

**Inspector Checklist for
The Miscellaneous Coating Manufacturing Maximum Achievable Control
Technologies (MACT)**

**National Emission Standards for Hazardous Air Pollutants (NESHAP):
Organic Liquids Distribution
40 CFR Parts 63.2330 – 63.2406 or Subpart EEEE
See Also General Provisions in 40 CFR Part 63**

Summary: This subpart establishes national emission and operating limitations for hazardous air pollutants (HAP) emitted from miscellaneous coating manufacturing at major sources of HAP emissions. Requirements to demonstrate initial and continuous compliance with these limitations have also been established.

NOTE: This checklist has not included any emissions calculations for this subpart. However, definitions, applicability of general provisions and all other tables for this subpart are included.

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I. Pre Site Visit Review

1. What should I do before I visit the facility to be inspected?

- Review any available information on the facility. This can be found in agency files containing construction and/or operating permits, reports, enforcement actions or by contacting facility personnel.

Facility ID/Permit Number(s):	
Facility Name/Address:	
Facility Contact Name:	
Facility Number/E-mail/Fax:	
Facility Contact Address:	

- Review Inspection History

Inspector	Title/Agency	Phone Number	Date of Inspection

- Review any agency or facility specific safety procedures.

II. Applicability

2. Is the facility subject to the Organic Liquids Distribution (OLD) NESHAP? 63.2334

- Does the facility own or operate an OLD operation that is located at, or part of, a major source of HAP emissions [an OLD operation may occupy the entire plant site or be collocated with other industrial operations]? Yes No NA
- Does facility have any operations not subject to this rule:
 - OLD operations located at research and development facilities Yes No NA
 - Activities and equipment, including product loading racks, used to process, store or transfer organic liquids that are:

- Oil and natural gas production field facilities Yes No NA
- Natural gas transmission and storage facilities Yes No NA

3. What parts of the facility are covered by this rule? 63.2338

- Does the facility have a collection of activities and equipment (new, reconstructed or existing) used to distribute organic liquids into, out of, or within the facility which is a major source of HAP?
 Yes No NA
- If yes, does that collection include any of the following activities/equipment (i.e. emission sources) covered by this rule:
 - Storage tanks storing organic liquids. Yes No NA
 - Transfer racks at which organic liquids are loaded into or unloaded out of transport vehicles and/or containers. Yes No NA
 - Equipment leak components in organic liquids service that are associated with storage tanks storing organic liquids; pipelines that transfer organic liquids directly between two storage tanks; pipelines that transfer organic liquids directly between a storage tank and a transfer rack; and pipelines that transfer organic liquids directly between two transfer racks. Yes No NA
 - Transport vehicles when loading or unloading organic liquids at transfer racks. Yes No NA
 - Containers when they are loading or unloading organic liquids at transfer racks. Yes No NA
- Does the facility have any excluded operations:
 - Storage tanks, transfer racks, transport vehicles, containers and equipment leak components that are part of an affected source under another 40 CFR Part 63 NESHAP. Yes No NA
 - Non-permanent storage tanks, transfer racks, transport vehicles, containers and equipment leak components when used in special situation distribution loading and unloading operations. Yes No NA
 - Storage tanks, transfer racks, transport vehicles, containers and equipment leak components when used to conduct maintenance activities, such as storm water management, liquid removal from tanks for inspections and maintenance, or changeovers to a different liquid stored in a storage tank. Yes No NA

4. If not a major source, what type of records does the facility have to prove its status? 63.1(b)(3) and 63.10(b)(3)

- Records of the total amount of materials used each month, and, if necessary, the HAP content of each material and the calculation of the total HAP consumed each month. Yes No NA
- Records that began 12 months before the source's compliance date. Yes No NA

- Records are kept for 5 years after they are created . Yes No NA

5. Has the facility met the applicable compliance dates? 63.2342

- If the facility has a new or reconstructed affected source, did they meet the applicable compliance dates as follows:

- If the facility started up their new affected source on or before February 3, 2004 or if they reconstructed an affected source on or before February 3, 2004, did they comply with the emission limitations, operating limits and work practice standards for their new and reconstructed sources no later than February 3, 2004? Yes No NA

- For any emission source, except for floating roof storage tanks, at an affected source that commenced construction or reconstruction after April 2, 2002, but before February 3, 2004, that is required to be controlled, but would not require control based on applicable criteria, did the facility comply with the emissions limitations, operating limits and work practice standards for each emission source no later than February 5, 2007, or at startup, whichever is later? Yes No NA

- For any emission source at an affected source, except for floating roof storage tanks, that commenced construction or reconstruction after April 2, 2002, but before February 3, 2004, that is required to be controlled, based on applicability criteria, but would have been subject to a less stringent degree of control, did the facility comply with the emission limitations, operating limits and work practice standards for each such emission source, no later than February 5, 2007, or at startup, whichever is later? Yes No NA

- If the facility started up their affected new or reconstructed source before February 5, 2007, did they comply with the emission limitations, operating limits and work practice standards for each such emission source until required to comply with the emission limitations, operating limits and work practice standards no later than February 5, 2007, or at startup, whichever is later, except for floating roof storage tanks? Yes No NA

- If the facility commenced construction or reconstruction of an affected source after February 3, 2004, did they comply with the emission limitations, operating limits and work practice standards for new and reconstructed sources upon startup of the affected source? Yes No NA

- If after the startup of a new affected source, the total actual annual facility-level organic liquid loading volume at that source exceeds the criteria for control in Table 2, items 9 and 10, did the facility comply with the transfer rack requirement to be in compliance the first day of the period following the end of the 3-year period triggering the control criteria [see 63.2346(b)]? Yes No NA

- If the facility has an existing affected source, did they comply with the emission limitations, operating limits and work practice standards for existing affected sources no later than February 5, 2007, except for floating roof storage tanks? Yes No NA

- For any floating roof storage tanks at an existing affected source, was the facility in compliance with the work practice standards in Table 4, item 1, at all times after the next degassing and cleaning activity or within 10 years after February 3, 2004, whichever occurs first? Yes No NA

- If the first degassing and cleaning activity occurs during the 3 years following February 3, 2004, the compliance date is February 5, 2007. Does this apply to the facility? Yes No NA

- If an addition or change other than reconstruction was made to an existing affected facility that caused the total actual annual facility-level organic liquid loading volume to exceed the criteria for control in Table 2, items 7 and 8, did the facility comply immediately with the transfer rack requirement to be in compliance the first day of the period following the end of the 3-year period triggering the control criteria? Yes No NA
- If the facility believed that compliance with the transfer rack emission limits could not be achieved immediately, did they submit a request for a compliance extension? Yes No NA
 - If yes, did they continue to comply with applicable requirements that their transfer racks were subject to until the extension was granted? Yes No NA
 - If submitted, did the compliance extension request include all appropriate information and was it submitted according to proper protocol and to the proper authority? Yes No NA
 - Did the facility receive a reply from the Administrator – either a notification of approval or intention to deny – and respond appropriately? Yes No NA

6. Has the facility met the requirements for emissions sources not requiring controls? 63.2343

- Does the facility have any emission sources not requiring control (storage tanks or transfer racks)? Yes No NA
- For each storage tank having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack that only unloads organic liquids (i.e. no organic liquids loaded), did the facility keep documentation that verifies that each of these storage tanks and transfer racks are not required to be controlled? Yes No NA
 - Is the documentation kept up-to-date and kept in a form suitable and readily available for expeditious inspection and review? Yes No NA
- For each storage tank having a capacity of 18.9 cubic meters (5,000 gallons) or more that is not subject to control based on the criteria specified in Table 2, items 1 through 6, did the facility comply with the following requirements:
 - Submit the required applicable information (according to 63.2386) in either the Notification of Compliance Status, according to the Table 12 schedule or the schedule specified in 63.2386(b), whichever occurs first? Yes No NA
 - Submit subsequent compliance report per the required schedule as applicable? Yes No NA
- For each storage tank having a capacity of 18.9 cubic meters (5,000 gallons) or more that is not subject to control based on the criteria specified in Table 2, items 1 through 6, did the facility keep documentation, including a record of the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid, that verifies the storage tank is not required to be controlled? Yes No NA
 - Is the documentation kept up-to-date and kept in a form suitable and readily available for expeditious inspection and review? Yes No NA

- For each applicable transfer rack that loads organic liquids, but is not subject to control based on the criteria specified in Table 1, items 7 through 10, did the facility comply with the following requirements:
 - Submit required information in either the Notification of Compliance Status, according to the schedule specified in Table 12, or a first Compliance report according to the appropriate schedule specified in 63.2386(b), whichever occurs first? Yes No NA
 - Submit a subsequent compliance report according to the correct schedule whenever any of the following events occur:
 - Any storage tank or transfer rack become subject to control; Yes No NA
 - Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) become part of the affected source but is not subject to any of the emission limitations, operating limits or work practice standards of this subpart; Yes No NA
 - Any transfer rack (except those racks at which only unloading of organic liquids occurs) become part of the affected source; Yes No NA
 - Any of the information reported has changed. Yes No NA
 - If one or more of the following events listed below occurred since the filing of the Notification of Compliance Status or the last Compliance report, did the facility submit a subsequent compliance report:
 - Any storage tank or transfer rack become subject to control; Yes No NA
 - Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) become part of the affected source but is not subject to any of the emission limitations, operating limits or work practice standards of this subpart; Yes No NA
 - Any transfer rack (except those racks at which only unloading of organic liquids occurs) become part of the affected source; Yes No NA
 - Any of the information reported has changed? Yes No NA

III. Emission Limits, Operating Limits and Work Practice Standards

7. Has the facility complied with the emissions limitations, operating limits and work practice standards of this rule? [63.2346](#)

Storage Tanks

- For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2, items 1 through 5, did the facility comply with the following:
 - Meet the emission limits specified in Table 2 and comply with the applicable requirements specified in 40 CFR Part 63, Subpart SS for meeting emission limits (storage vessel means storage tanks for the purpose of this item)? Yes No NA
 - Route emissions to fuel gas systems or back into an applicable process? Yes No NA

- Comply with 40 CFR Part 63, Subpart WWW (control level 2)? Yes No NA
- Use a vapor balancing system that meets design and recordkeeping requirements? Yes No NA
- For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure control in Table 2, item 6, did the facility comply with the following:
 - Meet the emission limits specified in Table 2 and comply with the applicable requirements specified in 40 CFR Part 63, Subpart SS for meeting emission limits (storage vessel means storage tanks for the purpose of this item)? Yes No NA
 - Route emissions to fuel gas systems or back into an applicable process? Yes No NA
 - Use a vapor balancing system that meets design and recordkeeping requirements? Yes No NA
 - The vapor balancing system is designed and operated to route organic HAP vapors displaced from loading of the storage tank to the transport vehicle from which the storage tank is filled? Yes No NA
 - Transport vehicles have a current certification in accordance with the United States Department of Transportation (U.S. DOT) pressure test requirements of 49 CFR part 180 for cargo tanks and 49 CFR 173.31 for tank cars? Yes No NA
 - Organic liquids are only unloaded from cargo tanks or tank cars when vapor collection systems are connected to the storage tank's vapor collection system? Yes No NA
 - No pressure relief device on any storage tank, cargo tank or tank car is open during loading or as a result breathing losses? Yes No NA
 - Pressure relief devices are set to no less than 2.5 pounds per square inch gage (psig) at all times to prevent breathing losses. Pressure relief devices may be set at values less than 2.5 psig if the owner or operator provides rationale in the notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times? Yes No NA
 - The facility complies with the following for each pressure relief valve:
 - Each relief valve is monitored quarterly [see 63.180(b) for method]? Yes No NA
 - When a leak is detected, it is repaired as soon as practicable, but no later than 5 days after it is detected [an instrument reading of 500 parts per million by volume (ppmv) or greater defines a leak]? Yes No NA
 - The facility complies with the recordkeeping requirements [see 63.181(d)(1) through (4)]? Yes No NA
 - Cargo tanks and tank cars that deliver organic liquids to a storage tank are reloaded or cleaned at a facility that utilizes the following control techniques:

- The cargo tank or tank car is connected to a closed-vent system with a control device that reduces inlet emissions of total organic HAP by 95 percent by weight or greater or to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air?
 Yes No NA
- A vapor balancing system designed and operated to collect organic HAP vapor displaced from the cargo tank or tank car during reloading is used to route the collected vapor to the storage tank from which the liquid being transferred originated or to another storage tank connected to a common header?
 Yes No NA
- The owner or operator of the facility where the cargo tank or tank car is reloaded or cleaned has submitted to the owner or operator of the storage tank and to the Administrator a written certification that the reloading or cleaning facility meets the requirements for a closed vent system and control device and the recordkeeping requirements.
 Yes No NA
- The facility has identified in their notification of compliance status whether the offsite reloading or cleaning facility complies the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 that has monitoring, recordkeeping, and reporting provisions which constitutes compliance with the monitoring, recordkeeping and reporting provisions of this section.
 Yes No NA

Transfer Racks

This section applies to each transfer rack that is part of the collection of transfer racks that meets the total actual annual facility-level organic liquid loading volume criterion for control in Table 2, items 7 – 10, loading organic liquids with applicable organic HAP content.

- For existing affected sources, did the facility comply with the following during the loading of organic liquids into transport vehicles:
 - Meet the emission limits specified in Table 2 and comply with the applicable requirements for transfer racks specified in 40 CFR Part 63, Subpart SS, for meeting emission limits, or
 Yes No NA
 - Route emissions to fuel gas systems or back into a process as specified in 40 CFR Subpart SS, or
 Yes No NA
 - Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid is being loaded originated or to another storage tank connected to a common header?
 Yes No NA
- For new affected sources, did the facility comply with the following for during the loading of organic liquids into transport vehicles and containers:
 - Meet the emission limits specified in Table 2 and comply with the applicable requirements for transfer racks specified in 40 CFR Part 63, Subpart SS, for meeting emission limits, or
 Yes No NA
 - Route emissions to fuel gas systems or back into a process as specified in 40 CFR Subpart SS, or
 Yes No NA

- Use a vapor balancing system that routes organic HAP vapors:
 - Displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid is being loaded originated or to another storage tank connected to a common header, and Yes No NA
 - Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g. not intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header? Yes No NA
- Did the total actual annual facility-level organic liquid loading volume at any affected source become equal to or greater than the loading volume criteria for control in Table 2, but at a later date is less than the loading volume criteria for control? [If yes, applicable compliance requirements listed above are not longer required.] Yes No NA
- Did the facility have a new or reconstructed source, where at a later date the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2? [If yes, the facility must comply with the applicable compliance requirements of this section immediately.] Yes No NA
- Did the facility have existing sources, that at a later date the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2? [If yes, the facility must immediately comply with applicable compliance requirements of this section, unless an alternate compliance schedule has been approved.] Yes No NA

Equipment Leak Components

This section only applies if the affected source has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2.

- For each pump, valve and sampling connection that operates in organic liquids service for at least 300 hours per year, did the facility comply with the applicable requirements under 40 CFR Part 63, Subpart TT (control level 1), Subpart UU (control level 2), or Subpart H? [Note: Pumps, valves and sampling connectors that are insulated to provide protection against persistent sub-freezing temperatures are subject to the “difficult to monitor” provisions in the applicable subpart selected.] Yes No NA

Transport Vehicles

- For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2, items 7 – 10, did the facility comply with the following:
 - Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provision in 40 CFR 60 502(f) through (i) (note that tank truck and gasoline tank truck means transport vehicle for the purpose of this rule)? Yes No NA
 - For each transport vehicle without vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, did the facility ensure that the organic liquids are loaded only into transport vehicles that have a current

certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars? Yes No NA

Operating Limits

- For each high throughput transfer rack, did the facility meet each operating limit in Table 3 for each control device used to comply with the provisions of this subpart whenever emissions from the loading of organic liquids are routed to the control device? Yes No NA
- For each storage tank and low throughput transfer rack, did the facility comply with the requirements for monitored parameters as specified in Subpart SS of this part for storage vessels and, during the loading of organic liquids, for low throughput transfer racks, respectively? [Alternatively, the facility may comply with the operating limits in Table 3.] Yes No NA

Non-combustion devices

- If the facility elected to demonstrate compliance with a percent reduction requirement in Table 2 to this subpart using total organic compounds (TOC) rather than organic HAP, did they first demonstrate, with proper approval, that for their storage tanks and/or transfer racks, the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC? Yes No NA
- Was the demonstration conducted prior to or during the initial compliance test? Yes No NA

Miscellaneous

- If the facility requested approval from the Administrator to use an alternative to emission limitations, operating limits and work practice standards in this section, did they follow appropriate procedures [see 63.177(b) – (e)] in applying for permission and did they include all requested information [see 63.6(g)(2)]? Yes No NA
- If the facility elected to comply with the requirements of this subpart by combining emissions from different emission sources in a single control device, did they comply with the applicable provisions specified in 63.982(f)? Yes No NA

IV. General Compliance Requirements

8. Has the facility complied with applicable general requirements? 63.2350

- Was the facility in compliance with the emission limitations, operating limits and work practice standards at all times when the applicable equipment (emission sources) was in OLD operation? Yes No NA
- Did the facility always operated and maintain their affected source, including the air pollution control and monitoring equipment according to applicable provisions [see 63.6(e)(1)(i)]? Yes No NA
- Except for emission sources not required to be controlled, did the facility develop a written startup, shutdown and malfunction (SSM) plan according to the applicable provisions [see 63.6(e)(3)]? Yes No NA

V. Testing and Initial Compliance Requirements

9. Has the facility conducted the required performance tests, design evaluations and performance evaluations? 63.2354

- For each design evaluation conducted, did the facility use the procedures specified in subpart SS of this part? Yes No NA
- For each performance evaluation of a continuous emission monitoring system (CEMS) conducted, did the facility follow the general provision requirements in 63.8(e)? Yes No NA
- For each performance test conducted, did the facility use the procedures specified in subpart SS of this part and the following provisions:
 - Conduct each performance test according to the general provisions requirements in 63.7(e)(1), and either 63.988(b), 63.990(b), or 63.995(b), using the procedures specified in 63.997(e), for non-flare control devices? Yes No NA
 - Conduct three separate test runs for each performance test on a non-flare control device with each test run lasting at least 1 hour, unless exception apply [see 63.997(e)(1)(v)(A)(B)]? Yes No NA
 - Did the facility use EPA Method 25 or 25A of 40 CFR part 60, appendix A, to determine compliance with the organic HAP or TOC emission limit, or EPA Method 18 of 40 CFR part 60, appendix A, or ASTM D6420–99 (Reapproved 2004) as an alternative to Method 18? Yes No NA
 - If the facility used EPA Method 18 to measure compliance with the percentage efficiency limit, did they first determine which organic HAP are present in the inlet gas stream (i.e., uncontrolled emissions) using knowledge of the organic liquids or the screening procedure described in EPA Method 18. Yes No NA
 - In conducting the performance test, did they analyze samples collected as specified in EPA Method 18, simultaneously at the inlet and outlet of the control device and quantify the emissions for the same organic HAP identified as present in the inlet gas stream for both the inlet and outlet gas streams of the control device? Yes No NA
 - If the facility used EPA Method 18 of 40 CFR part 60, appendix A, to measure compliance with the emission concentration limit, did they first determine which organic HAP are present in the inlet gas stream using knowledge of the organic liquids or the screening procedure described in EPA Method 18? Yes No NA
 - In conducting the performance test, did the facility analyze samples collected as specified in EPA Method 18 at the outlet of the control device and quantify the control device outlet emission concentration for the same organic HAP identified as present in the inlet or uncontrolled gas stream. Yes No NA
 - To determine the HAP content of the organic liquid, did the facility use EPA Method 311 of 40 CFR part 63, appendix A, or other method approved by the Administrator? Yes No NA
 - Were other means used, such as voluntary consensus standards, material safety data sheets (MSDS), or certified product data sheets, to determine the HAP content of the organic liquid? Yes No NA

- If the method selected to determine the HAP content provides HAP content ranges, did the facility use the upper end of each HAP content range in determining the total HAP content of the organic liquid? [Note: EPA may require facilities to test the HAP content of an organic liquid using EPA Method 311 or other method approved by the Administrator. If the results of the EPA Method 311 (or any other approved method) are different from the HAP content determined by another means, the EPA Method 311 (or approved method) results will govern.]
 Yes No NA

- Did the facility avoid conducting performance tests during periods of SSM, as required?
 Yes No NA

10. Did the facility conduct the performance tests and other initial compliance demonstrations by the appropriate date? 63.2358

Facilities must conduct initial performance tests and design evaluations according to 63.7(a)(2), or by the compliance date specified in any applicable State or Federal new source review construction permit to which the affected source is already subject, whichever is earlier.

- For storage tanks and transfer racks at existing affected sources complying with the emission limitations listed in Table 2, did the facility demonstrate initial compliance with the emission limitations within 180 days after February 5, 2007, except as provided below? Yes No NA
- For storage tanks with an existing internal or external floating roof, complying with Table 2, item 1.a.ii., and item 1.a. in Table 4, did the facility conduct an initial compliance demonstration during the next time the storage tank was emptied and degassed, but not later than February 3, 2014?
 Yes No NA
- For storage tanks complying with item 1.a.ii. or 6.a.ii in Table 2 of this subpart and item 1.b., 1.c., or 2. in Table 4 of this subpart, you must comply within 180 days after April 25, 2011?
 Yes No NA
- For storage tanks and transfer racks at reconstructed or new affected sources complying with the emission limitations listed in Table 2 to this subpart, did the facility conduct an initial compliance demonstration with the emission limitations within 180 days after the initial startup date for the affected source or February 3, 2004, whichever is later?
 Yes No NA
- For storage tanks at existing affected sources complying with the work practice standard in Table 4, did the facility conduct an initial compliance demonstration as specified below:
 - For storage tanks with an existing internal or external floating roof, complying with item 1.a. in Table 4, conduct an initial compliance demonstration the next time the storage tank is emptied and degassed, but not later than February 3, 2014. Yes No NA
 - For other storage tanks, comply within 180 days after April 25, 2011. Yes No NA
- For transfer racks and equipment leak components at existing affected sources complying with the work practice standards in Table 4 did the facility conduct an initial compliance demonstration within 180 days after February 5, 2007?
 Yes No NA
- For storage tanks, transfer racks, and equipment leak components at reconstructed or new affected sources complying with the work practice standards in Table 4 did the facility conduct an initial compliance demonstration within 180 days after the initial startup date for the affected source?
 Yes No NA

11. Did the facility conduct subsequent performance test at the appropriate time? 63.2362

- If requested by EPA, for non-flare control devices, did the facility conduct the subsequent performance testing required in Table 5, item 1? Yes No NA
- For each transport vehicle the facility owns that is equipped with vapor collection equipment and that is loaded with organic liquids at a transfer rack subject to control based on the criteria specified in Table 2, items 7 through 10, did the facility perform the vapor tightness testing required in Table 5, item 2, on that transport vehicle at least once per year? Yes No NA
- For transport vehicles that the facility own that do not have vapor collection equipment, has the facility maintained current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars? Yes No NA

12. Did the facility meet the required monitoring installation, operation and maintenance requirements? 63.2366

- Did the facility install, operate, and maintain a CMS on each control device required in order to comply with this subpart? Yes No NA
 - If yes, and the facility used a continuous parameter monitoring system (CPMS), did they comply with the applicable requirements for CPMS in subpart SS of this part for the control device being used? Yes No NA
 - If the facility uses a continuous emissions monitoring system (CEMS), are they complying with the requirements in general provisions section 63.8? Yes No NA
- For non-flare control devices controlling storage tanks and low throughput transfer racks, did the facility submit a monitoring plan according to the requirements in subpart SS of this part for monitoring plans? Yes No NA

13. Did the facility demonstrate initial compliance with the emission limitations, operating limits and work practice standards in the appropriate manner? 63.2370

- As specified in Tables 6 and 7, has the facility demonstrated initial compliance with each applicable emission limitation and work practice standard? Yes No NA
- Did the facility demonstrate initial compliance with the applicable operating limits requirements by establishing the operating limits during the initial performance test or design evaluation? Yes No NA
- Did the facility submit the results of the initial compliance determination in the Notification of Compliance Status according to applicable requirements [see 63.2382(d)]? Yes No NA

VI. Continuous Compliance Requirements

14. Did the facility monitor, collect and use properly data to demonstrate continuous compliance? 63.2374

- When using a control device for compliance, did the facility monitor continuously or collect data at all required intervals at all times that the emission source and control device were in OLD operation, except for CMS malfunctions (including any malfunction preventing the CMS from operating properly), associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments)? Yes No NA
- Did the facility remember to omit data recorded during CMS malfunctions, associated repairs, required quality assurance or control activities, or periods when emissions from organic liquids are not routed to the control device in data averages and calculations used to report emission or operating level? [Such data should not be used in fulfilling a minimum data availability requirement. However, all of the data collected during all other periods, including periods of SSM, in assessing the operation of the control device must be used.] Yes No NA

15. Is the facility adequately demonstrating continuous compliance with the emission limitations, operating limits and work practice standards? 63.2378

- Has the facility demonstrated continuous compliance with each applicable emission limitation, operating limit, and work practice standard in Tables 2 through 4 according to the methods specified in subpart SS and in Tables 8 through 10?
- Did the facility follow the required procedures [see 63.6(e)(1) and (3)] during periods of startup, shutdown, malfunction, or non-operation of the affected source or any parts of the affected source? Yes No NA
 - Did the facility meet the applicable emission limitations at all times (except during periods of non-operation of the affected source or portions of the source that resulted in cessation of the emissions)? Yes No NA

Note: The emission limitations of this subpart apply during periods of SSM, except where noted. However, if a SSM or period of non-operation of one portion of the affected source does not affect the ability of a particular emission source to comply with the emission limitations to which it is subject, then that emission source is still required to comply with the applicable emission limitations during the startup, shutdown, malfunction, or periods of non-operation.

- Did the facility avoid shutting down control devices or monitoring systems that are required or utilized for achieving compliance during periods of SSM while emissions are being routed to the equipment if a shutdown would violate requirements applicable to that equipment? Yes No NA
- During a SSM, did the facility, to the extent reasonably available, take measures to prevent or minimize excess emissions? Yes No NA
 - Were the measures taken identified in the SSM plan? [Note: such measures and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available.] Yes No NA
- During periods of planned routine maintenance of a control device (used to control storage tanks or transfer racks), was the time in which the control device did not meet the emission limits in Table 2 less than 240 hours per year? Yes No NA
- If the facility elected to route emissions from storage tanks or transfer racks to a fuel gas system or to a process to comply with the emission limits in Table 2, was the total aggregate amount of time during

which the emissions bypassed the fuel gas system or process during the calendar year less than 240 hours? Yes No NA

VII. Notifications, Reports and Records

16. Did the facility submit the appropriate notifications with the proper information at the proper time? 63.2383

- Did the facility submit each notification in subpart SS and of Table 12 to this subpart that applies to them?
- Did the facility also submit the following notifications according to the schedule in Table 12:
 - An initial notification no later than 120 calendar days after February 3, 2004, if they started up their affected source before February 3, 2004? Yes No NA
 - An initial Notification no later than 120 days after initial startup if they started up their new or reconstructed affected source on or after February 3, 2004? Yes No NA
 - A Notification of Intent to conduct a performance test at least 60 calendar days before it is initially scheduled to begin if they were required to conduct a performance test? Yes No NA
 - A Notification of Compliance Status if they are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 5, 6, or 7? Yes No NA
 - Did the Notification of Compliance Status must include the information required in 63.999(b) and the following information:
 - The results of any applicability determinations, emission calculations, or analyses used to identify and quantify organic HAP emissions from the affected source? Yes No NA
 - The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to tables 6 and 7? Yes No NA
 - Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels established? Yes No NA
 - Descriptions of worst-case operating and/or testing conditions for the control device(s)? Yes No NA
 - Identification of emission sources subject to overlapping requirements described in 63.2396 and the authority under which the facility will comply? Yes No NA

- The applicable information specified in 63.1039(a)(1) – (3) for all pumps and valves subject to the work practice standards for equipment leak components in Table 4, item 4? Yes No NA
- A statement to that that the pressure vent settings on the affected storage tanks are greater than or equal to 2.5 psig, If complying with the vapor balancing work practice standard for transfer racks according to Table 4, item 3.a? Yes No NA
- The information specified in required in 63.2386(c)(10)(i), unless the information has already been submitted with the first Compliance report? [If the information has already been submitted with the first Compliance report, then information specified in 63.2386(d)(3) and (4), as applicable, shall be submitted instead.] Yes No NA

17. Did the facility submit the proper reports at the correct time and did the reports contain the required information? 63.2386

- Did the facility submit each applicable report in subpart SS of this part, Table 11 to this subpart, Table 12 to this subpart, and as follows, unless a different schedule has been approved:
 - The first Compliance report covering the period beginning on the compliance date that is specified for an affected source and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the affected source? Yes No NA
 - Was the report postmarked no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date specified for the affected source? Yes No NA
 - Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Yes No NA
 - Was the report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period? Yes No NA

Note: For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the facility may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates indicated above.

- Did the first compliance report must contain the information specified below:
 - Company name and address? Yes No NA
 - Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete? Yes No NA
 - Date of report and beginning and ending dates of the reporting period? Yes No NA

- Any changes to information that have occurred since the submittal of the Notification of Compliance Status? Yes No NA
 - For an SSM occurrence during the reporting period where actions were taken consistent with your SSM plan, a statement that there were no deviations from the emission limitations, operating limits, or work practice standards during the reporting period, if there were no deviations during the reporting period? Yes No NA
 - If there were no periods during which the CMS was out of control, a statement that there were no periods during which the CMS was out of control during the reporting period. Yes No NA
 - For closed vent systems and control devices used to control emissions, information regarding planned routine maintenance activities that would require the control device to not meet the applicable emission limit, including the following:
 - A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. Yes No NA
 - A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description must include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the applicable emission limit due to planned routine maintenance. Yes No NA
 - A listing of all transport vehicles into which organic liquids were loaded at transfer racks that are subject to control based on the criteria specified in Table 2, items 7 – 10, during the previous 6 months for which vapor tightness documentation as required was not on file at the facility. Yes No NA
 - A listing of all transfer racks (except those racks at which only unloading of organic liquids occurs) and of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that are part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart. Yes No NA
- Did subsequent Compliance reports contain the all required information, including the following:
- For each deviation from an emission limitation occurring at an affected source where you are using a CMS to comply with an emission limitation in this subpart, you must include in the Compliance report the applicable information in paragraphs (d)(1)(i) through (xii) of this section. This includes periods of SSM.
 - The date and time that each malfunction started and stopped. Yes No NA
 - The dates and times that each CMS was inoperative, except for zero (low-level) and high-level checks. Yes No NA
 - For each CMS that was out of control, the information in 63.8(c)(8). Yes No NA

- The date and time that each deviation started and stopped, and whether each deviation occurred during a period of SSM, or during another period.
 Yes No NA
 - A summary of the total duration of the deviations during the reporting period, and the total duration as a percentage of the total emission source operating time during that reporting period.
 Yes No NA
 - A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
 Yes No NA
 - A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percentage of the total emission source operating time during that reporting period. Yes No NA
 - An identification of each organic HAP that was potentially emitted during each deviation based on the known organic HAP contained in the material.
 Yes No NA
 - A brief description of the emission source(s) at which the CMS deviation(s) occurred.
 Yes No NA
 - A brief description of each CMS that was out of control during the period.
 Yes No NA
 - The date of the latest certification or audit for each CMS.
 Yes No NA
 - A brief description of any changes in CMS, processes, or controls since the last reporting period.
 Yes No NA
- Did the facility include in the Compliance report the following information as applicable:
- For each storage tank and transfer rack subject to control requirements, include periods of planned routine maintenance during which the control device did not comply with the applicable emission limits in Table 2?
 Yes No NA
 - For each storage tank controlled with a floating roof, include a copy of the inspection record when inspection failures occur?
 Yes No NA
 - If elected to use an extension for a floating roof inspection, the documentation required for an extension request?
 Yes No NA
- A listing of any storage tank that became subject to controls based on the criteria for control specified in Table 2, items 1 through 6, since the filing of the last Compliance report?
 Yes No NA
- A listing of any transfer racks that became subject to controls based on the criteria for control specified in Table 2, items 7 through 10, since the filing of the last Compliance report.
 Yes No NA

- A listing of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report?
 Yes No NA
- A listing of all transfer racks (except those racks at which only the unloading of organic liquids occurs) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report?
 Yes No NA

Note: Each affected source that has obtained a title V operating permit under 40 CFR part 70 or 40 CFR part 71 must report all deviations in the required semiannual monitoring report. If an affected source submits a compliance report per Table 11 to this subpart along with, or as part of, the semiannual monitoring report required the operating permit and the compliance report includes all required information concerning deviations from any emission limitation in this subpart, the Administrator will consider submission of the compliance report as satisfying any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report will not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the applicable title V permitting authority.

18. Did the facility keep the required records? 63.2390

- For each emission source that does not require control under this subpart, did the facility keep all records identified in 63.2343 (e.g. all records and notifications that verify that source does not require controls)?
 Yes No NA
- For each emission source that does require control:
 - Did the facility keep all records identified in subpart SS of this part and in Table 12 to this subpart that are applicable, including records related to notifications and reports, SSM, performance tests, CMS, and performance evaluation plans; and Yes No NA
 - Did the facility keep all records required to show continuous compliance, as required in subpart SS of this part and in Tables 8 through 10 to this subpart, with each applicable emission limitation, operating limit, and work practice standard? Yes No NA
- For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, did the facility keep applicable records as follows:
 - For transport vehicles equipped with vapor collection equipment, the documentation described in 40 CFR 60.505(b) [Test title: Transport Vehicle Pressure Test-EPA Reference Method 27]?
 Yes No NA
 - For transport vehicles without vapor collection equipment, current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars?
 Yes No NA
 - In lieu of keeping the records specified above, as applicable, did the facility elect to record that the verification of U.S. DOT tank certification or Method 27 of appendix A to 40 CFR part 60 testing, required in Table 5, item 2, has been performed? [Note: Various methods for the record of verification can be used, such as: A check-off on a log sheet, a list of U.S. DOT serial numbers or Method 27 data, or a position description for gate security showing that the security

guard will not allow any trucks on site that do not have the appropriate documentation.]

Yes No NA

- Did the facility keep records of the total actual annual facility-level organic liquid loading volume through transfer racks to document the applicability, or lack thereof, of the emission limitations in Table 2, items 7 through 10? Yes No NA

- If the facility elected to comply with the requirements of a vapor balancing system for storage tanks [see 63.2346(a)(4)], were the following records kept:

A record of the required U.S. DOT certification for transport vehicles? Yes No NA

A record of the pressure relief vent settings [(see 63.2346(a)(4)(v))]? Yes No NA

If complying with requirements for cargo tanks and tank cars that deliver organic liquids to the storage tank,

A record of the equipment to be used and the procedures to be followed when reloading the cargo tank or tank car and displacing vapors to the storage tank from which the liquid originates, and Yes No NA

A record of each time the vapor balancing system is used to comply with requirements? Yes No NA

19. Were the records kept in the appropriate form and the correct length of time? 63.2394

- Were applicable records stored in a form suitable and readily available for expeditious inspection and review, including records stored in electronic form at a separate location? Yes No NA

- Did the facility keep files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record? Yes No NA

- Did the facility keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record? [They may keep the records off site for the remaining 3 years] Yes No NA

VIII. Other Requirements

- 20. Does the facility have to comply with other options if part of their facility is subject to both this subpart and another subpart? 63.2396**

Compliance with other regulations for storage tanks

- For any storage tank that is assigned to an OLD affected source and that is controlled with a floating roof and is in compliance with the provisions of either 40 CFR Part 60, Subpart Kb or 40 CFR Part 61, Subpart Y, was the facility in compliance with those provisions after the compliance dates specified in 63.2342 for this subpart? [If yes, the facility is in compliance with the provisions of this Subpart for those storage tanks.]

Yes No NA

- Are records for those tanks being kept for 5 years? Yes No NA
- For any storage tank with a fixed roof that is assigned to an OLD affected source and that is controlled with a closed vent system and control device, is the facility in compliance with either 40 CFR Part 60, Subpart Kb or 40 CFR Part 61, Subpart Y? [If yes, the facility is in compliance with the provision of this subpart for those tanks.] Yes No NA
- For those tanks, is the facility in compliance with the monitoring, recordkeeping and reporting requirements of this subpart as required? Yes No NA
- As an alternative to the above, did the facility elect to comply only with the requirements of this subpart for storage tanks meeting the applicability criteria for control in Table 2 of this subpart even if the storage tank(s) assigned to the OLD affected source is subject to control under 40 CFR part 60, Subpart Kb, or 40 CFR Part 61, Subpart Y? Yes No NA

Compliance with other regulations for transfer racks

- After the compliance dates of this subpart (see 63.2342), if the facility has a transfer rack subject to 40 CFR Part 61, Subpart BB, and that transfer rack is in OLD operation, did they meet all of the requirements of this subpart for that transfer rack when the transfer rack is in OLD operation during the loading of organic liquids, as required? Yes No NA

Compliance with other regulations for equipment leak components

- After the compliance dates specified in 63.2342, if the facility has pumps, valves, or sampling connections that are subject to a 40 CFR Part 60 Subpart, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service per this subpart, did the facility comply with the provisions of each subpart for those equipment leak components, as required? Yes No NA
- After the compliance dates specified in 63.2342, if the facility has pumps, valves, or sampling connections subject to 40 CFR Part 63, Subpart GGG, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service per this subpart, did the facility elect to comply with the provisions of this subpart for all such equipment leak components? Yes No NA
- If yes, did the facility identify in the Notification of Compliance Status required by 63.2382(b) the provisions with which they will comply? Yes No NA

Overlap with other regulations for monitoring, recordkeeping, and reporting

Control devices

- After the compliance dates specified in 63.2342, if the facility has any control device subject to this subpart and subject to the monitoring, recordkeeping, and reporting requirements of another 40 CFR part 63 Subpart, is the facility in compliance with the monitoring, recordkeeping, and reporting requirements of this Subpart EEEE as required? Yes No NA

Note: If complying with the monitoring, recordkeeping, and reporting requirements of the other subpart satisfies the monitoring, recordkeeping, and reporting requirements of this subpart, the facility may elect to continue to comply with the monitoring, recordkeeping, and reporting requirements of the other subpart. In such instances, the facility will be deemed to be in compliance with the monitoring,

recordkeeping, and reporting requirements of this subpart. However, the facility must identify the other subpart being complied with in the Notification of Compliance Status required by 63.2382(b).

Equipment leak components

- Is the facility applying the applicable recordkeeping and reporting requirements of another 40 CFR Part 63 Subpart (after the compliance dates specified in 63.2342), to the valves, pumps, and sampling connection systems associated with a transfer rack subject to this subpart that only unloads organic liquids directly to or via pipeline to a non-tank process unit component or to a storage tank subject to the other 40 CFR Part 63 Subpart? [If yes, they are in compliance with the recordkeeping and reporting requirements of this Subpart EEEE.] Yes No NA

- Is the facility complying with the recordkeeping and reporting requirements of the other subpart that satisfies the recordkeeping and reporting requirements of this subpart? [If yes, the facility will be deemed to be in compliance with the recordkeeping and reporting requirements of this subpart.] Yes No NA

- Did the facility identify the other subpart being complied with in the Notification of Compliance Status [see 63.2382(b)]? Yes No NA

21. Does the facility know which parts of the General Provisions apply to them? [63.2398](#)

- Has the facility referred to Table 12 to determine which parts of the General Provisions in 63.1 through 63.15 apply to them? Yes No NA

IX. Definitions

The following definitions are for terms used in this Subpart EEEE [63.2406] and are also defined in the Clean Air Act (CAA) in 40 CFR 63.2 and in the general provisions of this part.

Actual annual average temperature (for organic liquids) - the temperature determined using the following methods:

- For heated or cooled storage tanks, the calculated annual average temperature of the stored organic liquid as determined from a design analysis of the storage tank.
- For ambient temperature storage tanks, the annual average of the local (nearest) normal daily mean temperatures reported by the National Climatic Data Center; or any other method that the EPA approves.

Annual average true vapor pressure - the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred organic liquid. For the purpose of determining if a liquid meets the definition of an organic liquid, the vapor pressure is determined using standard temperature and pressure conditions. For the purpose of determining whether an organic liquid meets the applicability criteria in Table 2, items 1 through 6, use the actual annual average temperature as defined in this subpart. The vapor pressure value in either of these cases is determined:

- In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss from External Floating- Roof Tanks (incorporated by reference, see Sec. 63.14);
- Using standard reference texts;
- By the American Society for Testing and Materials Method D2879-83, 96 (incorporated by reference, see Sec. 63.14); or
- Using any other method that the EPA approves.

Bottoms receiver – a tank that collects distillation bottoms before the stream is sent for storage or for further processing downstream.

Cargo tank – a liquid-carrying tank permanently attached to and forming an integral part of a motor vehicle or truck trailer. This term also refers to the entire cargo tank motor vehicle or trailer. For the purpose of this subpart, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

Closed vent system – a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapors from an emission point to a control device. This system does not include the vapor collection system that is part of some transport vehicles or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Combustion device – an individual unit of equipment, such as a flare, oxidizer, catalytic oxidizer, process heater, or boiler, used for the combustion of organic emissions.

Container – a portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Includes, but are not limited to, drums and portable cargo containers known as "portable tanks" or "totes."

Control device - any combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart. Such equipment or devices include, but are not limited to,

absorbers, adsorbers, condensers, and combustion devices. Primary condensers, steam strippers, and fuel gas systems are not considered control devices.

Crude oil - any of the naturally occurring liquids commonly referred to as crude oil, regardless of specific physical properties. Only those crude oils downstream of the first point of custody transfer after the production field are considered crude oils in this subpart.

Custody transfer - the transfer of hydrocarbon liquids after processing and/or treatment in the producing operations, or from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

Design evaluation - a procedure for evaluating control devices.

Deviation - any instance in which an affected source subject to this subpart, or portion thereof, or an owner or operator of such a source:

- Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;
- Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
- Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during SSM.

Emission limitation - an emission limit, opacity limit, operating limit, or visible emission limit.

Equipment leak component - each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded.

Gasoline - any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater which is used as a fuel for internal combustion engines. Aviation gasoline is included in this definition.

High throughput transfer rack - those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) a total of 11.8 million liters per year or greater of organic liquids.

In organic liquids service - that an equipment leak component contains or contacts organic liquids having 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart.

Low throughput transfer rack - those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and contains (for new affected sources) less than 11.8 million liters per year of organic liquid.

On-site or on site - with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source to which the records pertain, storage in central files elsewhere at the major source, or electronically available at the site.

Organic liquid - Any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 and any crude oils downstream of the first point of custody transfer. Organic liquids for purposes of this subpart do not include the following liquids:

- Gasoline (including aviation gasoline), kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils;
- Any fuel consumed or dispensed on the plant site directly to users (such as fuels for fleet refueling or for refueling marine vessels that support the operation of the plant);
- Hazardous waste;
- Wastewater;
- Ballast water: or
- Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia).

Organic liquids distribution (OLD) operation - the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding, and packaging.

Permitting authority – The State Air Pollution Control Agency, local agency, or other agency authorized by the EPA Administrator to carry out a permit program under 40 CFR part 70; or the EPA Administrator, in the case of EPA-implemented permit programs under title V of the CAA (42 U.S.C. 7661) and 40 CFR part 71.

Plant site – all contiguous or adjoining surface property that is under common control, including surface properties that are separated only by a road or other public right-of-way. Common control includes surface properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination.

Research and development facility – laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which are not engaged in the manufacture of products for commercial sale, except in a de minimis manner.

Responsible official – responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2, as applicable.

Safety device – a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

Shutdown – the cessation of operation of an OLD affected source, or portion thereof, required or used to comply with this subpart, or the emptying and degassing of a storage tank. Shutdown as defined here includes, but is not limited to, events that result from periodic maintenance, replacement of equipment, or repair.

Startup – the setting in operation of an OLD affected source, or portion thereof, for any purpose. Startup also includes the placing in operation of any individual piece of equipment required or used to comply with this subpart including, but not limited to, control devices and monitors.

Storage tank - a stationary unit that is constructed primarily of non-earthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include:

- Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships;
- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- Bottoms receiver tanks;
- Surge control vessels;
- Vessels storing wastewater; or
- Reactor vessels associated with a manufacturing process unit.

Surge control vessel – feed drums, recycle drums and intermediate vessels. Surge control vessels are used within chemical manufacturing processes when in-process storage, mixing or management of flow rates or volumes is needed to assist in production of a product.

Tank car – a car designed to carry liquid freight by rail, and including a permanently attached tank.

Total actual annual facility-level organic liquid loading volume – the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) based on a 3-year rolling average, calculated annually.

Transfer rack – a single system used to load organic liquids into transport vehicles. It includes all loading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Transport vehicle – a cargo tank or tank car.

Vapor balancing system – a piping system that collects organic HAP vapors displaced from:

- Transport vehicles or containers during loading and routes the collected vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. For containers, the piping system must route the displaced vapors directly to the appropriate storage tank or to another storage tank connected to a common header in order to qualify as a vapor balancing system; or
- The loading of a storage tank and routes the collected vapors to the transport vehicle from which the storage tank is filled.

Vapor collection system – equipment located at the source (i.e., at the OLD operation) that is not open to the atmosphere; that is composed of piping, connections, and, if necessary, flow-inducing devices; and that is used for containing and conveying vapors displaced during the loading of transport vehicles to a control device or for vapor balancing. This does not include any of the vapor collection equipment that is installed on the transport vehicle.

Vapor-tight transport vehicle – a transport vehicle that has been demonstrated to be vapor-tight. To be considered vapor-tight, a transport vehicle equipped with vapor collection equipment must undergo a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water). This capability must be demonstrated annually using the procedures specified in EPA Method 27 of 40 CFR part 60, appendix A. For all other transport vehicles, vapor tightness is demonstrated by performing the U.S. DOT pressure test procedures for tank cars and cargo tanks.

Work practice standard – any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

X. Timeline of Compliance Events for Subpart EEEE

Organic Liquids Distribution (Non-Gasoline) 40 CFR Subpart EEEE

Event	Timeline
Effective Date of Subpart	February 3, 2004
Compliance Date	<p>February 3, 2004 for new affected sources started up on or before February 3, 2004 and sources reconstructed on or before February 3, 2004.</p> <p>Upon Startup for affected sources constructed or reconstructed after February 3, 2004.</p> <p>No later than February 5, 2007 for all existing affected sources.</p> <p>After next degassing and cleaning, or by February 3, 2014, whichever is sooner for floating roof storage tanks that do not initially meet the equipment standard for storage tanks in the final rule. [Note: If the first degassing and cleaning activity occurs during the 3 years following February 3, 2004, then the compliance date is February 5, 2007.</p> <p>3 years after the date of becoming a major source for existing area sources that become major sources.</p>
Initial Notification submittal	<p>No later than 120 calendar days after February 3, 2004 for affected sources started up before February 3, 2004.</p> <p>No later than 120 days after initial startup for new or reconstructed sources started up on or after February 3, 2004.</p>
Notice of Compliance Status submittal	Within 60 days after completion of compliance demonstration.
Compliance Report or Periodic Report Submittal	<p>Semiannually, and it must be postmarked no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for the affected source.</p> <p>Each subsequent compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.</p>

Note: This timeline does not take into account special situations such as compliance extensions.

XI. Tables 1 – 12 for Subpart HHHHH of Part 63

Table 1 to Subpart EEEE of Part 63 – Organic Hazardous Air Pollutants

The facility must use the organ HAP information listed in the following table to determine which of the liquids handled at their facility meet the HAP content criteria in the definition of Organic Liquid in 63.2406.

Compound Name	CAS No. ¹
2,4-D salts and esters	94757
Acetaldehyde	75070
Acetonitrile	75058
Acetophenone	98862
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Allyl chloride	107051
Aniline	62533
Benzene	71432
Biphenyl	92524
Butadiene (1, 3-)	106990
Carbon tetrachloride	56235
Chloroacetic acid	79118
Chlorobenzene	108907
2-Chloro- 1, 3-butadiene (Chloroprene)	126998
Chloroform	67663
m-Cresol	108394
o-Cresol	95487
p-Cresol	106445
Cresols/cresylic acid	1319773
Cumene	98828
Dibenzofurans	132649
Dibutylphthalate	84742
Dichloroethane (1,2-) (Ethylene Dichloride) (EDC)	107062
Dichloropropene (1,3-)	542756
Diethanolamine	111422
Diethyl aniline (N,N-)	121697
Diethylene glycol monobutyl ether	112345
Diethylene glycol monomethyl ether	111773
Diethyl sulfate	64675
Dimethyl formamide	68122
Dimethylhydrazine (1,1-)	57147
Dioxine (1,4-) (1,4-Diethyleneoxide)	123911
Epichlorohydrin (1-Chloro-2,3-epoxypropane0	106898
Epoxybutane (1,2-)	106887
Ethyl acrylate	104885
Ethylbenzene	100414
Ethyl chloride (Chloroethane)	75003
Ethylene dibromide (Dibromomethane)	106934
Ethylene glycol	107214
Ethylene glycol dimethyl ether	110714
Ethylene glycol monomethyl ether	109864
Ethylene glycol monomethyl ether acetate	110496

Compound Name	CAS No.¹
Ethylene glycol monophenyl ether	122996
Ethylene oxide	75218
Ethylidene dichloride (1,1-Dichloroethane)	75343
Formaldehyde	50000
Hexachloroethane	67721
Hexane	110543
Hydroquinone	123319
Isophorone	78591
Maleic anhydride	108319
Methanol	67561
Methyl Chloride (Chloromethane)	74873
Methylene chloride (Dichloromethane)	75092
Methylenedianiline (4,4-)	1011779
Methylene diphenyl diisocyanate	101688
Methyl hydrazine	60344
4-Methyl-2-pentanone (MIBK)	108101
Methyl methacrylate	80626
Methyl tert-butyl ether (MTBE)	1634044
Naphthalene	91203
Nitrobenzene	98953
Phenol	108952
Phthalic anhydride	85449
Polycyclic organic matter	50328
Propionaldehyde	123386
Propylene dichloride (1,2-Dichloropropane)	78875
Propylene oxide	75569
Quinoline	91225
Styrene	100425
Styrene oxide	96093
Tetrachloroethane (1,1,2,2-)	79345
Tetrachloroethylene (perchloroethylene)	127184
Toluene	108883
Toluene diisocyanate (2,2-)	584849
o-Toluidine	95534
Trichlorobenzene (1,2,4-)	120821
Trichloroethane (1,1,1-) (methyl chloroform)	71556
Trichloroethane (1,1,2-) (Vinyl trichloride)	79005
Trichloroethylene	79016
Triethylamine	121448
Trimethylpentane (2,2,4-)	540841
Vinyl acetate	108054
Vinyl chloride (Chloroethylene)	75014
Vinylidene chloride (1,1-Dichloroethylene)	75354
Xylene (m)	108383
Xylene (o)	95476
Xylene (p)	106423
Xylenes (isomers and mixtures)	1330207

¹CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

Table 2 to Subpart EEEE of part 63 – Emission Limits

As state in 63.2346, a facility must comply with the emission limits for the organic liquids distribution emission sources as follows:

If the facility owns or operates....	And if....	Then the facility must...
1. A storage tank at an existing affected source with a capacity \geq 18.9 cubic meters (5,000 gallons) and $<$ 189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is \geq 27.6 kilopascals (4.0 psia) and $<$ 76.6 kilopascals (11.1 psia)	i. i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent, or, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3% oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR Part 63, subpart SS; or ii. Comply with the work practice standards specified in Table 4, items 1.a, 1.b, or 1.c for tanks storing liquids described in the table.
	b. The stored organic liquid is crude oil	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
2. A storage tank at an existing affected source with a capacity \geq 189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is $<$ 76.6 kilopascals (11.1 psia).	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
3. A storage tank at a reconstructed or new affected source with a capacity \geq 18.9 cubic meters (5,000 gallons) and $<$ 37.9 cubic meters (10,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is \geq 27.6 kilopascals (4.0 psia) and $<$ 76.6 kilopascals (11.1 psia).	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
4. A storage tank at a reconstructed or new affected source with a capacity \geq 37.9 cubic meters (10,000 gallons) and $<$ 189.3 cubic meters (50,000 gallons)	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is \geq 0.7 kilopascals (0.1 psia) and $<$ 76.6 kilopascals (11.1 psia).	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
5. A storage tank at a reconstructed or new affected source with a capacity \geq 189.3 cubic meters (50,000 gallons)	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is $<$ 76.6 kilopascals (11.1 psia)	i. See the requirements in item 1.a.i. or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirements in item 1.a.i. or 1.a.ii of this table.

Table 2 to Subpart EEEE, continued

If the facility owns or operates....	And if....	Then the facility must...
<p>6. A storage tank at an existing, reconstructed or new affected source meeting the capacity criteria specified in this Table 2, items 1 through 5.</p>	<p>a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥ 76.6 kilopascals (11.1 psia)</p>	<p>i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent, or, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3% oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR Part 63, subpart SS; or</p>
		<p>ii. Comply with the work practice standards specified in Table 4, items 2.a, for tanks storing the liquids described in that table.</p>
<p>7. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons and less than 10 million gallons.</p>	<p>a. The total Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 90 percent by weight and is being loaded into a transport vehicle.</p>	<p>i. For all such loading arms at the rack, reduce emissions of total organic HAP (or, upon approval, TOC) from the loading of organic liquids either by venting the emissions that occur during loading through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR Part 63, Subpart SS, achieving at least 98 weight-percent HAP reduction, OR, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3% oxygen for combustion devices using supplemental combustion air; OR</p>
		<p>ii. During the loading of organic liquids, comply with the work practice standards specified in item 3 of Table 4.</p>
<p>8. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is ≥ 10 million gallons.</p>	<p>a. One or more of the transfer rack's arms is loading an organic liquid into a transport vehicle.</p>	<p>i. See the requirements in items 7.a.i and 7.a.ii of this Table.</p>
<p>9. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is less than 800,000 gallons.</p>	<p>a. The total Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack arms is at least 25% by weight and is being loaded into a transfer vehicle.</p>	<p>i. See the requirements in items 7.a.i and 7.a.ii of this Table.</p>
	<p>b. One or more of the transfer racks' arms is filling a container with a capacity equal to or greater than 55 gallons.</p>	<p>i. For all such loading arms at the rack during loading of organic liquids, comply with the provisions of 66.924 through 63.927 of 40 CFR Part 63, Subpart PP – National Emission Standards for Containers, Container Level 3 controls; OR</p> <p>ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of Table 4.</p>
<p>10. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons.</p>	<p>a. One or more of the transfer racks' loading arms is loading an organic liquid into a transport vehicle.</p>	<p>i. See the requirements in items 7.a.i and 7.a.ii of this Table.</p>
	<p>b. One or more of the transfer rack's arms is filling a container with a capacity equal to or greater than 55 gallons</p>	<p>i. For all such loading arms at the rack during the loading of organic liquids, comply with the provisions of 63.924 through 63.927 of 40 CFR Part 63, Subpart PP – National Emission Standards for Containers, Container Level 3 controls; OR</p> <p>ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of Table 4.</p>

TABLE 3 TO SUBPART EEEE OF PART 63 – Operating Limits—High Throughput Transfer Racks

As stated in 63.2346(e), the facility must comply with the operating limits for existing, reconstructed or new affected sources as follows:

For each existing reconstructed and new affected source using....	The facility must....
1. A thermal oxidizer to comply with an emission limit in Table 2	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
2. A catalytic oxidizer to comply with an emission limit in Table 2	a. Replace the existing catalyst bed before the age of the bed exceed the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
3. An absorber to comply with an emission limit in Table 2	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
4. A condenser to comply with an emission limit in Table 2	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.

Table 3 to Subpart EEEE, continued

For each existing reconstructed and new affected source using....	The facility must....
<p>5. An adsorption system with adsorbent regeneration to comply with an emission limit in Table 2</p>	<p>a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR</p> <p>b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND</p> <p>Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND</p> <p>Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.</p>
<p>6. An adsorption system without adsorbent regeneration to comply with an emission limit in Table 2</p>	<p>a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR</p> <p>b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND</p> <p>Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.</p>
<p>7. A flare to comply with an emission limit in Table 2</p>	<p>a. Comply with the equipment and operating requirements in 63.987(a); AND</p> <p>b. Conduct an initial flare compliance assessment in accordance with 63.987(b); AND</p> <p>c. Install and operate monitoring equipment as specified in 63.987(c)</p>
<p>8. Another type of control device to comply with an emission limit in Table 2</p>	<p>Submit a monitoring plan as specified in 63.995 (c) and 63.2366 (b), and monitor the control device in accordance with that plan.</p>

TABLE 4 TO SUBPART EEEE OF PART 63 –Work Practice Standards

As stated in 63.2346, the facility may elect to comply with one of the work practice standards for existing, reconstructed or new affected sources in the following table.

If the facility elects to do so, for each...	The facility must....
1. Storage tank at an existing, reconstructed or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in Table 2, items 1 through 5	<p>a. Comply with the requirements of 40 CFR Part 63, Subpart WW (control level 2), if you elect to meet 40 CFR Part 63, Subpart WW (control level 2) requirements as an alternative to the emission limit in Table 2, items 1 through 5; OR</p> <p>b. Comply with the requirements of 63.984 for routing emissions to a fuel gas system or back to a process; OR</p> <p>c. Comply with the requirements of 63.2346 (a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.</p>
2. Storage tank at an existing, reconstructed or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in Table 2, item 6	<p>a. Comply with the requirements of 63.984 for routing emissions to a fuel gas system or back to a process; or</p> <p>b. Comply with the requirements of 63.2346(a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.</p>
3. Transfer rack subject to control based on the criteria specified in Table 2, items 7 through 10, at an existing, reconstructed or new affected source	<p>a. If the option of a vapor balancing system is selected, install and, during the loading of organic liquids, operator a system that meet the requirements in Table 7 to this subpart, item 3.b.i and item 3.b.ii, as applicable; Or</p> <p>b. Comply with the requirements of 63.984 during the loading of organic liquids, for routing emissions to a fuel gas system or back to a process.</p>
4. Pump, valve and sampling connection that operates in organic liquids service at least 300 hours per year at an existing, reconstructed or new affected source	Comply with the requirements for pumps, valves and sampling connections in 40 CFR Part 63, Subpart TT (control level 1), Subpart UU (control level 2), or subpart H.
5. Transport vehicles equipped with vapor collection equipment that are loaded at transfer racks that are subject to control based on the criteria specified in Table 2, items 7 through 10	Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles, and comply with the provisions in 40 CFR 60.502(f), (g), (h) and (i), except substitute the term transport vehicle at each occurrence of tank truck or gasoline tank truck in those paragraphs.
6. Transport vehicles equipped without vapor collection equipments that are loaded at transfer racks that are subject to control based on the criteria specified in Table 2, items 7 through 10	Ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR 180 (cargo tanks) or 49 CFR 173.31 (tank cars)

Table 5 to Subpart EEEE of Part 63 – Requirements for Performance Tests and Design Evaluations

As stated in 63.2354(a) and 63.2362, the facility must comply with the requirements for performance tests and design evaluations for existing, reconstructed or new affected sources as follows:

For each...	The facility must conduct...	According to...	Using...	To determine...	According to the following requirements:
1. Existing, reconstructed and new affected source using a non-flare control device to comply with an emission limit in Table 2, items 1 through 10	a. A performance test to determine the organic HAP (or, upon approval, TOC) control efficiency of each non-flare control device, or, the exhaust concentration or each combustion device; OR	i. 63.985 (b)(1) (ii) 63.988 (b), 63.990 (b) or 63.995(b)	(1) EPA Method 1 or 1A in appendix A-1 of 40 CFR Part 60 as appropriate	(A) Sampling port locations and the required number of traverse points	i. Sampling sites must be located at the inlet and outlet of each control device if complying with the control efficiency requirement or at the outlet of the control device if complying with the exhaust concentration requirement; AND i. The outlet sampling site must be located at each control device prior to any releases to the atmosphere.
			(2) EPA Method 2, 2A, 2C, 2D or 2F in appendix A-1 of 40 CFR Part 60, or EPA Method 2G in appendix A-2 of 40 CFR Part 60, as appropriate	(A) Stack gas velocity and volumetric flow rate	See requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(3) EPA Method 3 or 3B in appendix A-2 of 40 CFR part 60, as appropriate	(A) Concentration of CO ₂ and O ₂ and dry molecular weight of the stack gas	See requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(4) EPA Method 4 in appendix A-3 of 40 CFR part 60	(A) Moisture content of the stack gas	See requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(5) EPA Method 18 in appendix A-6 of 40 CFR part 60, or EPA Method 25 or 25A in appendix A-7 of 40 CFR part 60, as appropriate, or EPA Method 316 in appendix A of 40 CFR part 63 for measuring formaldehyde	(A) Total organic HAP (or, upon approval, TOC), or formaldehyde emissions.	i. The organic HAP used for calibration gas for EPA Method 25A in appendix A-7 of 40 CFR part 60 must be the single organic HAP representing the largest percent by volume of emissions; AND i. During the performance test, the operating parameter limits must be established within which total organic HAP (or, upon approval, TOC) emissions are reduced by the required weight-percent or, as an option for non-flare combustion devices, to 20 ppmv exhaust concentration.

Table 5 to Subpart EEEE of Part 63, Continued

For each...	The facility must conduct...	According to....	Using...	To determine...	According to the following requirements:
	b. A design evaluation (for non-flare control devices) to determine the organic HAP (or TOC, upon approval) control efficiency of each non-flare control device, or the exhaust concentration of each combustion control device	63.985(b)(1)(1)			During a design evaluation, the facility must establish the operating parameter limits within which total organic HAP, (or, upon approval, TOC) emissions are reduced by at least 95 weight-percent for storage tanks or 98 weight-percent for transfer racks, or, as an option for non-flare combustion devices, to 20 ppmv exhaust concentration.
2. Each Transport vehicle owned that is equipped with vapor collection equipment and is loaded with organic liquids at a transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, at an existing, reconstructed or new affected source.	A performance test to determine the vapor tightness of the tank and ten repair as needed until it passes the test/		EPA Method 27 in appendix A of 40 CFR Part 60	Vapor Tightness	The pressure change in the tank must be no more than 250 pascals (1 inch of water) in 5 minutes after it is pressurized to 4,500 pascals (18 inches of water)>

TABLE 6 TO SUBPART EEEE OF PART 63 – Initial Compliance with Emissions Limits

As stated in 63.2370(a) and 63.2382(b), the facility must show initial compliance with the emission limits for existing, reconstructed, or new affected sources as follows:

For each...	For the following emission limit...	If...
<p>1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 through 6.</p>	<p>Reduce total organic HAP (or, upon approval, TOC) emissions by at least 95 weight-percent, or as an option for non-flare combustion devices to an exhaust concentration of ≤ 20 ppmv.</p>	<p>Total organic HAP (or, upon approval, TOC) emissions, based on the results of the performance testing or design evaluation specified in Table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 95 weight-percent or as an option for non-flare combustion devices to an exhaust concentration ≤ 20 ppmv.</p>
<p>2. Transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing reconstructed, or new affected source.</p>	<p>Reduce total organic HAP (or, upon approval, TOC) emissions from the loading of organic liquids by at least 98 weight-percent, or as an option for non-flare combustion devices to an exhaust concentration of ≤ 20 ppmv.</p>	<p>Total organic HAP (or, upon approval, TOC) emissions from the loading or organic liquids, based on the results of the performance testing or design evaluation specified in Table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 98 weight-percent or as an option for non-flare combustion devices to an exhaust concentration of ≤ 20 ppmv.</p>

TABLE 7 TO SUBPART HHHHH OF PART 63 – Initial Compliance with Work Practice Standards

For each...	If you ...	You have demonstrated initial compliance if...
<p>1. Storage tank at an existing affected source meeting either set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2, items 1 or 2.</p>	<p>a. Install a floating roof or equivalent control that meets the requirements in Table 4, Item 1.a</p>	<p>i. After emptying and degassing, you visually inspect each internal floating roof before the refilling of the storage tank and perform seal gap inspections of the primary and secondary rim seals of each external floating roof within 90 days after the refilling of the storage tank.</p>
	<p>b. Route emissions to a fuel gas system or back to a process.</p>	<p>i. You meet the requirements in 63.984(b0) and submit the statement of connection required by 63.984(c).</p>
	<p>c. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system.</p>	<p>i. You meet the requirements in 63.2346(a)(4).</p>
<p>2. Storage tank at a reconstructed or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2, items 3 through 5.</p>	<p>a. Install a floating roof or equivalent control that meets the requirements in Table 4 to this subpart, item 1.a</p>	<p>i. You visually inspect each internal floating roof before the initial filling of the storage tank, and perform seal gap inspections of the primary and secondary rim seals of each floating roof within 90 days after the initial filling of the storage tank.</p>
	<p>b. Route emissions to a fuel gas system or back to a process.</p>	<p>i. See item 1.b.i of this table.</p>
	<p>c. Install and, and during the filling of the storage tank with organic liquids, operate a vapor balancing system.</p>	<p>i. See item 1.c.i. of this table.</p>
<p>3. Transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, at an existing, reconstructed or new affect source.</p>	<p>a. Load organic liquids only into transport vehicles having current vapor tightness certification as described in Table 4, items 5 and 6.</p>	
	<p>b. Install and, during the loading of organic liquids, operate a vapor balancing system.</p>	<p>i. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into transport vehicles to the storage tank from which the liquid being loading originated or to another storage tank connected to a common header.</p> <p>ii. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into containers directly (e.g., no intervening tank or containments are such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.</p>
	<p>c. Route emissions to a fuel gas system or back to a process.</p>	<p>i. See item 1.b.i. of this table</p>
<p>4. Equipment leak component, as defined in 63.2406, that operates in organic liquids service ≥300 hours per year at an existing, reconstructed, or new affected source.</p>	<p>a. Carry out a leak detection and repair program or equivalent control according to one of the subparts listed in Table 4, item 4.a.</p>	<p>i. You specify which one of the control programs listed in Table 4 you have selected, or</p>
		<p>ii. Provide written specifications for your equivalent control approach.</p>

TABLE 8 TO SUBPART EEEE of Part 63 – Continuous Compliance with Emission Limits

As stated in 63.2378(a) and 63.2390(b), the facility must show continuous compliance with the emissions limits for existing, reconstructed or new affected sources according to the following table:

For each...	For the following emission limit ...	You must demonstrate continuous compliance by...
Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2, items 1 through 6.	Reduce total organic HAP (or, upon approval, TOC) emissions from the closed vent system and control device by 95 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices.	Performing CMS monitoring and collecting data according to 63.2366, 63.2374 and 63.2378; AND Maintaining the operating limits established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, at existing, reconstructed or new affected source.	Reduce total organic HAP (or, upon approval, TOC) emissions during the loading or organic liquids from closed vent system and control device by 98 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices.	Performing CMS monitoring and collecting data according to 66.2366, 63.2374, and 63.2378 during the loading of organic liquids; AND Maintaining the operating limits established during the design evaluation or performance tests that demonstrated compliance with the emission limit during the loading of organic liquids.

TABLE 9 TO SUBPART EEEE OF PART 63 – Continuous Compliance with Operating Limits – High Throughput Transfer Racks

As stated in 63.2378(a) and (b) and 63.2390(b), the facility must show continuous compliance with the operating limits for existing, reconstructed or new affected sources according to the following table:

For each existing, reconstructed, and each new affected source using....	For the following operating limit...	You must demonstrate continuous compliance by....
1. A thermal oxidizer to comply with an emission limit in Table 2	Maintain the daily average fire box or combustion zone, as applicable, temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.	Continuously monitoring and recording fire box or combustion zone, as applicable, temperature every 15 minutes and maintaining the daily average fire box temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.
2. A catalytic oxidizer to comply with an emission limit in Table 2.	Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit;	Replacing the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.
	And maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit;	Continuously monitoring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes and maintaining the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.
	And maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with that emission limit.	Continuously monitoring and recording the temperature at the outlet of the catalyst bed every 15 minutes and maintaining the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.

TABLE 9 TO SUBPART EEEE OF PART 63, continued

For each existing, reconstructed, and each new affected source using...	For the following operating limit...	You must demonstrate continuous compliance by....
<p>3. An absorber to comply with an emission limit in Table 2.</p>	<p>Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit;</p>	<p>Continuously monitoring the organic concentration in the absorber exhaust and maintaining the daily average concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.</p>
	<p>Or, maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; And maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.</p>	<p>Continuously monitoring the scrubbing liquid temperature and maintaining the daily average temperature less than or equal to the reference temperature established during the design evaluation during the design evaluation or performance test that demonstrated compliance with the emission limit; and maintaining the difference between the specific gravities greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.</p>
<p>4. A condenser to comply with an emission limit in Table 2</p>	<p>Maintain the daily average concentration level of organic compounds at the exit of the condenser less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit;</p>	
	<p>Or, maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with that emission limit.</p>	
<p>5. An adsorption system with adsorbent regeneration to comply with an emission limit in Table 2.</p>	<p>Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit;</p>	
	<p>Or, maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; And before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test; And achieve greater than or equal to the pressure reduction during the design evaluation or performance test that demonstrated compliance with the emission limit.</p>	

TABLE 9 TO SUBPART EEEE OF PART 63, continued

For each existing, reconstructed, and each new affected source using...	For the following operating limit...	You must demonstrate continuous compliance by....
<p>6. An adsorption system without adsorbent regeneration to comply with an emission limit in Table 2.</p>	<p>Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit;</p>	<p>Continuously monitoring the organic concentration in the adsorber exhaust and maintaining the concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; and keeping the applicable records required in 63.998.</p>
	<p>Or replace the existing adsorbent in each segment of the bed before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; and maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.</p>	<p>Replacing the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specification established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; and Maintaining the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit: and Keeping the applicable records required in 63.998.</p>
<p>7. A flare to comply with an emission limit in Table 2</p>	<p>Maintain a pilot flame in the flare at all times that vapors may be vented to the flare [see 63.11(b)(5)];</p>	<p>Continuously operating a device that detects the presences of the pilot flame; and keeping the applicable records required in 63.998.</p>
	<p>And maintain a flare flame at all times that vapors are being vent to the flare [63.11(b)(5)];</p>	<p>Maintaining a flare flame at all times that vapors are being vented to the flare; and keeping the applicable records required in 63.998.</p>
	<p>And operate the flare with no visible emissions, except for up to 5 minutes in any 2 consecutive hours [63.11(b)(4)];</p>	<p>Operating the flare with no visible emissions exceeding the amount allowed; and keeping the applicable records required in 63.998.</p>
	<p>And either operate the flare with an exit velocity that is within the applicable limits in 63.11(b)(7) and (8) and with a net heating value of the gas being combusted greater than the applicable minimum value in 63.11(b)(6)(ii);</p>	<p>Operating the flare within the applicable exit velocity limits; and Operating the flare with the gas heating value greater than the applicable minimum value; and Keeping the applicable records required in 63.998.</p>
	<p>Or adhere to the requirements in 63.11(b)(6)(i).</p>	<p>Operating the flare within the applicable limits in 63.11(b)(6)(i); and keeping the applicable records required in 63.998.</p>
<p>8. Another type of control device to comply with an emission limit in Table 2</p>	<p>Submit a monitoring plan as specified in 63.995(c) and 63.2366(c), and monitor the control device in accordance with that plan.</p>	<p>Submitting a monitoring plan and monitoring the control device according to that plan.</p>

TABLE 10 TO SUBPART EEEE OF PART 63 – Continuous Compliance with Work Practice Standards

As stated in 63.2378(a) and (b) and 63.2386(c), the facility must show continuous compliance with the work practice standards for existing, reconstructed, or new affected sources according to the following table:

For each....	For the following standard...	The facility must demonstrate continuous compliance by....
1. Internal floating roof (IFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity, and vapor pressure criteria specified in Table 2, items 1 through 5.	Install a floating roof designed and operated according to the applicable specifications in 63.1063(a) and (b).	Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR once per year [63.1063(d)(2)]; and Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first [63.1063(c)(1), (d)(1) and (3)]; and Keeping the tank records required in 63.1065.
2. External floating roof (EFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and vapor pressure criteria specified in Table 2, items 1 through 5.	Install a floating roof designed and operated according to the applicable specifications in 63.1063(a) and (b).	Visually inspecting the floating roof deck, deck fittings, and rim seals of each EFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first [63.1063(c)(2), (d) and (e)]; and Performing seal gap measurements on the secondary seal of each EFR at least once every year, and on the primary seal of each EFR at least every 5 years [63.1063(c)(2), (d) and (e)]; and Keeping the tank records required in 63.1065.
3. IFR or EFR tank at an existing, reconstructed or new affected source meeting any set of tank capacity and vapor pressure criteria specified in Table 2, items 1 through 5.	Repair the conditions causing the storage tank inspection failures [63.1063(e)].	Repairing conditions causing inspection failures: before refilling the storage tank with organic liquid, or within 45 days (or up to 105 days with extensions) for a tank containing organic liquid; and Keeping the tank records required in 63.1065(b).
4. Transfer rack that is subject to control based on the criteria specified in Table 2, items 7 through 10, at an existing reconstructed, or new affected source.	Ensure that organic liquids are loaded into transport vehicles in accordance with the requirements in Table 4, items 5 or 6, as applicable.	Ensuring that organic liquids are loaded into the transport vehicles in accordance with the requirements in Table 4, items 5 or 6, as applicable
	Install and, during the loading of organic liquids, operate a vapor balancing system.	Monitoring each potential source of vapor leakage in the system quarterly during the loading of transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in Table 4, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in the selected equipment leak standards.
	Route emissions to a fuel gas system or back to a process.	Continuing to meet the requirements specified in 63.984(b)
5. Equipment leak component, as defined in 63.2406, that operates in organic liquids service at least 300 hours per year.	Comply with the requirements of 40 CFR part 63, Subpart TT, UU or H.	Carrying out a leak detection and repair program in accordance with the subpart selected (Subpart TT, UU or H).
6. Storage tank at an existing, reconstructed, or new affected source meeting any of the tank capacity and vapor pressure criteria specified in Table 2, items 1 through 6.	Route emission to a fuel gas system or back to the process	Continuing to meet the requirements specified in 63.984(b).
	Install, and, during filling of the storage tank with organic liquids, operate a vapor balancing system.	Monitoring each potential source of vapor leakage in the system quarterly during the loading of a transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standards for equipment leak components as specified in Table 4, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in the selected equipment leak standards.

TABLE 11 TO SUBPART EEEE OF PART 63 – Requirements for Reports

As stated in 63.2386(a), (b) and (f), the facility must submit compliance reports and startup, shutdown and malfunction reports according to the following table:

The facility must submit...	The report must contain...	The facility must submit the report...
<p>1. Compliance report or Periodic Report</p>	<p>a. The information specified 63.2386(c), (d) and (e). If the facility had a SSM during the reporting period and took actions consistent with their SSM plan, the report must also include the information in 63.10(d)(5)(i); AND</p>	<p>Semiannually, and it must be postmarked by January 31 or July 31 in accordance with 63.2386(b).</p>
	<p>b. The information required by 40 CFR Part 63, Subpart TT, UU or H, as applicable, for pumps, valves and sampling connections; AND</p>	<p>See the submission requirement in item 1.a of this table.</p>
	<p>c. The information required by 63.999(c); And</p>	<p>See the submission requirement in item 1.a of this table.</p>
	<p>d. The information specified in 63.1066(b) including: Notification of inspection, inspection results, requests for alternate devices, and requests for extensions, as applicable.</p>	<p>See the submission requirement in item 1.a of this table.</p>
<p>2. Immediate SSM report if you had a SSM that resulted in an applicable emission standard in the relevant standard being exceeded, and you took an action that was not consistent with your SSM plan</p>	<p>a. The information required in 63.10(d)(5)(ii).</p>	<p>By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority [63.10(d)(5)(ii)].</p>

Table 12 to Subpart EEEE of Part 63 – Applicability of General Provisions (Subpart A)

As stated in 63.2382 and 63.2398, the facility must comply with the applicable General Provisions (GP) as follows:

Citation	Subject	Brief Description	Applies to Subpart EEEE
63.1	Applicability	Initial applicability determination; Applicability after standard established; Permit requirements; Extensions, Notifications	Yes
63.2	Definitions	Definitions for part 63 standards	Yes
63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes
63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, Severability	Yes
63.5	Construction/Reconstruction	Applicability; Applications; Approvals.	Yes
63.6 (a)	Compliance with Standards/O&M Applicability	GP apply unless compliance extension; GP apply to area sources that become major.	Yes
63.6 (b) (1) – (4)	Compliance dates for new and reconstructed sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes
63.6 (b) (5)	Notification	Must notify if commenced construction or reconstruction after proposal.	Yes
63.6 (b) (6)	Reserved		
63.6 (b) (7)	Compliance dates for new and reconstructed area sources that become major.	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.	Yes
63.6 (c) (1) – (2)	Compliance dates for existing sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes
63.6 (c) (3) – (4)	Reserved		
63.6 (c) (5)	Compliance dates for existing area sources that become major	Area sources that become major must comply with the major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years).	Yes
63.6 (d)	Reserved		
63.6 (e) (1)	Operation and maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements are met.	Yes
63.6 (e) (2)	Reserved		
63.6 (e)(3)	SSM Plan	Requirements for SSM plan; content of SSM plan; actions during SSM.	Yes, however, the 2-day reporting requirement in 63.6(e)(3)(iv) does not apply; and 63.6(e) does not apply to emissions sources not requiring control.
63.6 (f) (1)	Compliance except during periods of startup, shutdown and malfunction (SSM)	Must comply with emission standards at all times except during SSM.	Yes
63.6 (f) (2) – (3)	Methods for determining compliance	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes
63.6 (g) (1) – (3)	Alternative standard	Procedures for getting an alternative standard.	Yes
63.6 (h)	Opacity and visible emission (VE) standards	Requirements for compliance with opacity and visible emission standards.	Only for flares for which Method 22 observations are required as part of a flare compliance assessment.

Citation	Subject	Brief Description	Applies to Subpart EEEE
63.6 (i) (1) – (14)	Compliance extensions	Procedures and criteria for Administrator to grant compliance extension.	Yes
63.6 (j)	Presidential compliance exemption	President may exempt any source from requirement to comply with this subpart.	Yes
63.7 (a) (2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date.	Yes
63.7 (a) (3)	CAA Section 114 authority	Administrator may require a performance test under CAA section 114 at any time.	Yes
63.7 (b) (1)	Notification of performance test	Must notify Administrator 60 days before the test.	Yes
63.7 (b) (2)	Notification of rescheduling	If a facility has to reschedule performance test, they must notify Administrator of rescheduled dated as soon as practicable without delay.	Yes
63.7 (c)	Quality assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.	Yes
63.7 (d)	Testing facilities	Requirements for testing facilities	Yes
63.7 (e)(1)	Conditions for conducting performance tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM.	Yes
63.7(e)(2)	Conditions for conducting performance tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative.	Yes
63.7(e)(3)	Test Run Duration	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.	Yes, however, for transfer racks 63.987(b)(3)(i)(A) - (B) and 63.997(e)(1)(v)(A) – (B) provide exceptions to the requirement for test runs to be at least 1 hour.
63.7 (f)	Alternative test method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method.	Yes
63.7 (g)	Performance test data analysis	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; keep data for 5 years.	Yes; Performance test data is to be submitted with the Notification of Compliance Status according to the schedule specified in 63.9(h)(1) – (6) below.
63.7 (h)	Waiver of tests	Procedures for Administrator to waive performance test.	Yes
63.8 (a) (1)	Applicability of monitoring requirements	Subject to all monitoring requirements in standard.	Yes
63.8 (a) (2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply.	Yes
63.8 (a) (3)	Reserved		
63.8 (a) (4)	Monitoring with flares	Monitoring requirements of flares in 63.11	Yes, monitoring requirements in 63.987(c) also apply.
63.8 (b) (1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes
63.8 (b) (2) – (3)	Multiple effluents and multiple monitoring systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes

Citation	Subject	Brief Description	Applies to Subpart EEEE
63.8 (c) (1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes
63.8 (c) (1)(i) - (iii)	Routine and Predictable SSM	Keep parts for routing repairs readily available; reporting requirements for SSM when action is described in SSM plan.	Yes
63.8 (c) (2) – (3)	Monitoring system installation	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test.	Yes
63.8 (c) (4)	CMS Requirements	CMS must be operating except during breakdown, out-of-control, repair, maintenance and high level calibration drifts; COMS must have a minimum of once cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	Yes; however, COMS are not applicable.
63.8 (c) (5)	Continuous Opacity Monitoring System (COMS) minimum procedures	COMS minimum procedures	No
63.8 (c) (6) – (8)	CMS Requirements	Zero and high level calibration check requirements. Out-of-control periods.	Yes; only applies for CEMS. 40 CFR Part 63, subpart SS provides requirements for CPMS.
63.8 (d)	CMS quality control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years after revisions.	Yes; Only for CEMS. Requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
63.8 (e)	CMS Performance evaluation	Notification, performance evaluation test plan, reports.	Yes, but only applies for CEMS.
63.8 (f) (1) – (5)	Alternative monitoring method	Procedures for Administrator to approve alternative monitoring.	Yes, but 40CFR Part 63, subpart SS also provides procedures for approval of CPMS.
63.8 (f) (6)	Alternative to relative accuracy test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS.	Yes
63.8 (g)	Data reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4equally spaced date points; data that cannot be used in average.	Yes; however , COMS are not applicable.
63.9 (a)	Notification requirements	Applicability and State delegation.	Yes
63.9 (b) (1)-(2), (4)-(5)	Initial notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each.	Yes
63.9 (c)	Request for compliance extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate (BACT/LAER).	Yes
63.9 (d)	Notification of special compliance requirements for new sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.	Yes
63.9 (e)	Notification of performance test	Notify Administrator 60 days prior	Yes
63.9 (f)	Notification of opacity and visible emissions test	Notify Administrator 30 days prior.	No
63.9 (g)	Additional notification requirements when using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative.	Yes; however there are no opacity standards.

Citation	Subject	Brief Description	Applies to Subpart EEEE
63.9 (h) (1) – (6)	Notification of compliance status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/visible emissions, which are due 30 days after; when to submit to Federal vs. State authority	Yes, except there are no opacity standards and all initial Notification of Compliance Status, including all performance test data, are to be submitted at the same time, either within 240 days after the compliance date or within 60 days after the last performance test demonstrating compliance has been completed, whichever occurs first.
63.9 (i)	Adjustment of submittal deadlines	Procedures for Administrator to approve change when notification s must be submitted.	Yes
63.9 (j)	Change in previous information	Must submit within 15 days after change.	No, these changes will be reported in the first and subsequent compliance reports.
63.10 (a)	Record keeping and reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source.	Yes
63.10 (b) (1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years.	Yes
63.10 (b) (2) (i) – (iv)	Records related to (SSM) startup, shutdown and malfunction	Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM.	Yes
63.10 (b) (2) (vi) - (xi)	CMS Records	Malfunctions, inoperative out-of-control periods	Yes
63.10 (b) (2) (xii)	Records	Records when under waiver	Yes
63.10 (b) (2) (xiii)	Records	Records when using alternative to relative accuracy test	Yes
63.10 (b) (2) (xiv)	Records	All documentation supporting initial notification and notification of compliance status.	Yes
63.10 (b) (3)	Records	Applicability determinations	Yes
63.10 (c)	Records	Additional records for CMS	Yes
63.10 (d) (1)	General reporting requirements	Requirement to report	Yes
63.10 (d) (2)	Report of performance test results	When to submit to Federal or State	Yes
63.10 (d) (3)	Reporting opacity or visible emission observations	What to report and when	Yes
63.10 (d) (4)	Progress reports	Must submit progress reports on schedule if under compliance extension.	Yes
63.10 (d) (5)	Startup, shutdown and malfunction (SSM) reports	Contents and submission	Yes
63.10 (e) (1) – (2)	Additional CMS reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2-3 copies of COMS performance evaluation.	Yes; however, COMS are not applicable.
63.10 (e) (3)(i)-(iii)	Reports	Schedule for reporting excess emission and parameter monitor exceedance (now defined as deviations).	Yes, however, note that the title of the report is the compliance report; deviations include excess emission and parameter exceedance.

Citation	Subject	Brief Description	Applies to Subpart EEEE
63.10 (e) (3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions or parameter monitoring exceedance (now defined as deviations); provisions to request semiannual reporting after compliance for 1 year; submit report by 30 th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been not deviations; must submit report containing all of the information in 63.8(c) (7) – (8) and 63.10 (c)(5) – (13).	Yes
63.10 (e) (3)(vi)-(viii)	Excess Emission Report and Summary Report	Requirements for reporting excess emissions for CMS (now called deviations); requires all the information in 63.10(c) (5) – (13) and 63.8 (c) (7) – (8)	Yes
63.10 (e) (4)	Reporting COMS data	Must submit COMS data with performance test data	No
63.10 (f)	Waiver for recordkeeping/reporting	Procedures for Administrator to waive	Yes
63.11 (b)	Control and work practice requirements	Alternative work practice for equipment leaks	Yes
63.12	Delegations	State authority to enforce standards	Yes
63.13	Addresses	Addresses where reports, notifications, and requests are sent.	Yes
63.14	Incorporation by reference	Test methods incorporated by reference	Yes
63.15	Availability of information	Public and confidential information.	Yes

XII. Startup, Shutdown and Malfunction (SSM) Plan Checklist

The following is a Summary of Requirements for MACT Standard's Startup, Shutdown, and Malfunction Plans. This document was originally prepared in September 2003 by EC/R Incorporated for the U.S. Environmental Protection Agency and is only a tool for assessing a facility's plan.

It should be noted that on April 20, 2006, EPA issued a final amendment to the general provisions of the national emissions standards for hazardous air pollutants (NESHAP) and other specific national emissions standards affecting the SSM plan requirements. An SSM plan is still required, as applicable, however, a source is now allowed to deviate from its SSM plan in order to have more flexibility to address emissions during such SSM periods. However, sources must still operate to minimize emissions during periods of startup, shutdown and malfunction. Refer to http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html for additional details.

1. What is meant by Startup, Shutdown and Malfunction?

- **Startup** is defined as "setting in operation of an affected source or portion of an affected source for any purpose" (40 CFR 63.2). Startup is what you do when you start your process equipment.
- **Shutdown** is defined as "the cessation of operation of an affected source or portion of an affected source for any purpose" (40 CFR 63.2). Shutdown is what you do when you turn your process equipment off.
- **Malfunction** is defined as "any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions" (40 CFR 63.2). A malfunction is what happens when your equipment stops working properly because of unforeseeable equipment or other process-related failure. It does not include what happens to your equipment if you fail to maintain the equipment properly or are careless during operation so that the equipment breaks down or stops working properly.

2. What requires a facility to prepare a SSM Plan?

The Federal air pollution control requirements published by the EPA require owners and operators of MACT sources to write and put into use a Startup, Shutdown, and Malfunction Plan (SSM Plan). See Section 63.6(e)(3)(i) of the EPA "General Provisions" for these requirements.

3. What is the purpose of a SSM Plan?

The purpose of the SSM Plan is to make sure that:

- A facility runs (and keep in good running order) their MACT sources so that the facility's air emissions are minimized during all startups, shutdowns, and malfunctions (SSM) to the greatest extent which is consistent with safety and good air pollution control practices [63.6(e)(3)(i)(A)];
- A facility is ready to correct (for example, repair) malfunctions as soon as practical after they happen so as to minimize any emissions that might occur as a result of the malfunction [63.6(e)(3)(i)(B)]; and

- A facility's reporting duty is simplified when a SSM happens since the procedures followed during the startup or shutdown or to correct a malfunction are already described in a SSM Plan [63.6(e)(3)(i)(C)].

4. When must an SSM Plan be developed?

An SSM Plan must be developed by the compliance date of a facility's NESHAP [63(e)(3)(i)] or as otherwise specified for its MACT source.

5. What information should an SSM Plan contain?

An SSM Plan should describe how a facility is going to startup and shutdown the MACT source. The SSM Plan should also describe how the facility will handle malfunctions of its processes to minimize emissions, as well as malfunctions of the devices that control and monitor the emissions from regulated air pollution sources including continuous emissions monitoring systems (CEMS) [63.6(e)(3)].

A facility's SSM Plan should describe the information listed below [63.6(e)(3)]:

- How the facility plans to operate, or in other words, how the facility will run the MACT process equipment during startups and shutdowns to minimize emissions;
- How the facility plans to operate the MACT source during malfunctions to minimize emissions; and
- How the facility plan's to correct/repair malfunctioning equipment as soon as practical after malfunctions occur.

It may also be helpful to address in the SSM Plan the information that will be recorded during each SSM [63.6(e)(3) and 63.10(b)]. See Item 9 of this document for the list of information that needs to be recorded. The records may take the form of a "checklist" or any other type of recordkeeping that keeps track of the same information [63.6(e)(3)(iii) and 63.10(b)(2)(v)].

A facility may use a standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan, or other plan to satisfy the requirements for writing a SSM Plan as long as the other plan meets all the requirements of a SSM Plan, as described here [63.6(e)(3)(vi)]. Some MACT sources reference portions of their SOP manual in their SSM Plan.

6. When is a facility required to use a SSM Plan?

A facility must use the SSM Plan during all SSM occurrences of their MACT sources, and run and keep in good running order the MACT source using the procedures described in the SSM Plan [63.6(e)(3)(ii)]. If it is impracticable in a given situation to follow the procedures in the SSM plan, newly promulgated amendments to the general provisions allows the flexibility to deviate from the SSM plan. See http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html for additional details.

7. Who sees the SSM Plan and how long should it be kept?

- A facility's SSM Plan is a public document and may be requested by the public. You must submit your plan to your permitting authority when asked to do so in response to a request from the public. It may also need to be submitted as required by the NESHAP for your source.
- Under a facility's permit required by Title V (part 70 and 71) of the 1990 Clean Air Act

Amendments facilities are required to have an SSM plan. The Title V permit also requires facilities to follow the procedures in their SSM Plan during all times of startups, shutdowns, and malfunctions as they operate the equipment at their facility. Revisions made to an SSM Plan are not considered Title V permit revisions. Also, none of the procedures in the SSM Plan fall within the “permit shield” provision in Section 504(f) of the Clean Air Act [63.6(e)(3)(ix)].

- Facilities should keep a copy of their SSM Plan in a safe place with other important records so that it can be read or copied by EPA or any other regulatory agency for as long as they continue to operate their MACT processes and for five (5) years after they stop operating the process [63.6(e)(3)(v)].
- If an SSM Plan is ever revised, facilities should also keep the previous versions for five (5) years afterwards so that it can be available to EPA or any other regulatory agency and the public [63.6(e)(3)(v)].

8. When must a facility modify the SSM Plan?

A facility must modify their current SSM Plan in the following situations:

- To reflect changes to MACT operations or SSM procedures since the SSM Plan was last prepared [63.6(e)(viii)]; and
- If the current SSM Plan:
 - Does not include instructions for a SSM that has occurred [63.6(e)(3)(vii)(A)];
 - Does not include instructions for what will be done during a SSM -- i.e., safe procedures and good air pollution control practices that minimize emissions to the greatest extent [63.6(e)(3)(vii)(B)];
 - Does not include enough instructions for correcting/repairing the malfunctioning process, air pollution control, or monitoring equipment as quickly as practical [63.6(e)(3)(vii)(C)]; or
 - Includes instructions for anything that is not a SS&M, as defined above [63.6(e)(3)(vii)(D)];

Note: If the current SSM Plan leaves out or does not include enough instructions to correctly handle any incident that occurs that can be called a malfunction, the facility must revise its SSM Plan within 45 days after the incident. The facility must add to the revised SSM Plan information on what will be done in case this type of incident happens again [63.6(e)(3)(viii)]. Depending on what the SSM Plan revisions are, the permitting authority and/or EPA may ask to see a copy of the revised SSM Plan. If the facility revises its SSM Plan, it must report that the SSM Plan has been revised in the next semiannual SSM Report for its NESHAP (or Title V) compliance certification. These reports are typically due within 60 days following the end of each 6-month period [63.6(e)(viii) and 63.10(d)(5)(i); 70.5(c)(9)], although the permitting authority can approve less frequent reporting in some cases. If the revisions to the SSM Plan include changes to the scope of activities considered to be SSM events or otherwise changes how any emission limit, work practice requirement, or other requirement in your NESHAP will apply to the facility, the revised SSM Plan is not effective until the permitting authority receives written notice from the facility describing these SSM Plan revisions [63.6(e)(3)(viii)]. Until then, continue following the existing approved SSM Plan.

9. Does a facility have to keep any SSM records?

A facility is required to keep the following records (including all reports and notifications) for five years [63.6(e)(3) and 63.10(b)(2)]:

- When and how long each malfunction of MACT operations, or air pollution control and monitoring equipment happened;
- What was done to correct/repair the malfunctioning equipment;

- Whether the facility followed their current SSM Plan;
- What was done, if at all, that was different from what is in the current SSM Plan; and
- Any other information required by the facility's NESHAP, such as the cause of the malfunctions.

10. Does a facility have to submit SSM Reports?

If you revise your SSM Plan to reflect changes to your MACT source operation or procedures, you must report that you have revised your SSM Plan in your next semiannual SSM Report for your NESHAP (or Title V compliance certification) which is typically due within 60 days following the end of each 6-month period [63.6(e)(viii) and 63.10(d)(5)(i); 70.5(c)(9)].

If a SSM occurs and you correctly followed the procedures in your SSM Plan, you must submit the following in a letter in your next semiannual SSM Report, due within 60 days following the end of each 6-month period [63.6(e)(iii) and 63.10(d)(5)(i)]:

- Facility contact name and title;
- Certifying signature of the owner/operator or other responsible official;
- Statement that current SSM Plan was followed or deviation occurred; and
- How many SSM happened, how long the SSM were, and a brief description of each SSM. (Note: This information may take the form of a checklist)

If what you did during a SSM was not as written in your SSM Plan and/or the type of SSM was not covered by your current SSM Plan and your source exceeds any of the applicable emission limitations in the relevant standard, you must report exactly what your actions were and/or the type of SSM that occurred by telephone or facsimile (FAX) transmission within two (2) working days afterwards. Also, you must send a letter within seven (7) working days after the end of the SSM. The letter should include the following information [63.6(e)(3)(iv) and 63.10(d)(5)(ii)]:

- Facility contact name and title;
- Certifying signature of the owner/operator or other responsible official;
- How the recent SSM happened;
- What was done during the SSM;
- The reason(s) that current SSM Plan was not followed; and
- Whether any emissions and/or parameters that were monitored were higher or different than their allowable values during the SSM.

If, as above, what was done during a SSM was not as written in the current SSM Plan and/or the type of event was not covered by the current SSM Plan, the facility must also revise the SSM Plan within 45 days after the SSM so as to describe what will be done in case a similar SSM happens again.

A facility may also have reports to make that are required by the State Implementation Plan (SIP). Check with local permitting authority to find out about these additional requirements.

11. Startup, Shutdown and Malfunction (SSM) Plan Checklist:

- a. Has the facility described what will be done to operate, in other words, how the facility run all **process equipment** at the MACT sources during **startups and shutdowns** to minimize emissions?
- b. Has the facility included how they will record what will be done during a **startup or shutdown** if this information is not already included in the plan?

- c. Has the facility included what they will do to find and record the circumstances of malfunctions of the **process, air pollution control, and air pollution monitoring** equipment?
- d. Has the facility included what they will do to correct (for example, repair) the malfunctioning **process, air pollution control, and air pollution monitoring** equipment as soon as practical after the malfunctions happens to minimize emissions, and how they will record these corrections?
- e. Has the facility included how they will obtain any other information required by the applicable NESHAP, such as the cause of the malfunction?

Note: This is the least amount of information that a facility should have in their SSM Plan. The facility can include more information so that employees can operate the facility as best as possible during any startup, shutdown, or malfunction. They may also include any or all of the following as additional requirements: (1) the SSM Plan should be kept in a place where everyone who operates any equipment can find it quickly; (2) a manager should sign off any SSM Plan revisions and be notified of each SSM; or (3) all employees must be trained in the SSM procedures.

12. Sample SSM Recordkeeping Checklist:

- a. At what piece of equipment or where in the process did the startup, shutdown, or malfunction occur?
- b. What was the date and time of the startup and how long did it last?
- c. What was the date and time of the shutdown and how long did it last?
- d. What was the date and time of the malfunction and how long did it last?
- e. What did you do to correct the malfunctioning equipment?
- f. Is what was done during the startup, shutdown, or malfunction exactly as described in the SSM Plan?
- g. If the facility did anything that was not in the current SSM Plan, what was the result?
- h. Did the facility include all other information required by the applicable NESHAP, such as the cause of the malfunctions?

Note: This is the least amount of information that a facility should write down during any startup, shutdown, and malfunctions. The facility can include more information so that they can describe as best as possible what happened during any startup, shutdown, or malfunction.