

Gasoline MACT (GACT) Area Source Rule



API Storage Tank Conference
October 8, 2009

GACT Applicability

- Finalized January 10, 2008
 - Citations: 73FR1933 40 CFR 63.11080
- Affected sources:
 - Bulk gasoline terminal not subject to Subpart R or CC
 - Pipeline breakout station not subject to Subpart R
 - Pipeline pumping station
 - Bulk gasoline plant

GACT Compliance Dates

- New or Reconstructed after November 9, 2006 but before January 10, 2008:
 - **by January 10, 2008**
- New or Reconstructed after January 10, 2008:
 - Upon startup of the source
- Existing Sources:
 - By January 10, 2011

GACT Bulk Terminal Requirements

- Submerged Fill Pipes
 - Except for tanks <250 gallon capacity
- Monthly Leak Detection
- Gasoline handling requirements
- Initial Notification by May 9, 2008
 - Unless already complying with equally stringent state standard for submerged fill
- Notification of Compliance Status by compliance date

GACT Tank Requirements

(with reference to NSPS Kb- Tanks)

- Equip gasoline tanks >75,000L (19,815 gal) with one of the following:
 - Internal floating roof
 - External floating roof
 - Closed vent system and control device

GACT Tank Testing

- Floating roof tanks inspections
- For closed vent systems, test and establish operational parameters
- Compliance with NSPS Kb = Compliance with GACT

GACT Loading Racks

- VOC < 80 mg/l loaded
- Vapor tight tank trucks
- Testing and Monitoring Requirements
 - Testing of vapor processing/collecting system
 - Unless already certified through local rules
 - Must implement a Continuous Monitoring System (CMS) to show ongoing compliance



What Type of CMS

- Carbon Adsorption – VOC CEMs
- Thermal Oxidation – Temperature or Pilot flame monitor
- Flare – Pilot flame monitor
- Malfunctions must initiate cause determination within 1 hour and corrective actions within 24 hours

Table 2 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks

If you own or operate	Then you must
1. A gasoline loading rack(s) at a bulk gasoline terminal with a gasoline throughput of 250,000 gallons per day, or greater	(a) Equip your loading rack(s) with a vapor collection system designed to collect the TOC vapors displaced from cargo tanks during product loading; and (b) Reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack; and
	(c) Design and operate the vapor collection system to prevent any TOC vapors collected at one loading rack from passing to another loading rack; and
	(d) Limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in §60.502(e) through (j) of this chapter. For the purposes of this section, the term “tank truck” as used in §60.502(e) through (j) of this chapter means “cargo tank” as defined in §63.11100.
2. A gasoline loading rack(s) at a bulk gasoline terminal with a gasoline throughput of less than 250,000 gallons per day	(a) Use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank. (b) Make records available within 24 hours of a request by the Administrator to document your gasoline throughput.

Equipment Leak Requirements

- Monthly leak inspection of all equipment in gasoline service:
 - Detection methods involving sight, sound, and smell
 - Log book to be signed by operator after each inspection
 - Record each liquid or vapor leak found
- Leak repair requirements:
 - Initial attempt as soon as practicable; no later than 5 days after detection
 - Complete repair or replacement within 15 days or provide written demonstration that repair within 15 days is not feasible

Miscellaneous Requirements

- Prevention of VOC releases from gasoline handling:
 - Minimize gasoline spills
 - Clean up spills as expeditiously as possible
 - Cover all open gasoline containers with gasketed seal when not in use
 - Minimize gasoline sent to open waste-collection systems

Recordkeeping (1 of 4)

- Keep all records for five years
- For tanks, keep records per NSPS Kb, or MACT Subpart WW (Storage Vessels)
- Keep records of all vessels loaded
 - Annual certifications (hard copy or electronic)

Recordkeeping (2 of 4)

- For fugitive leaks
 - Keep record of all equipment in gasoline service
 - Keep log book of inspections and provide detailed information about each leak (63.11094(e))



Recordkeeping (3 of 4)

- Maintain records of the test results of each gasoline cargo tank loading at the facility
- Maintain records of compliance with parameters established for the CMS
- Maintain leak inspection and repair log book
- Maintain record of system malfunctions

Recordkeeping (4 of 4)

- For Bulk Terminals
 - Keep records of CMS parameters established during testing
 - Keep records of all monitoring and inspection plans
 - Keep record of all system malfunctions

Reporting

- Semiannual compliance report (63.11095)
- Extensive reporting pertaining to:
 - Tank controls (per NSPS Kb)
 - Vapor tightness records and exceptions
 - Excess emission reports
 - Each instance of: non vapor tight cargo tank loading; each exceedance of established CMS parameters; each leak that was not repaired within established timelines; each malfunction or deviation from any approved monitoring and inspection plans

GACT Summary

List of Affected Sources:	Compliance Dates:	Affected Equipment:	Control Requirements:	Testing:	Recordkeeping/Reporting:
Bulk Gasoline Terminals not subject to Subpart R or CC	New or Reconstructed November 9, 2006 – January 10, 2008 should be in compliance and send notice of compliance as of January 10, 2008	Tanks	Equip tanks >75,000L (19,815 gal) with Internal, External Floating roof or Closed Vent System and Control Device (95% control efficiency)	EFR – Annual secondary seal gap measurement, measure primary seal every 5 years IFR – Annual roof inspection from manway, internal inspection every 10 years Closed Vent system performance test (NSPS XX §60.503) Annual certification of cargo tanks	NSPS records, Vent system test results
Pipeline Breakout Stations not subject to Subpart R	New or Reconstructed after January 20, 2008 should be in compliance and send notice of compliance upon startup	Loading Racks	If throughput > 250,000 gpd, VOC <80 mg/L, vapor tight tanks truck only If throughput < 250,000 gpd, use a submerged fill pipe (no more than 6" from bottom)	Vapor Processing/Collecting System Testing Continuous Monitoring System	Vessel Loading, CMS compliance, Monitoring and inspection plans, Excess emissions, Cargo Tank Vapor Tightness
Pipeline Pumping Station	Existing Sources should be in compliance and send notice of compliance by January 10, 2011	Equipment in gasoline service	Monthly sight, sound, smell leak detection, attempt repair ASAP no later than 5 days, complete repair within 15 days or provide written infeasibility report	Monthly Leak Detection	Leak inspection and repair log book, each attempt to repair leak, reason for delays, date of successful repair. Excess emissions (every six months)
Bulk Gasoline Plant		Best Management Practices	Minimize spills Clean up spill ASAP Cover open gasoline containers Minimize gasoline sent to waste collection (O/W separators)	Monthly Leak Detection	Excess Emissions events

GACT Implementation Strategy

1. Conduct Applicability Determinations

2. Determine Control/Treatment Strategies

3. Prepare for Performance Testing

4. Prepare for Compliance Date

