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Implementation for Air Pollution Control

CHAPTER 10: REGULATIONS FOR THE CONTROL OF VOLATILE ORGANIC COMPOUNDS IN
PULASKI COUNTY

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CHAPTER 10: REGULATIONS FOR THE CONTROL OF VOLATILE ORGANIC COMPOUNDS IN PULASKI COUNTY

Reg. 19.1001 Title

This chapter, adopted in accordance with the provisions of the Arkansas Water and Air Pollution Control Act [Arkansas Code Annotated Sections 8-4-101 et seq., as amended] and pursuant to the provisions of the federal Clean Air Act, shall be known as the Regulations for the Control of Volatile Organic Compounds.

Reg. 19.1002 Purpose

The Regulations for the Control of Volatile Organic Compounds are designed to provide for the attainment and maintenance of the National Ambient Air Quality Standards for ozone in those areas of Arkansas which have been designated as nonattainment areas by the EPA pursuant to the federal Clean Air Act and are further designed to bring the Arkansas Plan of Implementation for Air Pollution Control into compliance with the provisions of said Act.

Reg. 19.1003 Definitions

When used in these Regulations for the Control of Volatile Organic Compounds, the following definitions apply. Terms and phrases used in this chapter which are not explicitly defined herein shall have the same meaning as those terms used in Chapter 2 of Regulation 19 or, if not defined in Chapter 2 of Regulation 19, as those terms defined in the federal Clean Air Act.

Unless manifestly inconsistent therewith, terms and phrases used herein shall have the same meaning as used in the Arkansas Water and Air Pollution Control Act and the federal Clean Air Act.

"Clear coat" means a coating which lacks color and opacity.

"Coating application system" means all operations and equipment which applies, conveys, and dries a surface coating.

"Control Technique Guideline" means any of the guideline series documents describing an emission control technology for a specific source or category of sources; which documents being published by the EPA.

"Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluent). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.

"Crude oil" means a naturally occurring mixture consisting of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid in the reservoir and at standard conditions.

"Custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

"Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary tanks of gasoline dispensing facilities.

"Existing source" means any source of volatile organic compounds other than a new source.

"External floating roof" means a storage vessel cover in an open tank top consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

"Extreme performance coating" means coatings designed for harsh exposure or extreme environmental conditions.

"Gasoline" means a petroleum distillate having a Reid vapor pressure of 27.6 kilopascals (kPa) (4 pounds per square inch [psi]) or greater that is used as fuel for internal combustion engines.

"Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

"Gasoline tank truck" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks or to gasoline bulk facilities.

"Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

"Low solvent coating" means coatings which contain less organic solvent than the conventional coatings used by the industry. Low solvent coatings include water borne, high solids, electrodeposition and powder coatings.

"Lowest Achievable Emission Rate" (LAER) means for any source, that rate of emissions which reflects the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable New Source Standards of Performance.

"Major source" means any stationary source which has the potential to emit 100 tons or more per year of volatile organic compounds.

"Modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any volatile organic compound emitted by such source or which results in the emission of any other volatile organic compound not previously emitted.

"New source" means any stationary source of volatile organic compounds, the construction or modification of which is commenced after July 1, 1979.

"New Source Standard of Performance" (NSPS) means those standards which are adopted by the EPA pursuant to the provisions of Section 111 of the federal Clean Air Act [NSPS, 40 CFR Part 60].

"Operator" means any person who leases, operates, controls, or supervises any source, facility or equipment affected by these regulations.

"Owner" means any person who has legal or equitable title to any source, facility, or equipment affected by these regulations.

"Person" means any individual or other legal entity or their legal representative or assignee.

"Prime coat" means the first of two or more films of coating applied to a metal surface.

"Reasonably Available Control Technology" (RACT) means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical source categories.

"Single coat" means one film coating applied to a metal surface.

"Top coat" means the final film or series of films or coatings applied in a two coat (or more) operation.

"True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute (API) Bulletin 2517, Evaporation Loss from External Floating Roof Tanks, 1980. The API procedure may not be applicable to some high viscosity or high pour crudes. Available estimates of true vapor pressure may be used in special cases such as these.

"Vapor collection system" means a vapor transport system which used direct displacement by the gasoline being transferred to force vapors from the vessel being loaded into either a vessel being unloaded or a vapor control system or vapor holding tank.

"Vapor control system" means a system that prevents release to the atmosphere of gasoline vapors in excess of 80 milligrams per liter of gasoline loaded (4.7 grains per liter).

"Vapor-mounted" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.

Reg. 19.1004 General Provisions

(A) Applicability and Effective Dates

- (1) Sources which are subject to provisions of the Regulations for the Control of Volatile Organic Compounds include:
 - (a) Any source for which controls are governed by Reg. 19.1005 hereof;
 - (b) Any source which is subject to the terms of a Commission order issued pursuant to Reg. 19.1004(D)(1) hereof, and
 - (c) Any new major source.
- (2) The provisions of Chapter 10, the Regulations for the Control of Volatile Organic Compounds, shall be limited to sources located in Pulaski County, except as provided in Reg. 19.1004(D)(1) and shall go into full force and effect on the effective date provided, however, that the provisions of Reg. 19.1004(D)(1) shall go into full force and effect on April 1, 1979. The effective date for Reg. 19.1005(A)(B) and (C) is July 1, 1979, and for Reg. 19.1005(D) and (E) is October 1, 1980. The effective date for Reg. 19.1005(F) is April 1, 1981.

(B) Exemptions and Variances

- (1) [RESERVED]
- (2) The requirements of Reg. 19.1005 are based upon information presented in the Control Technique Guidelines as published by the EPA and are intended to be consistent with Reasonably Available Control Technology. The owner or operator of equipment affected by the provisions of Reg. 19.1005 may be granted a variance from the specific provisions of such section provided that such owner or operator can demonstrate to the reasonable satisfaction of the Commission that full and strict compliance is technologically or economically infeasible or that alternative techniques to be employed by such owner or operator will result in substantially the same environmental benefits as would be achieved with full and strict compliance with the provisions of Reg. 19.1005. In no event, however, shall the Commission issue variances from the requirements of Reg. 19.1005 if

such variances will prevent reasonable further progress for the attainment and maintenance of the National Ambient Air Quality Standards for ozone.

(C) Toxic Compounds

The Regulations for the Control of Volatile Organic Compounds are not intended as appropriate controls for sources which emit volatile organic compounds which are hazardous air pollutants.

(D) Determination of Reasonably Available Control Technology

- (1) Where the Department proposes the existence of Reasonably Available Control Technology for existing sources, other than the sources for which the provisions of Reg. 19.1005 are applicable, the Department shall give public notice of such determination and shall, in such notice, describe the nature of such technology and shall list by size, type, source, category or by individual source name, the affected sources. The public notice shall also give notice of public hearing concerning the subject proposals. If, after review of the information produced through the public hearing process, the Department determines that such technology does exist and that the application of such technology is necessary to maintain reasonable further progress toward the attainment and maintenance of the National Ambient Air Quality Standards for ozone, the Department shall issue an order requiring the installation of such technology.
- (2) Any order issued pursuant to Reg. 19.1004(D)(1) above may require the owner or operator of sources affected by such order to file such schedules and reports as the Department feels necessary to assure that the subject technology is placed into operation as expeditiously as practicable. The terms of such orders may be modified where the Department finds that such modifications are necessary to avoid economic hardship and where such modification would not interfere with reasonable further progress toward the attainment of the previously cited standards.

(E) Permits and Compliance Schedules

- (1) Existing Sources:

- (a) No person shall cause or permit the operation or use of an existing source to which any provision of Reg. 19.1005 applies unless the owner or operator of such source shall have submitted to the Department, prior to the applicable date below, a compliance schedule indicating what steps have been, or will be taken to bring the operation of such source into compliance with the provisions of Reg. 19.1005. The compliance schedule shall be of such form and contain such information as the Department may reasonably require. The applicable date for Reg. 19.1005(A)(B) and (C) is October 1, 1979. The applicable date for Reg. 19.1005(D) and (E) is January 1, 1981. The applicable date for Reg. 19.1005(F) is May 15, 1981.
- (b) No person shall cause the operation or use of an existing source which is affected by any provision of Reg. 19.1005 after the approval date if a compliance schedule of such source under Subsection (a) above has been disapproved by the Department. No compliance schedule for any source shall be approved by the Department unless the Department finds that the controls proposed by the owner or operator will be installed, placed in operation, and that the source will be in compliance with the provisions of Reg. 19.1005 prior to the final compliance date. Extensions beyond the final compliance date may be granted by the Department provided the Department finds that such extensions are necessary to avoid economic hardship and that such extensions will not prevent reasonable further progress toward the attainment of the National Ambient Air Quality Standards for ozone. The approval date for Reg. 19.1005(A)(B) and (C) is February 1, 1981 and for Reg. 19.1005(D)(E) and (F) is February 1, 1982. The final compliance date for Reg. 19.1005(A)(B) and (C) is June 1, 1981, for Reg. 19.1005(D) is March 1, 1982, and for Reg. 19.1005(E) and (F) is July 1, 1982.
- (c) No person shall cause or permit the operation of an existing source in a manner which violates the terms of a compliance schedule which has been approved or amended by the Department or which violates the terms of a Department order issued pursuant to the provisions of Reg. 19.1004(D)(1).

(2) New Sources:

Except as provided herein, no person shall commence the construction, installation or modification of a new source after July 1, 1979, unless that person has first received a permit from the Department. Application for permit shall be of such form and contain such information as the Department may reasonably require.

(a) New Major Sources: No permit shall be issued for the construction, installation or modification of a new major source after July 1, 1979, unless the Department determines the following conditions to have been met:

- (i) The emissions resulting from the proposed source when considered together with all other existing and proposed emissions of volatile organic compounds in Pulaski County will not cause or contribute to emission levels which exceed the allowance permitted for volatile organic compounds under the Arkansas Plan of Implementation for Air Pollution Control, as revised to comply with the provisions of the Clean Air Act.
- (ii) The emissions resulting from the proposed new major source will comply with the requirements of the FCAA which are in effect as of the effective date of this regulation.
- (iii) The owner or operator of the proposed new or modified major source has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in Arkansas are in compliance, or on a schedule of compliance with all applicable emission limitations and standards under the federal Clean Air Act, including the Arkansas Plan of Implementation for Air Pollution Control.
- (iv) A permit may be issued to a new major source which would otherwise cause or contribute to emission levels which exceed the allowable levels for Pulaski County, as described in the State

Implementation Plan for Air Pollution Control, as amended, if the owner or operator of that source first submits legally binding agreements to the Department which reflect emission reductions from other sources in Pulaski County, or from sources within seventy-two (72) miles of the North Little Rock Municipal Airport, which would more than offset the emissions from such proposed new major source. Emission reductions claimed by such owner or operator may not include those emission reductions in Pulaski County which are necessary to reduce the total volatile organic compound emission to the allowable level in Pulaski County.

(b) Other New Sources:

- (i) No permit shall be issued for a new source of the size, type, class, or category for which the provisions of Reg. 19.1005 apply unless the Department finds that such new source incorporates Reasonably Available Control Technology developed for the kind and amount of volatile organic compounds to be emitted by the source and that, as a minimum, the source will be designed, constructed and operated such that the emissions therefrom, will not exceed the allowable emission rate provided by such section for existing sources.
- (ii) No permit shall be issued for a new source of the size, type, class or category for which a Department Order has been issued pursuant to Reg. 19.1004(D)(1), unless the Department finds that such source incorporates Reasonably Available Control Technology developed for the kind and amount of volatile organic compounds to be emitted by such source and that, as a minimum, the source will be designed, constructed, and operated such that the emissions therefrom will not exceed the rate required of existing sources by such order.

(F) Testing and Reporting Requirements

- (1) Any person owning or operating sources which are affected by the provisions of the Regulations for the Control of Volatile Organic Compounds shall, upon the request of the Director, furnish such information as may be required to demonstrate compliance with said Regulations. For purposes of this chapter, the provisions of Chapter 7 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control shall apply.
- (2) For purposes of administering the provisions of the Regulations for the Control of Volatile Organic Compounds, the Director shall not be limited to the results obtained from emission tests but may, where appropriate, determine the compliance status of any source with respect to the emission limitations contained herein by the results of engineering evaluations, by inspection reports or by such information submitted, and certified, by the source owner or operator. For purposes of this chapter, a source may be deemed to be in compliance with the emission limitations of said Regulations if the equipment of such source is designed and operated in accordance with the provisions of Reg. 19.1005 or, where Reg. 19.1005 is not applicable, is designed and operated in accordance with the provisions of a Department Order or a permit issued hereunder, provided however, where an emission limitation is applicable to a certain source and where emission testing has been conducted in a manner approved by the Department and where such test demonstrate compliance with such limitations, the source shall be deemed to be in compliance with such limitations.
- (3) To test the leak tightness of gasoline tank trucks as required in Reg. 19.1005(D), the following method and procedures should be followed:
 - (a) The owner or operator shall, at his or her own expense demonstrate compliance with Reg. 19.1005(D) by the methods of Part 3 of this subsection or an alternative method approved by the Director.
 - (b) The owner or operator of a tank truck subject to this regulation must notify the Director in writing of the date and location of a certification test at least thirty (30) days before the anticipated test date.

- (c) Test procedures to determine compliance with Reg. 19.1005(D) must be approved by the Director and consistent with the test procedures described in Appendix A or C of the OAQPS Guideline Series document, "Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA-450/2-78-051.
 - (d) Monitoring to confirm the continuing existence of leak tight conditions shall be consistent with the procedures described in Appendix B of the OAQPS Guideline Series document, "Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA-450/2-78-051.
- (4) To test for compliance with Reg. 19.1005(E) procedures outlined in EPA guideline series document "Measurement of Volatile Organic Compounds," EPA-450/2-78-041 and Appendix A of "Control of Volatile Organics from Existing Stationary Sources--Volume II--Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles and Light Trucks," EPA 450/2-77-008 shall be used.
 - (5) To test for compliance with Reg. 19.1005(F) a visual inspection must be conducted at an interval not to exceed one year. For tanks with vapor mounted primary seals, the secondary seal gap area should be determined by measuring the length and width of the gaps around the entire circumference of the secondary seal. Only gaps greater than or equal to 0.32 centimeter (cm) (1/8 inch) shall be used in computing the gap area. The area of the gaps shall be accumulated to determine the compliance with Reg. 19.1005(F)(1)(b). This data along with records of the throughput and type of volatile petroleum liquids for each vessel should be maintained by the owner or operator.

(G) Circumvention

- (1) No owner or operator subject to these Regulations may build, erect, install, or use any article, machine, equipment, process or method, the use of which conceals an emission which would otherwise constitute a violation of these Regulations.
- (2) The provisions of Reg. 19.1004(G)(1) above include, but are not limited to, the

use of gaseous diluents to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a Regulation that applies only to operations larger than a specified size.

(H) Malfunctions, Breakdowns, Upsets

- (1) Emissions in excess of these Regulations which are temporary and result solely from a sudden and unavoidable breakdown, malfunction or upset of process or emission control equipment, or sudden and unavoidable upset of operation will not be considered a violation of these Regulations provided:
 - (a) the owner or operator notifies the Department of any such occurrence by the end of the next business day of the occurrence; and
 - (b) the owner or operator demonstrates to the Director that the suggested period of time for correction is as expeditious as practicable; and
 - (c) the breakdown or upset is determined by the Director to be unavoidable and not the result of negligence; and
 - (d) within five (5) days after the beginning of the occurrence, a written report is submitted to the Director which includes the cause and nature of the event, estimated quantity of volatile organic compounds emitted, time of emission and to prevent recurrence; and
 - (e) the Director is immediately notified when corrective measures have been accomplished.

(2) [RESERVED]

Reg. 19.1005 Provisions for Specific Processes

(A) Gasoline Storage and Marketing

- (1) No person shall cause or permit the loading of gasoline into a storage tank of a gasoline storage or marketing facility with a monthly throughput in excess of 10,000 gallons except through a submerged fill pipe or by bottom loading. This provision shall not apply to storage tanks of less than 4,000 liter capacity (approximately 1,000 gallons).
- (2) No person shall cause or permit the operation of a gasoline bulk facility of less than 87,000 liters (23,000 gallons) per day throughput unless all gasoline delivery vessels are loaded by submerged fill pipe or bottom filling.
- (3) No person shall cause or permit the operation of a gasoline bulk facility having a daily throughput equal to greater than 87,000 liters (23,000 gallons) per day unless a vapor control system is in place, is properly maintained and is used to prevent gasoline vapors from being emitted into the atmosphere at a rate in excess of 80 milligrams per liter of gasoline loaded (4.7 grains per gallon).

(B) Petroleum Liquid Storage

- (1) No person shall cause or permit the storage of volatile organic compounds having a true vapor pressure in excess of 10.5 kilopascals (1.52 pounds-force per square inch [psia]) in tanks having a capacity equal to or greater than 150,000 liters (approximately 39,000 gallons) unless such tanks:
 - (a) meet the equipment specifications and maintenance requirements of the federal Standards of Performance for New Stationary Sources--Storage Vessels for Petroleum Liquids, 40 CFR 60.110, as amended by proposed rule change, *Federal Register*, May 18, 1978, pages 21617 through 21625; or
 - (b) are retrofitted with a floating roof or internal floating cover using a non-metallic resilient seal as a primary seal which meets the equipment specifications in the federal standards referred to in Reg. 19.1005(B)(1)(a), or its equivalent, or

- (c) have a covered floating roof or internal floating cover which is maintained in effective working order and which meets the manufacturer's equipment specifications in effect at the time it was installed.
- (2) All seals necessary to meet the requirements of Reg. 191005(B)(1)(b) and (c) are to be maintained in good operating condition.
- (3) All openings, except stub drains and those related to safety, are to be sealed with suitable closures when not in use.

(C) Cutback Asphalt

No person shall mix, use or apply cutback asphalt for roadway paving except where the cutback asphalt is used solely as a penetrating prime coat or when the maximum ambient temperature on the day of application is less than 15 degrees Celsius ($^{\circ}\text{C}$) (59 degrees Fahrenheit [$^{\circ}\text{F}$]).

(D) Gasoline Tank Trucks and Vapor Collection Systems

- (1) No person shall allow a gasoline tank truck subject to this regulation to be filled or emptied unless the gasoline tank truck:
 - (a) is tested on a schedule acceptable to the Director according to the test procedure referenced in Reg. 19.1004(F)(3);
 - (b) sustains a pressure change of no more than 750 pascals (3 inches of water [in. of H_2O]) in five minutes when pressurized to a gauge pressure of 4,500 pascals (18 in. of H_2O) or evacuated to a gauge pressure of 1,500 pascals (6 in. of H_2O) during the testing required in Reg. 19.1005(D)(1)(a); and
 - (c) is repaired by the owner or operator and retested within 15 days of testing if it does not meet the criteria of Reg. 19.1005(D)(1)(b). subparagraph (1)(b) of this chapter.
- (2) The owner or operator of a vapor collection system subject to this regulation shall:

- (a) Design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:
 - (i) Gauge pressure from exceeding 4,500 pascals (18 in. of H₂O) and vacuum from exceeding 1,500 pascals (6 in. of H₂O) in the gasoline tank truck;
 - (ii) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in Reg. 19.1004(F)(3) during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and
 - (iii) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals.
- (b) Within 15 days, repair and retest a vapor collection or control system that exceeds the limit in supporting Reg. 19.1005(D)(2)(a)(ii) above.
- (3) The Director may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system by the method referenced in Reg. 19.1004(F)(3) to confirm continuing compliance with Reg. 19.1005(D)(1) or (2) of this section.

(E) Surface Coating of Metal Parts and Products

- (1) No owner or operator of a major source engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this regulation that emits VOC in excess of:
 - (a) 0.52 kg/liter (l) 4.3 pounds per gallon [lb/gal]) of coating, excluding water, delivered to a coating applicator that applies clear coatings;
 - (b) 0.42 kg/l (3.5 lb/gal) of coating, excluding water, delivered to a coating applicator in a coating application system that utilizes air or forced air dryers;

- (c) 0.42 kg/l (3.5 lb/gal) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings;
 - (d) 0.36 kg/l (3.0 lb/gal) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems; and
 - (e) The above emission limitations shall include all VOC emissions from both coating and solvent washing unless the solvent is directed into containers that prevent evaporation.
- (2) If more than one emission limitation in Reg. 19.1005(E)(1) applies to a specific coating, then the most stringent emission limitation shall be applied.
- (3) The emission limits set forth in Reg. 19.1005(E)(1) shall be achieved by:
- (a) The application of low solvent coating technology;
 - (b) An incineration system which oxidizes at least 90.0 percent of the non-methane VOC measured as total combustible carbon to carbon dioxide and water; or
 - (c) An equivalent means of VOC removal. The equivalent means must be certified by the owner or operator and approved by the Director.
- (4) A capture system must be used in conjunction with the emission control system in Reg. 19.1005(E)(3)(b) and (c). The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency of at least 80 percent.

(F) External Floating Roof

- (1) No person shall cause or permit the storage of volatile organic compounds having a true vapor pressure in excess of 10.5 kilo pascals (1.52 psia) in tanks having a capacity equal to or greater than 150,000 liters (approximately 39,000 gallons) equipped with an external floating roof unless:

- (a) The storage tank has been fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim mounted) or an equivalent control device with an effectiveness equal to or greater than the secondary seal;
 - (b) All seal closure devices meet the following requirements:
 - (i) There shall be no visible holes, tears, or other openings in the seals or seals fabric;
 - (ii) The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank walls; and
 - (iii) For vapor mounted seals, the gap area between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of inside tank diameter (1.0 square inch per foot of inside tank diameter);
 - (c) All openings in the external floating roof except for automatic bleeder vents, rim space vents, and leg sleeves provide a projection below the liquid surface and are sealed with a suitable closure when not in use;
 - (d) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (e) Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended settings; and
 - (f) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening.
- (2) The following are specifically exempted from the requirements of this subsection:

- (a) External floating roof tanks having capacities less than 1,600,000 liters (10,000 barrels [bbls]) used to store produced crude oil and condensate prior to custody transfer;
- (b) A metallic-type shoe seal in a welded tank which has a secondary seal from the top of the shoe to the tank wall (a shoe-mounted secondary); and
- (c) External floating roof tanks storing waxy, heavy pour crudes.

Reg. 19.1006 Severability

If any provision of the Regulations for the Control of Volatile Organic Compounds or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the Regulations for the Control of Volatile Organic Compounds which can be given effect without the invalid provision or application, and to this end, the provisions of the Regulations for the Control of Volatile Organic Compounds are declared to be severable.