7) Leak detection equipment in satisfactory condition.	
(8) Separator or drainage tank in satisfactory condition.	
(9) Tank water bottom drawoffs not in use are secured.	

(10) Tank fill valves not in use are secur	ed.			
(11) Valves inspected for signs of leakage	ge or deterioration.			
(12) Inlet and outlet piping and flanges i	nspected for leakage.			
(13) All tank gauges have been inspected	d and are operational.			
Signature of Inspector	Date	Time		
d. The operator shall promptly remedy unsatis	factory facility and ed	quipment conditions		
observed in the daily and weekly inspections. The operator shall make repairs,				
alterations and retrofits in accordance with API 653, industry standards, and methods				
approved by the board.				
8. Training of individuals. To ensure proper tinspections required by subdivision 7 of this su				
train personnel based on the following requires	•	Ž		

a. Each facility operator shall establish a training program for those facility personnel

conducting the daily visual and weekly inspections of the facility. Facility records shall

contain the basic information and procedures required by subdivision 8 c of this subsection. The operator or a third party may conduct the required training may be conducted by the operator or by a third party. The operator shall maintain the training program established shall be maintained to reflect current conditions of the facility.

- (1) The operator of a new facility shall establish the training program within six months after being broughtbringing the facility into use.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall establish the training program on or before December 24, 1998 within six months after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a training program within six months after June 30, 1993, shall be deemed to be in compliance with this training program requirement as of the effective date of this chapter, so long asprovided that program reflects current conditions of the facility.
- b. The <u>operator shall conduct</u> required training shall be conducted for facility personnel as applicable. Personnel not receiving this initial training and who will be conducting these inspections shall receive the training prior to conducting any inspection.

- (1) The operator of a new facility shall conduct the personnel training within 12 months after being brought of bringing the facility into use and prior to before personnel conducting any inspection.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall conduct the personnel training on or before June 24, 1999. within 12 months after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have conducted the personnel training within 12 months after June 30, 1993, shall be deemed to be in compliance with this personnel training requirement as of the effective date of this chapter, so long asprovided that the training provided reflects current conditions of the facility and all inspections are current.
- c. Training for personnel performing daily and weekly inspections shall address at a minimum:
- (1) <u>Basic iInformation regarding occupational safety</u>, hazard recognition, personnel protection, and facility operations;

- (2) The procedures to be followed in conducting the daily visual and weekly facility inspections;
- (3) The procedures to be followed upon recognition of a hazard or the potential for a hazard; and
- (4) The procedure for evaluating the condition of the aboveground storage tank and appurtenances.
- d. The operator of a facility shall train facility personnel upon any changes to the contents of the initial training program or every three years, whichever occurs first, and shall document this training in the facility records.
- e. Only a person certified to conduct the inspection or test shall conduct_All formal inspections and testing required by subdivision 2 of this subsection shall be conducted by a person certified to conduct the inspection or test. This certification shall be accomplished in accordance with the provisions of API Standard 650 and API Standard 653 or a procedure approved by the board. The operator shall maintain Pproof of this certification shall be maintained in the facility records. The operator shall maintain Tthe results of all tests and inspections required by subdivision 2 of this subsection shall be maintained at the facility or at another location the board approvesd by the board for the life of the tank, but for no less thanor five years from the installation of the tank, whichever is longer.

- 9. Leak detection. The operator shall operate, maintain, monitor and keep records of the system established for early detection of a discharge to groundwater (i.e., a method of leak detection) as required by 9 VAC 25-91-170 A 18 and contained in the facility's approved ODCP. These activities shall be inspected and approved by the department.
- B. Section 62.1-44.34:15.1 of the Code of Virginia provides the following requirements for existing This subsection applies to above ground storage tanks at facilities with an aggregate above ground storage capacity of less than one million gallons but equal to or more than 25,000 gallons of oil or for an existing individual above ground storage tank with a storage capacity of less than one million but equal to or more than 25,000 gallons of oil, unless otherwise exempted.
- 1. Inventory control and testing for significant variations.
- a. The following aboveground storage tanks shall not be subject to inventory control and testing for significant variations:
- (1) Aboveground storage tanks totally off ground with all associated piping off ground;
- (2) Aboveground storage tanks with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil; and

- (3) Aboveground storage tanks containing No. 5 or No. 6 oil for consumption on the premises where stored.
- b. Each operator shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1.0% of the storage capacity of each individual AST. For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output. Reconciliations of inventory measurements shall be conducted monthly for each AST. If thea significant variation persists for two consecutive reconciliation periods, the operator shall conduct an investigation to determine the cause of the variation. The operator shall reconcile physical measurements to 60°F at 14.7 pounds per square inch absolute. The operator shall complete this investigation shall be completed within five working days of the end of the second reconciliation period. If this investigation does not reveal the cause of the inventory variation, the operator shall notify the board and the local director or coordinator of emergency services and shall conduct additional testing to determine the cause for the inventory variation. The operator shall submit the testing method, schedule, and results of this additional testing shall be submitted to the board for review.
- c. The operator shall keep Finventory records shall be kept of incoming and outgoing volumes of oil from each tank. The operator All tanks shall be gauged all tanks no less frequently than once every 14 days and on each day of normal operation. Physical measurements shall be reconciled to 60°F at 14.7 pounds per square inch absolute.

- 2. Secondary containment.
- a. Each AST shall have secondary containment or another method approved by the board to contain a discharge of oil for detection and cleanup. Each secondary containment dike or berm or approved method shall be maintained, and evaluated, or certified to be in compliance with the applicable requirements of 40 CFR Part 112 (1997), NFPA 30the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR Part 1910.106.
- <u>b.</u> The operator shall have this evaluation <u>orand</u> certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted.
- c. If secondary containment cannot be certified to be in compliance, the containment must be upgraded, repaired, or replaced to meet the applicable requirements listed in paragraph a of this subsection.
- d. The operator shall have the evaluation and certification performed on or before June 30, 1998 and every 10 years thereafter, unless otherwise exempted, by a professional engineer (PE) licensed in the Commonwealth of Virginia or other state having reciprocity with Virginia or by a person approved by the board.

- e. At a minimum, the certification statement for the secondary containment must contain the PE's signature, seal, and the following "Based on my evaluation, I certify that each secondary containment structure is in compliance with the applicable requirements of 40 CFR 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106."
- <u>f.a.</u> Operators of facilities exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have this evaluation completed <u>on or before June 24, 2003, within five years after the effective date of this ehapter</u> and every 10 years thereafter.
- gb. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter.
- 3. Safe fill and shutdown procedures.
- a. Each operator shall institute <u>and keep records of safe fill</u>, shutdown and transfer procedures, or equivalent measures <u>the board</u> establisheds <u>by the board</u>, that will ensure that spills resulting from tank overfills or other product transfer operations do not occur. All receipts of oil shall be authorized by tThe operator or facility personnel trained by the operator who shall ensure the volume available in the tank is greater than the volume of oil to be transferred to the AST before the transfer operation commences. The operator shall ensure the transfer operation is monitored continually, either by manual or

automatic means, until complete and shall keep records of each transfer, documenting the volume available in the tank, the volume to be transferred, the signature of the personnel monitoring the transfer and the date of the transfer. The operator shall ensure that all tank fill valves not in use are secured and that only the tank designated is receiving oil.

- b. The operator shall equip Aall oil transfer areas where filling connections are made with vehicles shall be equipped with a spill containment system capable of containing and collecting those spills and overfills. The containment system shall be designed to hold at least the capacity as required by 40 CFR Part 112 (1997) (e.g., the maximum capacity of any single compartment of a vehicle loaded or unloaded in the transfer area).
- c. If installed, an automatic shutdown system <u>utilizedused</u> during transfers of oil shall include the capability to direct the flow of oil to another tank capable of receiving the transferred oil or the capability to shut down the pumping or transfer system. The <u>operator shall test Tthis automatic shutdown system shall be tested prior tobefore</u> each receipt of oil and maintain records of testing shall be maintained at the facility.
- d. The operator shall equip Aall ASTs shall be equipped with a gauge that is readily visible and indicates the level of oil or quantity of oil in the tank. In addition, the operator must mark the storage capacity, product stored and tank identification numbershall be clearly marked on the tank at the location of the gauge. The operator shall calibrate Tthese gauges shall be calibrated annually.

4. Pressure testing of piping.

The operator shall pressure test Aall piping-shall be pressure tested as specified in this subsection or using an equivalent method or measure the board approvesd by the board at intervals not to exceed five years. The operator of an existing facility or AST shall complete the initial test on or before June 30, 1998, except operators of existing facilities or ASTs for which compliance was exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil). These excepted operators shall complete the initial test on or before June 24, 2003 within five years after the effective date of this chapter. The operator shall test Aall newly installed or repaired piping shall be tested before being placinged it into service.

- a. A pressure test may be a hydrostatic test at 150% maximum allowable working pressure (MAWP) or an inert gas test at 110% MAWP.
- b. A test conducted and certified by an API authorized piping inspector to be in conformity with the API 570 Piping Inspection Code is deemed an equivalent method of testing approved by the board.
- c. The board may consider on a case-by-case basis requests for approval of other equivalent methods or measures which that conform to industry recommended practices, standards and codes. The operator shall submit a request for approval of a proposed equivalent method or measure to the board as specified in 9 VAC 25-91-160.

- 5. Visual daily inspection and weekly inspections.
- a. The operator or a duly authorized representative shall conduct a daily visual inspection foron each day of in which normal operation occurs, but no less frequently than once every fourteen days, in the areas of the facility where this chapter applies. The facility personnel conducting the inspection shall document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection shall include the following:
- (1) A complete walk-through of the facility property in the areas where this chapter applies to ensure that no hazardous conditions exist;
- (2) An inspection of the ground surface for signs of leakage, spillage, or stained or discolored soils;
- (3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;
- (4) A visual inspection of the exterior tank shell to look for signs of leakage or damage; and
- (5) An evaluation of the condition of the aboveground storage tank and appurtenances.

- b. The operator-or a duly authorized representative-shall conduct a weekly inspection each week in which normal operation occurs, but no less frequently than once every fourteen days, of the facility in the areas where this chapter applies, using a checklist which contains at least the items found in the weekly inspection checklist subdivision of this section. The checklist is not inclusive of all safety or maintenance procedures but is intended to provide guidance to the requirements within this chapter. The operator shall maintain the weekly checklist-shall be maintained at the facility and provided it to the board upon request. The facility personnel conducting the inspection shall sign and date Tthis checklist, shall be signed and dated by the facility person or persons conducting the inspection and the checklist shall become part of the facility record.
- (1) The operator of a new AST/facility shall develop the checklist within 90 days after the date of installation.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall develop the checklist on or before September 22, 1998 within 90 days after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a

checklist within 90 days after June 30, 1993, shall be deemed to be in compliance with this checklist requirement as of the effective date of this chapter.

c. Sample—At a minimum, the operator shall include the following items in the weekly
inspection checklist for aboveground storage tank systems:
(1) Containment dike or berm in satisfactory condition.
(2) Containment area free of excess standing water or oil.
(3) Gate valves used for emptying containment areas secured.
(4) Containment area/base of tank free of high grass, weeds, and debris.
(5) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, and foundation, visually inspected for areas of rust and other deterioration.
(6) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage.
(7) Leak detection equipment in satisfactory condition.
(8) Separator or drainage tank in satisfactory condition.

	_(9) Tank water bottom drawoffs not in u	ise are secure	ed.	
	_(10) Tank fill valves not in use are secur	red.		
	_(11) Valves inspected for signs of leaka	ge or deterion	ration.	
	_(12) Inlet and outlet piping and flanges	inspected for	leakage.	
	_(13) All tank gauges have been inspecte	d and are ope	erational.	
	Signature of Inspector	Date	Т	Time
<u>d.</u> ′	The operator shall promptly remedy unsatis	sfactory facil	ity and equ	ipment conditions
obs	erved in the daily and weekly inspections.	The operator	shall mak	e repairs,
alte	rations and retrofits in accordance with AF	PI 653, indust	ry standard	ls, and methods
<u>app</u>	roved by the board.			

6. Training of individuals. _To ensure proper training of individuals conducting

train personnel based on the following requirements:

inspections required by subdivision 5 of this subsection, the operator of a facility shall

- a. Each facility operator shall establish a training program for those facility personnel conducting the daily visual and weekly inspections of the facility. Facility records shall contain the basic information and procedures required by subdivision 6 c of this subsection. The operator or a third party may conduct the required training may be conducted by the operator or by a third party. The operator shall maintain the training program established shall be maintained to reflect current conditions of the facility.
- (1) The operator of a new facility shall establish the training program within six months after being broughtbringing the facility into use.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall establish the training program on or before December 24, 1998 within six months after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a training program within six months after June 30, 1993, shall be deemed to be in compliance with this training program requirement as of the effective date of this chapter, so long asprovided that program reflects current conditions of the facility.

- b. The <u>operator shall conduct</u> required training <u>shall be conducted</u> for facility personnel as applicable. Personnel not receiving this initial training and who will be conducting these inspections shall receive the training prior to conducting any inspection.
- (1) The operator of a new facility shall conduct the personnel training within 12 months after being brought of bringing the facility into use and prior to before personnel conducting any inspection.
- (2) The operator of each facility exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall conduct the personnel training on or before June 24, 1999within 12 months after the effective date of this chapter.
- (3) Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have conducted the personnel training within 12 months after June 30, 1993, shall be deemed to be in compliance with this personnel training requirement as of the effective date of this chapter, so long as provided that the training provided reflects current conditions of the facility and all inspections are current.
- c. Training for personnel performing daily and weekly inspections shall address at a minimum:

- (1) Basic iInformation regarding occupational safety, hazard recognition, personnel protection, and facility operations;
- (2) The procedures to be followed in conducting the daily visual and weekly facility inspections;
- (3) The procedures to be followed upon recognition of a hazard or the potential for a hazard; and
- (4) The procedure for evaluating the condition of the aboveground storage tanks and appurtenances.
- d. The operator of a facility shall train facility personnel upon any changes to the contents of the initial training program or every three years, whichever occurs first, and shall document this training in the facility records.
- 7. Leak detection. The operator shall operate, maintain, monitor and keep records of the system established for early detection of a discharge to groundwater (i.e., a method of leak detection) as required by 9 VAC 25-91-170 A 18 and contained in the facility's approved ODCP. These activities shall be inspected and approved by the department.

9 VAC 25-91-140. Performance standards for aboveground storage tanks newly installed, retrofitted, <u>relocated</u>, or brought into use.

A. All ASTs shall be built in accordance with the applicable design standards adopted by Underwriters Laboratories, the American Petroleum Institute, the Steel Tank Institute or other standard the board approvesd by the board.

B. All ASTs shall be strength tested before being placed in use in accordance with the applicable code or standard under which they were built.

C. ASTs that have the tank bottom in direct contact with the soil shall have a determination made by a corrosion professional as to the type and degree of corrosion protection needed to ensure the integrity of the tank system during the use of the tank. If a survey indicates the need for corrosion protection for the new installation, the operator shall install corrosion protection-shall be provided.

D. ASTs installed after the effective date of this chapter shall have a release prevention barrier (RPB) installed either under or in the bottom of the tank. The RPB shall be capable of: (i) preventing the release of the oil and (ii) containing or channeling the oil for leak detection.

E. 1. Retrofitted ASTs

Existing ASTs that are retrofitted (reconstruction or bottom replacement) or brought back into use shall be brought into compliance with subsections A, B, C, and D of this section. The operator shall submit a schedule to the board of the work to be performed in order to bring the existing AST into compliance with new-built construction standards. The operator shall submit Tthis compliance schedule-shall be submitted to the board no less than six months prior to before the anticipated completion date.

2. Relocated ASTs

ASTs that are relocated shall be brought into compliance with subsections B, C, and D of this section. The operator shall conduct an assessment of the AST site before placing the AST into use.

- F. Operators of ASTs installed, retrofitted (reconstruction or bottom replacement) or brought back into use shall also comply with 9 VAC 25-91-130 A or 9 VAC 25-91-130 B, whichever is applicable.
- G. All newly installed ASTs shall be constructed and installed in a manner consistent with the applicable standards and requirements found in the Uniform Statewide Building Code and its referenced model codes and standards NFPA 30 and the BOCA Pational Building Code or other standards the board approvesd by the board. The operator shall obtain Aapproval and any applicable permits shall be obtained from the local building official before construction starts.

- H. Compliance dates for subsections A through G of this section.
- 1. Operators of a newly installed, retrofitted or brought-back-into-use facility or AST shall comply with the requirements of this section within 30 days prior to before the facility or AST is being placed into service.
- 2. Operators of facilities exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall comply with these requirements on or before October 22, 1998within 120 days of the effective date of this chapter.
- 3. Operators of facilities not exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have met these requirements on or before June 30, 1993, shall be deemed to be in compliance with these requirements as of the effective date of this chapter.
- 9 VAC 25-91-150. Recordkeeping and access to facilities.
- A. Each operator of a facility subject to this chapter shall maintain the following records:
- 1. All records relating to all required measurements and inventory of oil at the facility;

- 2. All records relating to required tank/pipe testing;
- 3. All records relating to spill events and other discharges of oil from the facility;
- 4. All supporting documentation for developed contingency plans;
- 5. All records for implementation and monitoring of leak detection and applicable provisions of 9 VAC 25-91-170 A 18 of Part IV (9 VAC 25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter;
- 6. All records relating to training of individuals;
- 7. All records relating to facility and tank inspections; and
- 78. Any records required to be kept by statute or <u>a</u> regulation of the board.
- B. These records shall be kept by the operator of a facility at the facility or at an alternate location the board approvesd by the board for a period of no less than five years unless otherwise indicated.
- C. Upon request, each operator shall make these records available to the board and to the director or coordinator of emergency services for the locality in which the facility is located or to any political subdivision within one mile of the facility.

D. Operators shall maintain all records relating to compliance with this chapter for a

period of no less than five years from the date the board receives notice of the closure

unless otherwise indicated. These records shall be made available to the board at any

time upon request.

9 VAC 25-91-160. Variances to the requirements of Part III (9 VAC 25-91-130 et seq.)

of this chapter.

A. General criteria for granting a variance on a case-by-case basis.

1. The board is required by §62.1-44.34:15.1 of the Code of Virginia to establish the

criteria to grant variances of the AST pollution prevention requirements on a case-by-

case basis and by regulation for categories of ASTs._Any person affected by this chapter

may petition the board to grant a variance of any requirement of Part III (9 VAC 25-91-

130 et seq.) of this chapter.

2. The board will not grant any petition for a variance related to:

a. Definitions;

b. Registration;

c. Classification of aboveground storage tanks; or

d. Oil discharge contingency plans.

3. The board may grant a variance if:

a. The petitioner applicant demonstrates to the satisfaction of the board that the alternate

design or operation will result in a facility that is equally capable of preventing pollution

of state water, land, and storm drains from the discharge of oil from new and existing

ASTs. If the variance would extend a deadline, the petitioner shall demonstrate that a

good faith effort to comply with the deadline was made;

b. Granting the variance will not result in an unreasonable risk to human health or the

environment; and

c. Granting the variance will not result in a conflict with applicable local codes or

ordinances.

4. In rendering a decision, the board may:

a. Deny the petition;

b. Grant the variance as requested;
c. Grant a modified variance which:
(1) Specifies additional or modified requirements;
(2) Includes a schedule for:
(a) Periodic review of the modified requirements;
(b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
(c) Compliance, including increments of progress, by the facility with each requirement of the variance; or
(3) Specifies the termination date of the variance.
d. Grant a partial variance that:
(1) Specifies a particular part of the requirement;
(2) Specifies a particular part of the request;

- (3) Includes a schedule for:
- (a) Periodic review of the partial requirements;
- (b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
- (4) Specifies the termination date of the variance.
- 5. An operator must comply with the requirements of this chapter even when a variance request is under consideration by the board. A variance request submitted but disapproved, or submitted but not yet decided, shall not constitute a defense or delay to any enforcement action undertaken by the department.
- B. Administrative procedures.
- 1. General requirements for the submission of a petition—by the owner or a duly authorized representative._ All petitions submitted to the board shall include:
- a. The ownerpetitioner's or duly authorized representative's name and address;
- b. A citation of the regulatory requirement to which a variance is requested;

- c. An explanation of the need or desire for the proposed action, including the reason the existing requirement is not achievable or is impractical compared to the alternative being proposed;
- d. An explanation of the impact to applicable local codes and ordinances;
- e. A description of the proposed action;
- f. The duration of the variance, if applicable;
- g. The potential impact of the variance on human health or the environment and an explanation of how justification of the proposed action's ability to provides equivalent protection of human health and the environment that is equivalent to the protection as would compliance with the regulatory requirements provide;
- h. Enforcement action against or pending against the petitioner;
- i. Other information believed by the applicant petitioner to be pertinent; and
- j. The following statements signed by the ownerpetitioner or a duly authorized representative:

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"I certify that I have personally examined and am familiar with the information submitted

in this petition and all attached documents, and that, based on my inquiry of those

individuals immediately responsible for obtaining the information, I believe that the

submitted information is true, accurate, and complete. The petition, if granted, will not

be in violation of any local codes or ordinances or pose an unreasonable risk to human

health or the environment. I am aware that there are significant penalties for submitting

false information, including the possibility of fine and imprisonment."

2. In addition to the general information required of all petitioners under subdivision 1 of

this subsection, the petitioner shall submit other information the board requests as may be

required by the board.

3. The petitioner shall submit Aall variance petitions and correspondence shall be

submitted to the following address:

Mailing Address:

Department of Environmental Quality

Office of Spill Response and Remediation

P.O. Box 10009

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Richmond, VA 23240-0009

Street Address:

Department of Environmental Quality

Office of Spill Response and Remediation

629 E. Main Street

Richmond, VA 23219

C. Petition processing.

1. After receiving a petition that includes the information required in subdivision B 1 of this section, the board will determine whether the information received is sufficient to render the decision._ If the information is deemed to be insufficient, the board will specify

additional information needed and request that it be furnished.

2. The petitioner may submit the additional information requested, may attempt to show

that no reasonable basis exists for the request for additional information, or may

withdraw the petition. If the board agrees that no reasonable basis exists for the request

for additional information, the board will act in accordance with subdivision 3 b of this

subsection. If the board continues to believe that a reasonable basis exists to require the submission of such information, the board will deny the petition.

- 3. After the petition is deemed complete:
- a. The board will review the petition;
- b. After evaluating the petition, the board will notify the applicant petitioner of the following final decision:
- (1) Petition is denied;
- (2) Requested variance is granted; or
- (3) Modified or partial variance is granted;
- c. The board shall send written notification of the variance to the chief administrative officer of the locality in which the facility is located; and
- d. If the board grants a variance request, the notice to the petitioner shall provide that the variance may be terminated upon a finding by the board that the petitioner has failed to comply with any variance requirements.

- D. Variance by regulation for categories of ASTs.
- 1. ASTs totally off ground with all associated piping off ground, or with all associated piping double walled, shall not be subject to inventory control or testing for significant variation.
- 2. ASTs with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil shall not be subject to inventory control or testing for significant variation.
- 3. ASTs containing No. 5 or No. 6 fuel oil for consumption on the premises where stored shall not be subject to inventory control or testing for significant variation.
- 4. ASTs with release prevention barriers (RPBs) with all associated piping off ground, with an established corrosion rate and cathodic protection that protects the entire area of the tank bottom shall not be subject to inventory control or testing for significant variation.
- 5. ASTs with release prevention barriers (RPBs) with all associated piping off ground and with secondary containment that is 72 hours impermeable shall not be subject to inventory control or testing for significant variation.

- 6. ASTs that meet the construction and installation standards of STI--F911-93, F921-93, or F941-94 or equivalent standards the board approveds by the board shall not be subject to inventory control or testing for significant variation.
- 7. For refineries with a continuous leak detection monitoring system and cathodic protection of the AST and piping, a significant variation of inventory shall be considered a loss in excess of 3.0% by weight of the difference between the refinery's input and output.
- 8. Vaulted tanks meeting UL 2245 or an equivalent standard the board approvesd by the board shall not be subject to inventory control or testing for significant variation. The inspections required in sections 130.A.7 and 130.B.5 of this chapter need be conducted no more frequently than once every 31days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.
- 9. An AST used in the production/manufacturing process with full containment that is 72 hours impervious shall not be subject to inventory control or testing for significant variation.
- 10. An AST of 12,000 gallons or less with full containment that is 72 hours impervious, inside a building and used for the storage of heating oil consumed on the premises shall not be subject to inventory control or testing for significant variation.

11. A double walled AST shall not be subject to inventory control or testing for significant variation. The inspections required in sections 130.A.7 and 130.B.5 of this chapter need be conducted no more frequently than once every 31days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.

9 VAC 25-91-170. Contingency plan requirements and approval.

A. No operator shall cause or permit the operation of a facility in the Commonwealth unless an oil discharge contingency plan applicable to the facility has been filed with and approved by the board. Section 62.1-44.34:15 of the Code of Virginia requires that all facility oil discharge contingency plans shall-provide for the use of the best available technology (economically feasible, proven effective and reliable and compatible with the safe operation of the facility) at the time the plan is submitted for approval.-_and, iIn order to be approvable, a plan shall contain, at a minimum, the following requirements:

- 1. The name of the facility, geographic location and access routes from land and water if applicable;
- 2. The names of the operators of the facility including address and phone number;

- 3. A physical description of the facility consisting of a plan of the facility which identifies the applicable oil storage areas, transfer locations, control stations, above and below ground oil transfer piping within the facility boundary (and including adjacent easements and leased property), monitoring systems, leak detection systems and location of any safety protection devices;
- 4. A copy of the material safety data sheet (MSDS) or its equivalent for each oil or groups of oil with similar characteristics stored, transferred or handled at the facility._ To be equivalent, the submission shall contain the following:
- a. Generic or chemical name of the oil;
- b. Hazards involved in handling the oil; and
- c. A list of fire-fighting procedures and extinguishing agents effective with fires involving each oil or groups of oil demonstrating similar hazardous properties which require the same fire-fighting procedures;
- 5. The maximum storage or handling capacity of the facility and the individual tank capacities or, in the case of a pipeline, the average daily throughput of oil;
- 6. A complete listing, including 24-hour phone numbers, of all federal, state and local agencies required to be notified in the event of a discharge;

- 7. The position title of the individuals responsible for making the required notifications and a copy of the notification check-off list;
- 8. The position title, address and phone number of the individuals authorized to act on behalf of the operator to implement containment and cleanup actions. This individual shall be available on a 24-hour basis to ensure the appropriate containment and cleanup actions are initiated;
- 9. The position title of the individuals designated by the operator to ensure compliance during containment and cleanup of a discharge with applicable federal, state and local requirements for disposal of both solid and liquid wastes;
- 10. Identification and ensuranceassurance by contract or other means acceptable to the board of the availability of private personnel and equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge. This contract or agreement shall ensure a certain response within the shortest feasible time. The board will accept a letter of understanding between the operator and the response contractors which attests to this capability being readily available. Membership in a cleanup cooperative or other response organization is also acceptable. A listing of contractor or cooperative capabilities, including an inventory of the equipment and specification of the other information required by

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subdivision 12 of this subsection, shall be included unless these capabilities are already on file with the board;

- 11. Assessment of the worst case discharge, including measures to limit the outflow of oil, response strategy and operational plan. For the purpose of this chapter, the worst case discharge is the instantaneous release of the volume of the largest tank on the facility (125% of the volume of the largest tank for facilities with multiple tanks within a single containment dike) during adverse weather conditions. Facilities shall take into consideration that due to hydraulic pressure of the release, the secondary containment will not contain this volume in its entirety. The worst case discharge for a pipeline shall be based upon the volume of a discharge calculated using the maximum pressure, velocity, and elevation, and the largest pipe size and pipeline location. If facility design and operation indicates that this worst case discharge scenario does not meet the intent of this chapter, the board may require submission of other worst case scenarios on a facility-specific basis;
- 12. Inventory of facility containment equipment, including specification of quantity, type, location, time limits for gaining access to the equipment, and identification of facility personnel trained in its use;
- 13. Identification and location of natural resources at risk (including, but not limited to, surface waters as indicated on the applicable USGS quadrangle maps, groundwater, public water supplies, public and private water wells and springs, state or federal wildlife

management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks), priorities for protection and means of protecting these resources;

- a. In addition to the requirements set forth in this subdivision, the operator of a facility with an aggregate aboveground storage or handling capacity of one million gallons or greater of oil shall conduct a groundwater characterization study (GCS) within the geographic boundaries of the facility to be submitted as part of the contingency plan. The operator of such a facility shall utilize upgradient and downgradient GCS monitoring wells to satisfy this requirement. At the time of a discharge, the operator of such a facility shall conduct further characterization of the groundwater as required by the board;
- b. For purposes of satisfying the requirement to identify and locate natural resources at risk, the operator of a pipeline shall identify surface waters as indicated on the applicable USGS quadrangle maps, public water supplies, state or federal wildlife management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks which could reasonably be expected to be impacted by the discharge. At the time of a discharge, the operator of a pipeline shall conduct a complete groundwater characterization study as required by the board and identify other natural resources at risk including public and private wells or springs which could reasonably be expected to be impacted by the discharge;

- 14. Identification and location of any municipal or other services (including, but not limited to, storm drains, storm water collection systems and sanitary sewer systems) at risk, notification procedures applicable and means of protection of these services. _The identification and location of all municipal services shall include those services for which official records are available. _The operator of a pipeline shall determine which sections of the system are located in areas that would require an immediate response by the operator to prevent hazards to the public if a discharge occurred;
- 15. If applicable, the facility's responsibility for responding to a discharge from a vessel moored at the facility and the identity of the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously;
- 16. A description of training, equipment testing, and periodic unannounced oil discharge drills conducted by the operator to mitigate or prevent the discharge or the substantial threat of a discharge;
- 17. The facility's oil inventory control procedures. Facilities shall ensure that this control procedure is capable of providing for the detection of a discharge of oil within the shortest feasible time in accordance with recognized engineering practices and industry measurement standards;

- 18. A detailed description of a system for early detection of a discharge to groundwater, utilizing up-gradient and down-gradient leak detection monitoring wells or other groundwater protection measures acceptable to the board (i.e., visual, interstitial, vapor and leak detection groundwater monitoring wells). The operator shall operate, maintain, monitor and keep records of Tthe system-will be operated, maintained and monitored in the manner approved and be subject to inspection by the department, under the pollution prevention requirements of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter. Operators subject to subdivision 13 a of this subsection may utilize such GCS wells to meet this requirement when approved by the board;
- 19. The procedures to be followed, upon detection of a discharge of oil, for testing and inspection of all tanks, piping and all oil transfer associated equipment that could reasonably be expected to be a point source for the discharge. The operator shall conduct Tthese procedures shall be conducted within the shortest feasible time, and include a progression of written procedures from visual inspection to formal testing and bethat are conducted in accordance with recognized engineering practices;
- 20. The facility's preventive maintenance procedures applicable to the critical equipment of an oil storage and transfer system as well as the maximum pressure for each oil transfer system. The term "critical equipment" shall mean equipment that affects the safe operation of an oil storage and handling system;

- 21. A description of the security <u>measures employed procedures used by at the facility</u> personnel to avoid the possibility of a discharge of oil caused by intentional <u>incidents</u>, particularly any measures associated with threats to homeland security or unintentional damage to the facility; and
- 22. A post-discharge review procedure to assess the discharge response in its entirety.
- B. All nonexempt facility operators shall file with the board the application form for requesting approval of the contingency plan. This form shall be submitted along with the required contingency plan and shall be completed insofar as it pertains to the facility.

 The operator shall send the submittal to the address specified in 9 VAC 25-91-60 A. The operator shall retain a copy of the plan and the board approval letter at the facility, readily available for inspection.

The operator shall sign and date the certification statement on the application form. If the operator is a corporation, the form shall be signed by an authorized corporate official; if the operator is a municipality, state, federal or other public agency, the form shall be signed by an authorized executive officer or ranking elected official; if the operator is a partnership or sole proprietorship, the form shall be signed by a general partner or the sole proprietor. _All forms shall be acknowledged before a Notary Public.

C. Contingency plans shall be filed with and approved by the board. The plan The operator shall be submitted the plan to the board, at the address specified in 9VAC25-91-

- 60 A. The operator shall retain a copy of the original <u>plan</u> with the facility-specific information and the approval letter shall be retained at the facility, and shall be readily available for inspection.
- D. An operator of multiple facilities may submit a single contingency plan encompassing more than one facility if the facilities are located within the defined boundaries of the same city or county or if the facilities are similar in design and operation. The plan shall contain site-specific information as required by subsection A of this section for each facility. The operator shall place site-specific information—shall be placed in appendices to the plan.

Upon renewal of an approved contingency plan submitted under this subsection, the board shall consider the individual facilities subject to all provisions of subsections E through J of this section.

- E. The operator shall review Othe oil discharge contingency plans shall be reviewed, updated it if necessary, and resubmitted it to the board for approval every 60 months from the date of approval unless significant changes occur sooner. Operators shall notify the board of significant changes and make appropriate amendments to the contingency plan within 30 days of the occurrence. For the purpose of this chapter, a significant change includes the following:
- 1. A change of operator of the facility;

- 2. An increase <u>or decrease</u> in the maximum storage or handling capacity of the facility that would change the measures to limit the outflow of oil, response strategy or operational plan in the event of the worst case discharge;
- 3. A decrease in the availability of private personnel or equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge, or a change to the method approved to limit and contain the outflow of oil in the assessment of the worst case discharge;
- 4. A change in the type of product dealt in, stored or handled by any facility covered by the plan for which an MSDS or its equivalent has not been submitted as part of the plan; or
- 5. A change in the method or operation <u>utilizedused</u> for the early detection of a discharge to groundwater (i.e., change in a method of leak detection).
- F. The operator shall submit Uupdated plans or certification for renewal of an existing plan-shall be submitted to the board for review-and approval not less than 90 days prior to expiration of approval of the current plan. Submittal of the certification for renewal for an existing plan shall be made in accordance with the provisions of subsection B of this section. The operator shall direct Aall notifications of changes, renewals, submissions

and updates of plans required by this chapter shall be directed to the respective department regional office servicing the facility that is the subject of the correspondence.

- G. The board may require Aan oil discharge exercise may be required by the board to demonstrate the facility's ability to implement the contingency plan._The board will consult with the operator of the facility prior to before initiating an exercise. Where appropriate, the board will ensure coordination with federal agencies prior to before initiating on of an exercise.
- H. The board may, aAfter notice and opportunity for a conference pursuant to §9-6.14:112.2-4020 of the Code of Virginia, the board may deny or modify its approval of an oil discharge contingency plan if it determines that:
- 1. The plan as submitted fails to provide sufficient information for the board to process, review and evaluate the plan or fails to ensure the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of a discharge, and to contain and clean up an oil discharge within the shortest feasible time;
- 2. A significant change has occurred in the operation of the facility covered by the plan;
- 3. The facility's discharge experience or its inability to implement its plan in an oil spill discharge exercise demonstrates a necessity for modification; or

- 4. There has been a significant change in the best available technology since the plan was approved.
- I. The board, after notice and opportunity for hearing, may revoke its approval of an oil discharge contingency plan if it determines that:
- 1. Approval was obtained by fraud or misrepresentation;
- 2. The plan cannot be implemented as approved;
- 3. A term or condition of approval of this chapter has been violated; or
- 4. The facility is no longer in operation.
- J. The board may accept Aa Facility Response Plan (FRP) developed pursuant to \$4202 of the federal Oil Pollution Act of 1990, Pub. L. No. 101-380, 33 USCA \$2716 (1996), may be accepted as meeting the requirements of subdivisions A 1 through A 22 of this section. The operator shall submit a copy of the FRP and a copy of the currently valid FRP approval letter for the facility for the board's review and approval by the board. The FRP shall contain a cross-reference in order to index pages for the specific requirements of the ODCP. In order for the board to accept the FRP, Tthe FRP shall also contain the satisfaction of must satisfy the requirements of subdivisions A 13 a and A 18 of this section. The operator shall resubmit Tthis information shall be resubmitted in accordance

with the renewal period established by federal statute or regulation but in no instance shall the renewal period exceed five years. The <u>operator shall board shall be</u>

notifiednotify the board of any plan amendments within thirty days of the amendment.

9 VAC 25-91-180. Groundwater characterization study (GCS).

A. Section 62.1-44.34:15 of the Code of Virginia requires the operator to apply to the board for approval of an ODCP. The ODCP shall be accompanied by other relevant information required by the board (e.g., The purpose of the groundwater characterization study (GCS), of each facility with an aggregate aboveground storage capacity of one million gallons or greater of oil). The purpose of this GCS is to determine baseline conditions and flow of groundwater within the geographic boundaries of the facility. The operator's results of the GCS shall be subject to the review and approval of the department and shall be submitted to the department as part of the Oil Discharge Contingency Plan (ODCP) referenced in Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter. The GCS wells are required by 9VAC25-91-170 A 13 a in the ODCP requirements.

B. Section 62.1-44.34:15.1 of the Code of Virginia requires that tThe operator of a facility with an aggregate capacity of one million gallons or greater of oil shall conduct monthly gauging and inspection, monitoring of well headspace, and quarterly sampling and laboratory analysis of all groundwater monitoring wells located at the facility to

determine the presence of petroleum or petroleum by-product contamination. The monitoring requirements of these GCS wells are in 9VAC25-91-190, GCS well monitoring.

C. Although GCS monitoring wells may be approvused for use as part of a leak detection system when approved by the board. Both the GCS well monitoring requirements in 9

VAC 25-91-190 and should not be confused with any requirement for the leak detection monitoring wells required by requirements in 9 VAC 25-91-170 A 18 apply.

9 VAC 25-91-190. GCS well monitoring.

A. All GCS wells (required by 9VAC25-91-170 A 13 a, in the ODCP requirements) shall be monitored as follows:

- 1. <u>Perform Mmonthly gauging of GCS groundwater monitoring wells. To perform this requirement, the operator shall:</u>
- a. Measure and record static water levels monthly.
- b. Reference all water-level measurements, including total well-depth measurements, from an established and documented point on the top of the well casing.

- c. <u>Correlate all Mm</u>easurements-shall be correlated with mean sea level datum and measured to the nearest 0.01 foot.
- 2. <u>Perform Qquarterly groundwater and vapor monitoring. To perform this requirement</u> the operator shall:
- a. <u>Conduct Qquarterly vapor monitoring of all GCS wells identified in the ODCP GCS</u> shall be conducted prior to before collecting quarterly groundwater samples.
- b. Quarterly vapor monitoring consists of eCollecting one monitoring well headspace measurement for each GCS well.
- c. <u>Conduct Qquarterly groundwater sampling (visual inspection) of all GCS wells identified in the ODCP GCS shall be conducted.</u>
- (1) Measure for free product on top of the groundwater.
- (2) Collect groundwater samples for visual inspection.
- d. Tabulate vapor measurements and quarterly visual groundwater monitoring results for each well sampled.

- 3. <u>Perform Aannual groundwater monitoring for laboratory analysis. To perform this requirement, the operator shall:</u>
- a. Annual groundwater sampling of all wells identified in the ODCP groundwater characterization study (GCS) shall be conducted.
- <u>a</u>. <u>b. Annual groundwater monitoring consists of cCollecting</u> groundwater samples for laboratory analysis.
- e. Groundwater samples shall be collected and analyzed each sample for BTEX and TPH. for each well.
- B. The GCS groundwater well-monitoring wells may should not be confused with the monitoring of groundwater wells utilizedused to satisfy the requirements of 9 VAC 25-91-170 A 18 (i.e., leak detection wells) when approved by the board. Both the GCS well monitoring requirements in 9 VAC 25-91-190 and the leak detection monitoring well requirements in 9 VAC 25-91-170 A 18 apply.
- 9 VAC 25-91-200. Reporting; GCS well monitoring report.
- A. The operator shall compile and maintain at the facility Aall observations and data gathered as a result of the requirements in 9 VAC 25-91-190 and any other data obtained from those same the GCS wells. The operator shall be maintained at the facility,

<u>compiled</u>, <u>and</u> submitted <u>these observations and data</u> to the board annually in the following format:

I. Monthly gauging of GCS groundwater monitoring wells. 1.0 Summary of measurement procedures. 2.0 Table of static water levels recorded from monitoring wells. II. Quarterly GCS groundwater vapor monitoring. 1.0 Summary of groundwater and vapor collection procedures. 2.0 Table of vapor measurements from monitoring well headspace. 3.0 Table of groundwater monitoring well visual inspection results. III. Annual GCS groundwater quality evaluation. 1.0 Summary of groundwater collection methods. 2.0 Summary of groundwater analytical results and interpretation.

- 3.0 Table of analytical methods used.
- 4.0 Table of analytical results.
- 5.0 Table of field and trip blank results.
- 6.0 Groundwater laboratory data including chain-of-custody forms.
- 7.0 Laboratory quality assurance review.
- B. The <u>operator shall include in the annual GCS</u> monitoring report shall include the facility name and address, operator, and consultant, if any, who prepared the report, contact person and the date the report was submitted.
- 9 VAC 25-91-210. Response.

Should any observations or data indicate the presence of petroleum hydrocarbons in groundwater, the operator shall immediately report the results shall be immediately reported to the board and to the local director or coordinator of emergency services appointed pursuant to §44-146.19 of the Code of Virginia.

- 9 VAC 25-91-220. Referenced publications.
- A. The following documents or portions thereof are referenced in this chapter:
- 1. Underwriters Laboratories Standards: Specification 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids," Seventh Edition;
- 2. American Petroleum Institute (API) Standards:
- a. API 12B: Specification 12B and Supplement 2, October 1, 1990, "Specification for Bolted Tanks for Storage of Production Liquids," Thirteenth Edition;
- b. API 12D: Specification 12D and Supplement 2, 1982 as supplemented 1985,"Specification for Field Welded or Storage of Production Liquids," Ninth Edition;
- c. API 12F: Specification 12F, and Supplement 1, 1982 as supplemented 1988,"Specification for Shop Welded Tanks for Storage of Production Liquids," Tenth Edition;
- d. API 570: Piping Inspection Code, Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems, First Edition, June 1993;
- e. API 620: Standard 620, 1990, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," Eighth Edition;

- f. API 650: Standard 650, 1988, "Welded Steel Tanks for Oil Storage," Eighth Edition;
- g. API 652: Recommended Practice 652, April 1991, "Lining of Aboveground Petroleum Storage Tank Bottoms," First Edition;
- h. API 653: API Standard 653, January 1991, "Tank Inspection, Repair, Alteration, and Reconstruction," First Edition, incorporates supplement 1, January 1992;
- i. API 2350: Recommended Practice 2350, March 1987, "Overfill Protection for Petroleum Storage Tanks";
- 3. National Fire Protection Association (NFPA) Standards:
- a. NFPA 30, "Flammable and Combustible Liquids Code," 1996 edition;
- b. NFPA 30A, "Automotive and Marine Service Station Code," 1990 edition;
- 4. National Association of Corrosion Engineers (NACE) Standards: Recommended Practice 0285-95 (1995), "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems";
- 54. 40 CFR Part 112 (1997), "Oil Pollution Prevention";

- 65. 29 CFR Part 1910.106 (19972002), "Flammable and Combustible Liquids";
- 76. Uniform Statewide Building Code (USBC), and its referenced model codes and standards, as promulgated by the Virginia Department of Housing and Community Development. 1996 edition;
- 87. Virginia Statewide Fire Prevention Code (SWFPC), 1996 edition;
- 9. Building Officials & Code Administrators International, Inc. (BOCA®); BOCA-National Building Code, 1996 edition:
- a. Chapter 32--Flammable and Combustible Liquids;
- b. Chapter 23--Hazardous Materials; and
- 108. Steel Tank Institute (STI), Standards and Recommended Practices:
- a. STI Standard for Diked Aboveground Storage Tanks F911-93;
- b. STI Standard for Aboveground Tanks with Integral Secondary Containment F921-93;
- c. STI Fireguard TM Thermally Insulated Aboveground Storage Tank Standard F941-94.

B. The issue of the industry specification, standard, or code, including addenda or changes, described in this chapter as referenced publications, shall be used unless circumstances warrant the use of an earlier date and are specifically authorized by the board.