



Gasoline Dispensing Facilities (GDF) 40 CFR Part 63, Subpart CCCCCC

Gasoline vapor contains hazardous air pollutants (HAP) which pose a health risk when inhaled. By installing the controls and following the management practices in this rule, the health risk is greatly reduced.

This fact sheet is presented as a summary only; compliance will be determined by compliance with the actual rule text in 40 CFR 63, Subpart CCCCCC (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Dispensing Facilities. Minor source facilities (those that do not have emissions for any single criteria pollutant greater than 100 tons per year or for any single HAP greater than 10 tons per year or total emissions for all HAP greater than 25 tons per year) are not required by EPA to obtain a Title V permit. However, Oklahoma rules require any new or reconstructed facility which is subject to a performance standard under NESHAP to obtain a construction permit prior to construction.

This rule deals primarily with good management practices associated with the filling of storage tanks and containers and the environmentally safe storage of gasoline.

THE BASICS

On January 10, 2008, the U.S. Environmental Protection Agency (U.S. EPA) enacted stringent requirements to minimize the release of gasoline vapors during the filling of storage tanks at gasoline dispensing facilities (GDFs). A GDF is a facility that dispenses gasoline into a fuel tank of a motor vehicle. Examples of these facilities are service stations, convenience stores, car rental agencies, motor pools and/or facilities that dispense gasoline into on-road, off-road, street or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment,



generators, pumps, and other gasoline-fueled engines and equipment. The rule also affects tank trucks during the filling of gasoline into storage tanks at a GDF and each gasoline storage tank at the facility. Equipment used in the process of actually refueling vehicles is not covered by this rule, but are controlled by other regulations.



The requirements are based on the facility size which is determined by the gasoline throughput.

- All owners or operators are required to minimize evaporation by improved work practices.
- Additionally, larger facilities must install equipment to reduce the amount of vapors generated (called submerged fill pipes, or drop tubes).
- The largest facilities are also required to capture and send vapors back into the delivery tanker truck through vapor balance equipment. Vapor balance equipment minimizes the release of gasoline vapors when storage tanks are filled at GDFs through a combination of pipes and hoses that collect displaced gasoline vapors from the tank and route them back into the tanker truck. The terminal recovers the vapor when the tanker truck returns to reload.



COMPLIANCE DATES (Reference: §63.11113)

Facility Type	Compliance Date	
New or reconstructed facilities (After November 6, 2006)	Startup before January 10, 2008	January 10, 2008
	Startup after January 10, 2008	Upon Initial Startup
Existing facilities (On or before November 6, 2006)	January 10, 2011	
Existing facilities that increase throughput above threshold levels	3 years after threshold exceedance	

RULES AND STANDARD REQUIREMENTS (BASED ON MONTHLY THROUGHPUT) (Reference: §63.11113 - §63.11118)



All facilities must handle gasoline in a manner that will not result in vapor releases to the atmosphere for extended periods of time. Specific requirements are based on monthly gasoline throughput which means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. EPA has determined a GDF's monthly throughput will be calculated as follows:

Add the total volume of gasoline loaded or dispensed from all gasoline storage tanks during the current day, to the total volume of gasoline loaded or dispensed from all gasoline storage tanks during the previous 364 days and then divide that sum by 12.

An affected source shall, within 24-hours of a request demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. The following table is a short list of things a GDF must do to meet the new rule requirements (based on the throughput calculated by the above method):

Throughput	Facility Requirements
Less Than 10,000 (gallons per mo.)	Minimize gasoline spills.
	Clean up spills as expeditiously as practicable.
	Cover all open gasoline containers and all gasoline storage tank fill-pipes when not in use.
	Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
	Compliance with the requirements of this subpart by the applicable dates contained in §63.11113 is required.
	Compliance with the applicable requirements of §63.11116 is required.
10,000 to 99,999 (gallons per mo.)	The facility must comply with all requirements for facilities with throughputs less than 10,000 gal/mo and:
	Storage tanks greater than 250 gal must have submerged fill pipes.
	<ul style="list-style-type: none"> ● Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank. ● Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.
	Compliance with the applicable requirements of §63.11117 is required.
100,000 or More (gallons per mo.)	<p>The facility must comply with all requirements for facilities with throughputs less than 100,000 vgal/mo and:</p> <p>Operation of a vapor balance system that is in compliance with an enforceable state, local, or tribal rule or permit and either:</p> <ul style="list-style-type: none"> ● Achieves emissions reduction of at least 90 percent; or ● Operates using management practices at least as stringent as those in Table 1 to Subpart CCCCCC of Part 63.
	Cargo tanks unloading must comply with the management practices in Table 2 to Subpart CCCCCC of Part 63.
	Compliance with the applicable requirements of §63.11118 is required.
	Compliance with the applicable testing requirements contained in §63.11120 is required.
	Submittal of the applicable notifications under §63.11124 is required.
	The loading of aviation gasoline storage tanks at airports is not subject to this subpart and the aviation gasoline is not included in the gasoline throughput calculation.
Exceptions	Gasoline storage tanks with floating roofs, or the equivalent.
	<p>The following are not subject to the requirements of §63.11118 but must comply with the requirements in §63.11117.:</p> <ul style="list-style-type: none"> ● Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008; and ● Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

ADDITIONAL CRITERIA AND MANAGEMENT PRACTICES

The following table lists additional requirements for gasoline dispensing facilities with monthly throughput of 100,000 gallons of gasoline or more. (Reference: Table I to Subpart CCCCCC of Part 63)

Type of Facility	A vapor balance system that meets the following design criteria shall be installed on gasoline storage tanks at facilities subject to §63.11118:
<p>For all GDF subject to §63.11118</p>	<p>Existing sources in Oklahoma are permitted to use either a coaxial vapor balance system or a dual-point vapor balance system as long as it meets all requirements of Subpart CCCCCC. Facility requirements include but are not limited to:</p> <ul style="list-style-type: none"> ● All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect; ● The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132. ● The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer; ● The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations; ● If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b); and ● Liquid fill connections for all systems shall be equipped with vapor-tight caps. ● Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water; and ● The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation: $P_f = 2e^{-500.887/v}$ Where: P_f = Minimum allowable final pressure, inches of water. v = Total vapor space affected by the test, gallons. e = Dimensionless constant equal to approximately 2.718. 2 = The initial pressure, inches water.
<p>For new/reconstructed GDF, or new storage tank(s) at facility subject to §63.11118</p>	<p>A dual-point vapor balance system is required for gasoline storage tanks at a new or reconstructed GDF, or new storage tank(s) at a facility subject to §63.11118 (as defined in §63.11132). The facility shall also comply with the requirements for existing sources above.</p>

CARGO TANK TRUCK CRITERIA AND MANAGEMENT PRACTICES

Gasoline cargo tanks unloading at gasoline dispensing facilities with monthly throughput of 100,000 gallons of gasoline or more must comply with the following requirements. (Reference: Table 2 to subpart CCCCCC of part 63)

If you own or operate	Then you must
A gasoline cargo tank truck	<p>Not unload gasoline into a storage tank at a GDF subject to the control requirements for a vapor balance system under §63.11118 unless the following conditions are met:</p> <ul style="list-style-type: none"> ● All hoses in the vapor balance system are properly connected; ● The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect; ● All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight; ● All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank; ● All hatches on the tank truck are closed and securely fastened; and ● The filling of storage tanks at GDF shall be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be on the tanker truck.

TESTING REQUIREMENTS (Reference: Table 3 to Subpart CCCCCC of Part 63)

Each owner or operator required to install a vapor balance system under §63.11118(b)(1), is required at the time of installation of such system and every 3 years thereafter, to comply with the requirements in paragraphs (a)(1) and (2) of §63.11120.

If you are required	Then the testing requirements under §63.11086, §63.11087, or §63.11088
To install a vapor balance system	<p>Testing requirements include but are not limited to:</p> <ul style="list-style-type: none"> ● Must conduct an initial performance test within 180 days after compliance date; ● The administrator may require a performance test under CAA section 114 at any time; ● Must notify the administrator 60 days before the test; ● If necessary to reschedule the performance test the administrator must be notified of the rescheduled date as soon as practicable; ● Must submit site-specific test plan procedures, performance audit requirements and internal/external QA procedures for testing 60 days before the test or the date agreed to by the administrator; ● Performance tests must be conducted under representative conditions; ● Must conduct according to this subpart and EPA test methods unless the administrator approves alternative; ● Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used; ● Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status and keep data for 5 years; and ● Performance Specifications in appendix B of 40 CFR part 60 apply.

NOTIFICATION REQUIREMENTS BASED ON MONTHLY THROUGHPUT

Depending on the size and compliance status of the facility certain gasoline facilities must submit a notification to the Oklahoma Department of Environmental Quality.

Throughput	Facility notification requirements of §63.11124	
Less Than 10,000 (gallons per mo.)	No notification is required	
	Initial Notice	Existing Facilities by May 9, 2008, or when the monthly throughput exceeds 10,000 gallons.
10,000 or More (gallons per mo.)	Notice of Compliance	New Facilities by January 10, 2008, or by startup
		Existing Facilities by January 10, 2011 or within three years of the monthly throughput exceeding 10,000 gallons.
Exceptions	The Notice of Compliance can be submitted in lieu of the Initial Notification provided it contains the information required for the Initial Notification.	
	If a facility is operating in compliance with an enforceable state, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b) by January 10, 2008, it is not required to submit an Initial Notification or Notice of Compliance. Oklahoma has a rule that requires submerged fill (as defined in OAC 252:100-37-2) for VOC storage tanks with a capacity of 400 gallons or more constructed after December 28, 1974. However, since the definition of submerged fill for OAC 252:100-37-2 and the requirements of §63.11117(b) are not the same, only those tanks meeting the enforceable submerged fill requirements of OAC 252:100-37-2 which satisfy the requirements of §63.11117(b) are not required to submit these notices.	

For Oklahoma Facilities Notifications should be mailed to:

Oklahoma Department of Environmental Quality
 Manager, Compliance and Enforcement
 Air Quality Division
 P O Box 1677
 Oklahoma City OK 73101-1677