

2011

Summaries for Gasoline Distribution Facilities and Gasoline Dispensing Facilities 40 CFR 63 subpart BBBBBB and 40 CFR 63 subpart CCCCCC



Ohio EPA, Division of Air Pollution
Control
1/1/2011

Disclaimer

The Ohio EPA, Division of Air Pollution Control has developed this guidance in order to provide assistance to the regulated community concerning the applicability of U.S. EPA's gasoline distributing facility and gasoline dispensing facility standards. Every effort has been made to ensure the accuracy and completeness of this guidance.

This guidance is intended for informational purposes. It cannot be relied upon to create any rights enforceable by any party in litigation with the United States EPA or Ohio EPA. This guidance is not a final action, and it does not constitute rule making. U.S. EPA and/or Ohio EPA officials may decide to follow the guidance provided herein, or they may act at variance with the guidance, based on site-specific circumstances. The guidance may be reviewed and/or changed at any time without public notice. Before relying on the use of this guidance, parties should review the actual standards and verify that they are following the standards. If any conflict between the standards are followed and this guidance is found, it is recommended that the standards are followed and not this guidance.

Comments and Suggestions

Any comments and suggestions concerning this guidance should be sent to:

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Introduction:

According to section 112(k) of the 1990 CAAA, U.S. EPA is required to identify 30 hazardous air pollutants (HAPs) located at area sources which present the greatest threat to the public in the largest number of urban areas. U.S. EPA is also required to reduce cancer risks attributed to these pollutants by 75 percent. Gasoline distribution bulk terminals, bulk plants, pipeline facilities, and gasoline dispensing facilities emit volatile organic HAPs, which includes HAPs targeted under section 112(k) of the CAAA. These rules were developed to establish emission standards for HAPs in the gasoline distribution (Stage I) source category. Gasoline vapors contain two HAPs (benzene and ethylene dichloride) included among the 30 area source HAPs listed under the Urban Air Toxics Strategy. The final rules, promulgated on January 10, 2008, apply to any existing or new gasoline distribution or dispensing facility that is an area source of HAPs.

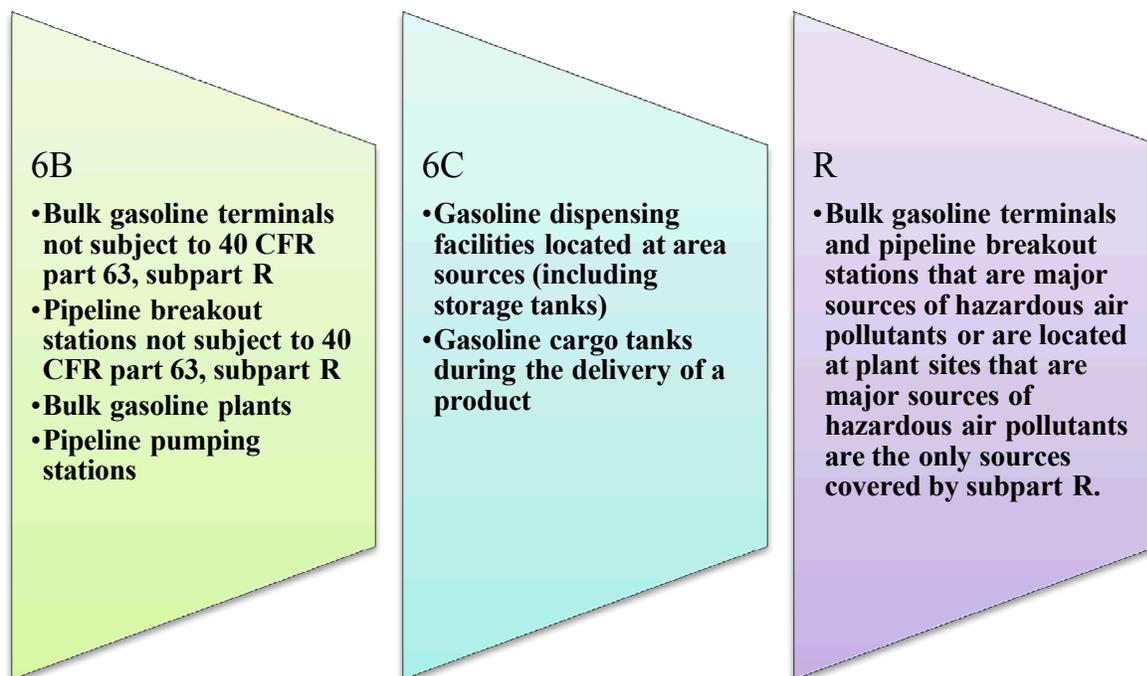
Subpart BBBBBB (6B)- Gasoline Distribution Facilities
Subpart CCCCCC (6C)- Gasoline Dispensing Facilities (GDFs)

Important Dates:

Rule Proposed: 11/09/06
 Rules Finalized: 1/10/08
 Rules Amended: 6/25/08
 Rules Amended: 1/24/ 2011

Who is subject to these standards?

Figure 1. Diagram describing relationship between facilities subject to subparts 6B,6C, and R.



Basic definitions (§63.11100 and §63.11132):

Bulk gasoline plant: any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline *throughput of less than 20,000 gallons per day*.

Bulk gasoline terminal: any gasoline storage and distribution facility that receives gasoline by pipeline, ship/barge, or cargo tank and had a gasoline *throughput of 20,000 gallons per day or greater*.

Gasoline cargo tank: a delivery tank truck or railcar which is loading gasoline or has loaded gasoline in the immediate previous load

Gasoline dispensing facility (GDF): stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, non-road vehicle, or non-road engine.

Pipeline breakout station: a facility along a pipeline containing storage vessels used to relieve surges or to receive and store gasoline from the pipeline for re-injection and continued transportation.

Pipeline pumping stations: a facility along a pipeline that contains pumps to maintain the desired pressure and flow of a product through the pipeline and not containing storage vessels (other than surge control tanks).

Submerged filling: the filling of a gasoline storage tank through a submerged fill pipe. Submerged fill pipes installed before November 9, 2006 must be no more than 12 inches from the bottom of the tank. Submerged fill pipes installed after November 9, 2006 must be no more than 6 inches from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Subpart BBBBBB-National Emission Standards for Hazardous Air Pollutants: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

40 CFR 63 subpart BBBBBB (6B): This rule establishes requirements for bulk distribution facilities (gasoline distribution bulk terminals, bulk plants, and pipeline facilities).

Emission sources include gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service.

Compliance Dates:

<i>Type of source</i>	<i>Compliance date</i>
Existing area source	January 10, 2011
New area source	January 10, 2008 or upon start-up, whichever is later
Existing affected source that becomes subject to the control requirements for these subparts	3 years after affected source becomes subject to standard

Reference: §63.11083 and §63.11113

Existing source: Facilities that started construction or reconstruction on or before November 9, 2006.

New source: Facilities that started construction after November 9, 2006.

Reconstructed: An existing facility that made modifications after November 9, 2006.

Emission Limits and Management Practices:

For bulk gasoline plants (§63.11086):

- Load gasoline into storage tanks and cargo tanks at your facility by utilizing submerged filling:
 - Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.
 - Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank*.
- *These distances are measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.
 - If the submerged fill pipes do not meet the specifications listed above for submerged filling, facilities are still considered to be in compliance if the liquid level in the gasoline storage tank is always above the entire opening of the fill pipe.
- Perform a monthly leak inspection of all equipment in gasoline service. The requirements are listed in §63.11089 (a) through (d).

- Do not allow gasoline to be handled in a way that would result in vapor releases
- Submit an Initial Notification (by May 9, 2008) and Notification of Compliance Status (by March 11, 2011) to the appropriate offices
- Comply with the above requirements by the compliance dates listed in §63.11083 while keeping applicable records and submitting reports
- If your facility has a gasoline storage tank with a capacity of less than 250 gallons or a gasoline storage tank subject to subpart CCCCCC, refer to §63.11086 for more details.

For gasoline storage tanks at bulk gasoline terminals (§63.11087):

- Details on emission limits and management practices for applicable gasoline storage tanks vary with differing storage tank capacities:

<i>Storage tank capacity</i>	<i>Requirements</i>
1. Gasoline storage tanks with a capacity of less than 75 cubic meters (~20,000 gallons) or a capacity of less than 151 cubic meters and a gasoline throughput of 480 gallons per day or less:	The tank should be covered with a fixed roof and all openings must be maintained in a closed position when not in use.
2. Gasoline storage tanks with a capacity of more than 75 cubic meters (~20,000 gallons) and not meeting the criteria in item 1 of this table:	Must use specified floating roofs (external or internal) and seals or a closed vent system and control device to reduce emissions by 95%.
3. A surge control tank	Each tank must be equipped with a fixed roof. All openings must be maintained in a closed position when not in use.

- Comply with applicable testing and monitoring (§63.11092(e)):

<i>Control device installed in gasoline storage tank</i>	<i>Testing/monitoring requirements</i>
1. Gasoline storage tanks equipped with an internal floating roof:	Must perform inspections on the floating roof systems Note: refer to rule for exceptions and further detail
2. Gasoline storage tanks equipped with an external floating roof system:	Must perform inspections on the floating roof systems Note: refer to rule for exceptions and further detail
3. Gasoline storage tank is equipped with a closed vent system and control device:	Performance test must be conducted to establish an operating parameter value

- Comply with the above requirements by the compliance dates listed in §63.11083 while keeping applicable records and submitting reports
- Owners and operators of gasoline cargo tanks are required to conduct an annual certification test.

For gasoline loading racks at bulk gasoline terminals, pipeline breakout stations, or pipeline pumping stations (§63.11088):

- Emission limits and management practices for applicable loading racks:

<i>Gasoline loading rack throughput</i>	<i>Requirements</i>
1. Gasoline loading racks at a bulk gasoline terminal with a daily throughput of less than 250,000 gallons:	Submerged filling must be used for the loading of cargo tanks. The submerged fill pipe must be no more than 6 inches from the bottom of the cargo tank.
2. Gasoline loading racks at a bulk gasoline terminals with a daily throughput greater than 250,000 gallons:	Reduce emissions of total organic carbon to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks (0.00067 lbs/gallon). Loading racks should be equipped with a vapor collection system designed to collect total organic carbon vapors. Gasoline should be loaded into cargo tanks that are demonstrated to be vapor tight.

- There are alternative requirements for railcar cargo tanks
- Comply with applicable testing and monitoring. Sources subject to an emission limit in §63.11088 for gasoline loading racks must conduct a performance test on the vapor processing and collection systems. For each performance test conducted, the owner/operator should establish a monitored operating parameter value for the vapor processing system.
Notes: If performance testing has been conducted on the vapor processing and collection systems within 5 years prior to January 10, 2008, these results may be submitted to the Administrator in lieu of the testing requirements under this rule. Testing also does not apply to flares.
- Comply with the above requirements by the compliance dates listed in §63.11083 while keeping applicable records and submitting reports/notifications

For equipment leak inspections at bulk gasoline terminals, bulk plant pipeline breakout stations, or pipeline pumping stations (§63.11089):

- A monthly inspection of all equipment in gasoline service must be conducted
 1. Use a log book
 2. Record each detection of a liquid or vapor leak. An attempt at repair should be made within 5 calendar days of detection.
 3. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days.

- Comply with the above requirements by the compliance dates listed in §63.11083 while keeping applicable records and submitting reports/notifications

Testing and monitoring requirements (§63.11092):

For sources subject to testing requirements under §63.11086, §63.11087, or §63.11088, the testing requirements include:

- Must conduct an initial performance test within 180 days after compliance date
- 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 for testing 60 days before the test or the date agreed to by the Administrator
- Performance tests must be conducted under representative conditions for the facility
- Must conduct performance tests according to this subpart and U.S. EPA test methods unless the Administrator approves an alternative test method
- Must have three test runs of at least 1 hour each. Compliance is based on arithmetic mean of three runs
- 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
- Developing a monitoring and inspection plan may be required for some facilities
- Bulk gasoline terminals subject to this subpart must install a continuous monitoring system (CMS). This system must be installed by January 10, 2011

Notification requirements (§63.11093):

1. Initial Notification
2. Notification of Compliance Status
3. Notification of Performance Test (if testing is required)
4. Additional notifications under §63.9 may need to be submitted as appropriate

Recordkeeping requirements (§63.11094):

Records should be kept onsite for 5 years. Owners/operators of bulk gasoline terminals subject to the gasoline cargo tank loading requirements must keep records of the required test results. This includes annual certification testing. Owners/operators of facilities subject to equipment leak provisions shall keep a record of the types, locations, and identification numbers of all equipment in gasoline service.

Other records to be kept include:

1. Records of continuous monitoring data
2. For the Notification of Compliance Status, keep a record of methods used to determine the operating parameter value

3. Up-to-date copy of the monitoring and inspection plan
4. Records of all system malfunctions: This includes records of the occurrence and duration of each malfunction and records of actions take during periods of malfunctions which would minimize emissions.

Reporting requirements (§63.11095):

1. Bulk terminals or pipeline breakout stations subject to control requirements are required to submit a semiannual compliance report.
2. Affected sources subject to the control requirements shall submit an excess emissions report at the same time the semiannual compliance report is submitted.
3. Bulk gasoline plants or pipeline pumping stations are required to submit a semiannual excess emission report only for a 6 month period during which an excess emission event has occurred. If no excess emission events have occurred, no report is required.
4. Each affected source is required to submit a semiannual report which includes information on any malfunctions which may have occurred. Affected bulk plants and pipeline facilities are not required to submit reports for periods which no malfunctions have occurred.
5. For storage vessels complying with this subpart after January 10, 2011, the source's NOCS information can be included in the next semi-annual compliance report.

Table 1. Side-by-side comparison of subpart BBBBBB and RACT rules for bulk plants (OAC 3745-21-09(P)).

RACT 21-09 (P)	Subpart BBBBBB (terms for bulk gasoline plants)
<p>Applicability: Bulk gasoline plants are applicable to this rule.</p> <p>Exemptions (5):</p> <ol style="list-style-type: none"> 1. Bulk gasoline plants that have an <i>average daily throughput of less than 4,000 gallons of gasoline</i> for a calendar year. These facilities are only applicable to record and reporting requirements in the state rule. 2. A facility that has a stationary storage tank equipped with an internal floating roof or external floating roof. These facilities are exempt from the state rule requirements for obtaining a vapor balance system or vapor control system to eliminate vapors displaced by gasoline transfer (1)(b). 	<p>Applicability: Area source bulk gasoline plants. Area sources are sources that emit less than 10 tons per year of one hazardous air pollutant or less than 25 tons per year of multiple hazardous air pollutants.</p> <p>A bulk gasoline plant is defined as a gasoline storage and distribution facility that receives gasoline via pipeline, ship, barge, or cargo tanks and has a <i>gasoline throughput of less than 20,000 gallons per day</i>.</p>

Requirements for bulk gasoline plants:

Submerged filling:

Owners/operators must load gasoline into storage tanks by a submerged fill pipe (1)(a).

Vapor release control parameters.

Transferring gasoline from delivery vessel to stationary storage tank (1)(b):

One of the following systems must be used:

1. Vapor balance system that is equipped with a vapor tight vapor line connection from the stationary tank to the delivery vessel. The line should route at least 90% by weight of the VOC content in the displaced vapors to the delivery vessel.
2. Vapor control system which recovers at least 90% by weight of the displaced vapors.

Gasoline is not allowed to be spilled, discarded in sewers, stored in open containers, or handled in any way that would allow evaporation (3).

Reporting/Recordkeeping:

Owner/operators shall maintain records for 5 years. Records of the following information must be kept on site:

- Daily quantity of gasoline loaded into gasoline tank trucks
- Results of leak checks with date of inspection, findings, leak determination method, corrective measure taken, inspector's name (6).

Bulk gasoline plants that have an *average daily throughput of less than 4,000 gallons of gasoline* shall notify OEPA within 30 days for this exemption to the state rule (7).

OEPA shall be notified of any leaks in vapor or liquid lines that are not repaired within 15 days (7).

Requirements for bulk gasoline plants:

Submerged filling:

Owners/operators must load gasoline into storage tanks and cargo tanks by utilizing submerged filling. Submerged fill pipes installed before November 9, 2006 must be no more than 12 inches from the bottom of the tank. Submerged fill pipes installed after November 9, 2006 must be no more than 6 inches from the bottom of the tank. Gasoline storage tanks with a capacity of less than 250 gallons and gasoline storage tanks that are subject to the GDF NESHAP are not subject to the submerged filling requirements. (§63.11086(a) and (b)).

Vapor release control parameters:

Gasoline should not be handled in a manner that would cause vapor releases. Measures to prevent vapor releases include minimizing gasoline spills, cleaning up spills as quickly as possible, covering all open gasoline containers with a gasketed seal (when not in use), minimizing gasoline sent to open waste collection systems.

A monthly inspection must be conducted on all equipment in gasoline service.

(§63.11086(c) and (d))

Reporting/Recordkeeping:

Submit an Initial Notification and a Notification of Compliance Status (§63.11086(e) and (f))

For equipment leak provisions, owners/operators must keep a record which describes all equipment used in gasoline service. For equipment leak inspections, owners/operators must keep a log book of each leak detected.

The log book should include:

- Equipment type/identification number
- Nature of leak and method of detection
- Date a leak was detected
- Repair method applied to leak
- If repair was delayed, the reason it wasn't repaired within 15 days and the expected date of repair
- Date of successful repair (§63.11094(d) and (e)).

A semiannual excess emissions report shall be submitted only for a 6 month period which an excess emission event has occurred (§63.11095(c)).

Table 2. Side-by-side comparison of subpart BBBBBB and RACT rules for bulk terminals (OAC 3745-21-09(Q)).

RACT 21-09(Q)	Subpart BBBBBB (terms for bulk gasoline terminals)
<p>Applicability: Bulk gasoline terminals are subject to this rule.</p> <p>Exemptions (4):</p> <ol style="list-style-type: none"> 1. Bulk gasoline terminals which have a <i>maximum daily throughput of equal or less than 20,000 gallons of gasoline</i> and the gasoline is supplied to the loading rack from stationary storage tanks (equipped with and internal floating roof or external floating roof) or the loading rack is equipped with a vapor balance system that meets the requirements of (P)(1)(d)(i), (P)(2), and (P)(4). These sources are exempt from the vapor control/collection provisions of (1). <p>Requirements for bulk gasoline terminals:</p> <p>For gasoline storage tanks: Any liquid gasoline that may be returned to a stationary storage tank from the vapor control system must be free of trapped air.</p> <p>For gasoline loading racks: The loading rack must be equipped with a vapor collection system during the transfer of gasoline to any delivery vessel. During transfer, all vapors displaced in from the delivery vessel are to be vented to the vapor collection system only and the pressure of the system must be maintained between -6 and +18 inches of water gauge pressure (1)(a).</p> <p>The loading rack must be equipped with a vapor control system and all vapors collected by the vapor collection system must be vented to the vapor control system.</p>	<p>Applicability: Area source bulk gasoline terminals. Area sources are sources that emit less than 10 tons per year of one hazardous air pollutant or less than 25 tons per year of multiple hazardous air pollutants. A bulk gasoline terminal is defined as a gasoline storage and distribution facility that receives gasoline via pipeline, ship, barge, or cargo tanks and has a <i>gasoline throughput of more than 20,000 gallons per day</i>.</p> <p>Requirements for bulk gasoline terminals:</p> <p>For gasoline storage tanks:</p> <ol style="list-style-type: none"> 1. Gasoline storage tanks with a capacity of less than 75 cubic meters (~20,000 gallons) must have the tank covered with a fixed roof and maintain all openings in a closed position when not in use. 2. Gasoline storage tanks with a capacity of more than 75 cubic meters (~20,000 gallons) must use specified floating roofs (external or internal) and seals or a closed vent system and control device to reduce emissions by 95% (§63.11087) <p>For gasoline storage tanks equipped with internal floating roofs or external roof system, inspections must be performed on the floating roof system. If your gasoline storage tank is equipped with a closed vent system and control device, a performance test must be conducted to determine a monitored operating parameter (§63.11092(e)).</p>

The emissions of volatile organic carbon should be less than or equal to 80 mg/l (0.00067 lbs/gallon) of gasoline loaded into the delivery vessel (1)(b).

All gasoline loading lines and vapor lines are equipped with fittings that are vapor tight. Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in a way that would cause evaporation.

Repairs must be made within 15 days after a leak is detected from the vapor control system and vapor collection system.

For gasoline loading racks:

1. Gasoline loading racks at a bulk gasoline terminal with a daily throughput of less than 250,000 gallons must use submerged filling for the loading of cargo tanks. The submerged fill pipe must be no more than 6 inches from the bottom of the cargo tank.
2. Gasoline loading racks at a bulk gasoline terminals with a daily throughput greater than 250,000 gallons must reduce emissions of total organic carbon to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks (0.00067 lbs/gallon). Loading racks should be equipped with a vapor collection system designed to collect total organic carbon vapors. Gasoline should be loaded into cargo tanks that are demonstrated to be vapor tight. (§63.11088)

For gasoline loading racks, annual performance tests on the vapor processing and collection systems are required. If any changes to the operating parameter occur after the initial performance test is conducted, the owner/operator shall document the reason to the change (§63.11092 (a) and (c)). The vapor processing system should be operated in a manner not to exceed the established operating parameter value. If the operating parameter value is exceeded, an emission standard violation has occurred. Monitoring and inspecting are required as well. (§63.11092(d)).

Equipment leak inspections:

A monthly leak inspection must be conducted of all equipment used in gasoline service (§63.11089(a)).

Reporting/Recordkeeping:

Submit an Initial Notification, Notification of Compliance Status, and Notification of Performance Test when applicable (§63.11093).

Records must be kept on site for at least 5 years. Records of test results for each gasoline cargo tank loading at the facility shall be kept. An up-to-date, readily accessible record for the continuous monitoring data should be kept on-site (§63.11094 (a), (b), and (f)).

For equipment leak provisions, owners/operators must keep a record which describes all equipment used in gasoline service. For equipment leak inspections, owners/operators must keep a log book of each leak detected.

The log book should include:

- Equipment type/identification number
- Nature of leak and method of detection
- Date a leak was detected
- Repair method applied to leak
- If repair was delayed, the reason it wasn't repaired within 15 days and the expected date of repair
- Date of successful repair (§63.11094 (d) and (e)).

Subpart CCCCCC-National Emission Standards for Hazardous Air Pollutants: Gasoline Dispensing Facilities

40 CFR 63 Subpart CCCCCC- This rule applies to gasoline dispensing facilities (GDFs). This rule establishes requirements for the loading of storage tanks at GDFs. A GDF is defined as any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. The affected source subject to this rule includes each gasoline cargo tank during the delivery of product to a GDF, and also includes each storage tank.

Emission sources include gasoline storage tanks and equipment used in vapor or liquid gasoline service. The Stage II equipment used in the re-fueling of vehicles is **not** covered by this subpart.

Notes: If your facility becomes subject to this rule due to the expanded definition of a gasoline dispensing facility (1/24/2011 amendments), compliance date requirements are different from what is listed below. Existing facilities (monthly throughput of 10,000 gallons or more) must submit their Initial Notification forms by May 24, 2011. The compliance date for these facilities is January 24, 2014.

Compliance Dates:

<i>Type of source</i>	<i>Compliance date</i>
Existing area source	January 10, 2011
New area source	January 10, 2008 or upon start-up, whichever is later
Existing affected source that becomes subject to the control requirements for these subparts	3 years after affected source becomes subject to the control requirements of the standard

Reference: §63.11083 and §63.11113

Existing source: GDFs that started construction or reconstruction on or before November 9, 2006.

New source: GDFs that started construction after November 9, 2006.

Reconstructed: An existing GDF that made modifications after November 9, 2006.

When do I need to comply with this rule? (§63.11113(e))

If you have a new or reconstructed source, you must conduct the initial compliance test upon the installation of the complete vapor balance system.

If you have an existing source:

1. For vapor balance systems installed on/before December 15, 2009, the initial compliance test must be conducted no later than 180 days after applicable compliance date.
2. For vapor balance systems installed after December 15, 2009, the initial compliance test must be conducted upon installation of the vapor balance system.

Emission Limits and Management Practices:

1. Facilities with a monthly flow of *under* 10,000 gallons must:
 - Minimize spills, and if there is a spill, clean it up as quickly as possible.
 - Cover gasoline containers & storage tank fill pipes with gasketed seal.
 - Minimize gasoline sent to open collection systems.
 - Notifications and reports are not required, but owners/operators must have records available within 24-hours of a request by the Administrator.
 - Portable gasoline containers that meet the criteria of 40 CFR 59, subpart F are considered to be in compliance with this rule.

2. Facilities with a monthly flow *at* or *above* 10,000 gallons must meet all of the requirements in #1 (except for last bullet point) and also:
 - Load all storage tanks at or above 250 gallons capacity using submerged fill.
 - 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.*

*These distances are measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

 - Submit applicable notifications to the Administrator

3. Facilities with a monthly flow *at* or *above* 100,000 gallons must meet all of the requirements in #1 and #2 and either:
 - Operate a vapor balance system that meets a specified enforceable State, local, or tribal rule or permit *or*
 - Operate vapor balance system during storage tank loadings, test the system periodically to make sure it works correctly, including specific equipment and work practices, or meets 90% control.

*The following emission sources are not required to abide by the control requirements in #3:

- Gas storage tanks constructed after January 10, 2008 with a capacity of < 250 gallons
- Gas storage tanks constructed before January 10, 2008 with a capacity of < 2,000 gallons
- Gas storage tanks equipped with floating roofs (or equivalent)

Additional requirements for facilities with a monthly throughput of 100,000 gallons or greater:

Gasoline storage tanks located all GDFs must be equipped with a vapor balance system. This system must meet an emission reduction of at least 90 percent and meet specific management practices on the system. New, reconstructed GDFs, or new storage tanks at existing affected facilities must equip their gasoline storage tanks with a dual-point vapor balance system.

Testing and monitoring requirements:

To install a vapor balance system testing requirements include:

- Must conduct an initial performance test within 180 days after compliance date
- 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 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 U.S. 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.
- 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

Owners and operators of affected sources must do the following at the time of installation of a vapor balance system and every three years thereafter (§63.11120):

1. Demonstrate compliance with leak and cracking pressure requirements
 - For pressure-vacuum vent valves the pressure specifications should be set to a positive pressure setting of 2.5 to 6.0 inches of water and a negative setting of 6.0 to 10.0 inches of water. The total leak rate of all pressure-vacuum vent valves should 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 pressure of 4.0 inches of water.
 - Test methods to use: CARB Vapor Recovery Test Procedure TP-201.1E or an approved alternative test method
2. Demonstrate compliance with the static pressure performance requirement
 - An equation listed in Table 1 item 1(h) of the final rule should be used to determine compliance with the static pressure performance requirement
 - Test methods to use: CARB Vapor Recovery Test Procedure TP-201.3, an approved alternative test method, or Bay Area Air Quality Management District Source Test Procedure ST-30

Notification and recordkeeping requirements (§63.11124 and §63.11125):

1. Facilities with a monthly flow of *under* 10,000 gallons
 - Not required to submit notifications or reports
 - Must keep records of monthly throughput, all malfunctions, and actions used to correct malfunctions
2. Facilities with a monthly flow *at* or *above* 10,000 gallons
 - Initial Notification
 - Notification of Compliance Status (NOCS)
 - Must keep records of monthly throughput, all malfunctions, actions used to correct malfunctions, and emission limits exceeded. These reports are due March 15 each year if malfunctions occur.
3. Facilities with a monthly flow *at* or *above* 100,000 gallons
 - Initial Notification
 - Notification of Compliance Status (NOCS)
 - Submit results of all volumetric efficiency tests required. These results must be submitted within 180 days of the completion of performance testing
 - Records of tests performed. Records of these tests must be kept for 5 years
 - Must keep records of monthly throughput, all malfunctions, actions used to correct malfunctions, and emission limits exceeded. These reports are due March 15 each year if malfunctions occur.

Note: Gasoline distribution area sources are exempt from obtaining a Title V permit as a result of being subject to these standards.

Note: Pursuant to the 1/24/2011 amendments, NOCS forms for existing sources are now due on March 11, 2011. Also, the method used to calculate monthly throughput of gasoline at the facility must be included on the NOCS form.

Reporting requirements (§63.11126):

Sources that have a monthly flow at or above 100,000 gallons are required to submit results of all volumetric efficiency tests to the Administrator. These results must be submitted within 180 days of the completion of the performance test. Also, each affected source must submit a report by March 15 of each year which explains the number, duration, and brief description of each malfunction.

Table 3: Side-by-side comparison of subpart CCCCCC and RACT rules for bulk terminals (OAC 3745-21-09(R)).

RACT 21-09(R) Stage I Vapor Control Systems	6C (terms for GDFs)
<p>Applicability: Gasoline dispensing facilities are subject to this rule.</p> <p>Exemptions (4):</p> <ol style="list-style-type: none"> 1. Gasoline dispensing facilities that have an <i>annual throughput of less than 120,000 gallons</i> 2. Stationary storage tank transfers in which the storage tank is equipped with an internal or external floating roof <p>Facilities that fit the exemption criteria listed above are still required to maintain records of the quantity of gasoline delivered to the facility. These records are to be kept at the facility for 3 years.</p> <p>If the annual throughput of gasoline exceeds 120,000 gallons for any rolling 12 month period, OEPA should be notified within 45 days after the this limit is exceeded.</p> <p>Definitions: Submerged fill pipe: means any fill pipe where the discharge opening is entirely submerged when the liquid level is six inches above the bottom of the tank. Also, this definition includes any fill pipe where the discharge opening is entirely submerged when the liquid level is eighteen inches above the bottom of the tank when applied to a tank which is loaded from the side (21-01(H)(15)).</p> <p>Requirements for Gasoline Dispensing Facilities: For a gasoline <i>throughput of greater than 120,000 gallons annually (~10,000 gallons per month)</i>: Stationary storage tanks that store gasoline at GDFs are required to be equipped with a submerged fill pipe.</p> <p>When gasoline is transferred from a delivery vessel to a stationary storage tank located at a GDF, the vapors displaced during transfer must be processed by a vapor balance system or a vapor control system.</p>	<p>Applicability: Area source gasoline dispensing facilities. Area sources are sources that emit less than 10 tons per year of one hazardous air pollutant or less than 25 tons per year of multiple hazardous air pollutants. This subpart regulates gasoline cargo tanks during the delivery of product to a GDF. Emission sources covered by this rule include gasoline storage tanks (including pressure/vacuum vents) and equipment components in vapor or liquid gasoline service (including pressure/vacuum vents). (§63.11112)</p> <p>Definitions: Submerged filling: the filling of a gasoline storage tank through a submerged fill pipe. Submerged fill pipes installed before November 9, 2006 must be no more than 12 inches from the bottom of the tank. Submerged fill pipes installed after November 9, 2006 must be no more than 6 inches from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition. (§63.11132)</p> <p>Requirements for Gasoline Dispensing Facilities: For a gasoline <i>throughput of less than 10,000 gallons of gasoline per month</i>: Management practices: Gasoline must not be handled in a way that would cause vapor releases to the atmosphere. Measures to do this include minimizing gasoline spills, cleaning up spills as quickly as possible, covering all open gasoline containers and gasoline storage tank fill pipes with a gasketed seal, and minimize gasoline sent to open waste collection systems (§63.11116).</p>

The vapor balance system must route 90% by weight of the VOC in the displaced vapors. The vapor control system must recover at least 90% by weight of the VOC in the displaced vapors.

If a vapor balance system is used, it must meet the following operating practices:

1. The system must be kept in good working order and should be used at all times during gasoline transfer.
2. There should be no leaks in the vapor and liquid lines during the transfer of gasoline and in the delivery vessel pressure/vacuum relief lines and hatch covers ((1) and (2)).

If a leak occurs in the vapor balance system or vapor control system, the repair shall be made within 15 days (3).

For a gasoline *throughput of 10,000 gallons of gasoline per month or greater*. You must follow the management practices listed in §63.11116. Gasoline must be loaded into storage tanks through submerged filling. Note: gasoline storage tanks with a capacity if less than 250 gallons are not required to comply with the submerged filling requirements (§63.11117).

For a gasoline *throughput of 100,000 gallons of gasoline per month or greater*. You must follow the management practices listed in §63.11116. Gasoline must be loaded into storage tanks through submerged filling.

Additional requirements:

Gasoline storage tanks located all GDFs must be equipped with a vapor balance system.

This system must meet an emission reduction of at least 90 percent and meet specific management practices on the system. New, reconstructed GDFs, or new storage tanks at existing affected facilities must equip their gasoline storage tanks with a dual-point vapor balance system.

Exceptions to these requirements include:

1. Gasoline storage tanks constructed after January 10, 2008 with a capacity of less than 250 gallons.
2. Gasoline storage tanks constructed before January 10, 2008 with a capacity of less than 2,000 gallons.
3. Gasoline storage tanks equipped with floating roofs or equivalent.

For cargo tanks unloading at GDFs: Gasoline cannot be unloaded unless all the hoses in the vapor balance system are properly connected, adapters/couplers have closures which seal upon disconnect, all return hoses, couplers, adapters, and tank truck vapor return equipment used must be vapor tight, all hatches on the tank truck must be closed and securely fastened.
(§63.11118)

Testing and monitoring:

GDFs required to install a vapor balance system are required to demonstrate the following*:

1. Leak rate and cracking pressure requirements (CARB Vapor Recovery Test Procedure TP-201.1E or approved alternative)
2. Static pressure performance requirements (CARB Vapor Recovery Test Procedure TP-201.3, approved alternative, or Bay Area Air Quality Management District Source Test Procedure ST-30)

*These tests should be conducted upon initial installation and they should be conducted every 3 years as well.

Initial compliance is determined by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95% reduction using the CARB Vapor Recovery Test Procedure 201.1. (§63.11120)

Figure 1. Flow diagram describing the flow of gasoline and gasoline vapors.

