

List of Questions and Answers for Wastewater

What is wastewater?	8 - 1
What is process wastewater?	8 - 1
What is maintenance wastewater?	8 - 1
What are my requirements for maintenance wastewater?	8 - 2
Do I have a Group 1 wastewater stream?	8 - 2
Do I have a Group 2 wastewater stream?	8 - 3
What test methods and procedures do I need to use to calculate the annual average concentration and flow rates for Group determinations?	8 - 3
What are the general requirements for a Group 1 Wastewater stream?	8 - 7
What are the general requirements for a Group 2 Wastewater stream?	8 - 8
Can I transfer a Group 1 stream off site or to onsite treatment (different owner or operator)?	8 - 8
What are the wastewater tanks requirements for Group 1 wastewater streams?	8 - 8
What types of inspections do I need to preform on Group 1 wastewater tanks?	8 - 9
What are the surface impoundment requirements for Group 1 wastewater streams?	8 - 12
What are the container requirements for Group 1 wastewater streams or residuals from Group 1 wastewater streams?	8 - 14
What are the individual drain system requirements for Group 1 wastewater streams?	8 - 15
What are the oil-water separator requirements for Group 1 wastewater streams?	8 - 18
What are the provisions for managing existing source Group 1 wastewater streams?	8 - 23
What are the provisions for managing new source Group 1 wastewater streams?	8 - 25
What are the treatment requirements for residuals from Group 1 wastewater	

streams? 8 - 27

What are the control device requirements for Group 1 wastewater streams? 8 - 27

What are my recordkeeping requirements? 8 - 28

The wastewater provisions are found in 63.1330.

What is wastewater? [63.1312]

Wastewater means water that contains an annual average concentration of, Acetaldehyde, Acrylonitrile, 1,3 Butadiene, 1,4 Dioxane, methanol, or styrene, of at least 5 ppmw and an average flow rate of 0.02 L/min or greater and is discarded from a TPPU that is part of an affected source.

or

An annual average concentration of Acetaldehyde, Acrylonitrile, 1,3 Butadiene, 1,4 Dioxane, methanol, or styrene, of at least 10,000 ppmw at any flow rate and is discarded from a TPPU that is part of an affected source.

Wastewater can be considered process water or maintenance water.

What is process wastewater? [63.101]

Wastewater which during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Examples include product tank drawdown, feed tank drawdown, water formed during a chemical reaction or used as a reactant, water used to wash impurities from organic products or reactants, water used to cool or quench organic vapor streams through direct contact, condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

What is maintenance wastewater? [63.1312 & 63.101]

Wastewater generated by the draining of process fluid from components in the thermoplastic manufacturing process unit into an individual drain system prior to or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shut down. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of low legs and high point bleeds, draining of pumps into an individual drain system, and draining of portions of the TMPU for repair. However, generation of wastewater from the routine rinsing or washing of equipment in batch operation between batches is not maintenance wastewater, but is considered to be process wastewater, for the purpose of this subpart.

What are my requirements for maintenance wastewater? (63.105)

The owner or operator shall prepare a description of maintenance procedures for management of wastewater generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance and repair, and during periods which are not shut downs (i.e. routine maintenance).

- S** Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
- S** Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere.
- S** Specify the procedures to be followed when clearing materials from process equipment.

The owner or operator should modify this description as needed following each maintenance activity based on the actions that were taken. These procedures should be implemented and included as part of the required start up and shut down plan (General Provision Requirement).

Do I have a Group 1 wastewater stream? [63.132 modified per 63.1330]

If you have an *existing source* the following definitions apply for a Group 1 source:

- If the total annual average concentration of any combination of the following compound(s) [Acetaldehyde, Acrylonitrile, 1,3 Butadiene, 1,4 Dioxane, methanol, or styrene] is \$10,000 ppmw at any flow rate.

or

- The total annual average concentration of these compounds is \$ 1,000 ppmw and the annual average flow rate is \$10 L/min.

If you have a *new source* the following definitions apply for a Group 1 source:

- If the annual average concentration of 1,3 butadiene \$ 10ppmw and the annual average flow rate \$ 0.02 L/min.

- The existing source definition for Group 1 sources also apply to new sources for the annual average for these following compounds: Acetaldehyde, Acrylonitrile, 1,3 Butadiene, 1,4 Dioxane, methanol, or styrene.

Do I have a Group 2 wastewater stream? [63.132 modified per 63.1330]

Wastewater streams that do not meet the Group 1 definition are considered Group 2 wastewater streams.

What test methods and procedures do I need to use to calculate the annual average concentration and flow rates for Group determinations? [63.144]

The annual average concentration is a flow weighted average that represents actual or anticipated operation of the TPPU over a designated 12 month period.

If you chose to designate a wastewater stream Group 1, no calculations are necessary.

Otherwise, the following test methods may be used to test for the concentration of organic HAP's in the water stream.

Test Method/Procedure for Concentration	Comments
Knowledge of wastewater	Provide sufficient information to document Group 2 status if stream is determined to be Group 2. (e.g. material balances, records of chemical purchases, process stoichiometry, or previous test results). If test results are used provide documentation describing the testing protocol and the means by which any losses of volatile compounds during sampling, bias, and accuracy of analytical method, were accounted for during the test.
Bench Scale or Pilot Scale Test Data	Provide sufficient information to document that the data are representative of the actual annual average concentration, or are reliably indicative of another relevant characteristic of the wastewater stream that could be used to predict the annual average concentration. For concentration data, the owner or operator shall also provide documentation describing the testing protocol and the means by which any losses of volatile compounds during sampling, and the bias and accuracy of the analytical method, were accounted for in the determination of the annual average concentration.

Test Method/Procedure for Concentration	Comments
<p>Test Data from Sampling:</p> <p>Method 25D (Part 60 Appendix A) Method 305 (Part 63 Appendix A) Methods 624 and 625 (Part 136 Appendix A) Method 1624 and 1625 (Part 136 Appendix A)</p> <p>Other EPA Methods (must submit sampling plan and validation)</p> <p>Methods other than EPA (must submit sampling plan and validation)</p>	<p>For each wastewater stream, measurements shall be made either at the point of determination or downstream of the point of determination with adjustment for concentration changes when two or more wastewater streams have been mixed, one or more wastewater streams have been treated, or losses to the atmosphere have occurred.</p> <p>A minimum of three samples from each wastewater stream shall be taken. Samples may be grab samples or composite samples.</p>

Test Method	Adjustment allowed
Method 305	Concentration may be adjusted by dividing by the compound-specific Fm factors listed in table 34 of 40 C.F.R Part 63 Subpart G
Method 25D	Concentration cannot be adjusted.
Concentrations gather from other test methods,	<p>Can be adjusted by compound specific Fm factors* may be adjusted by multiplying by the compound specific-Fm factor.</p> <p>*This can only be used only when concentrations of individual compounds are determined or only one compound is in the wastewater stream.</p>

Test Method/Procedures for Flow Rates	Comments
Knowledge of the wastewater	<p>Use the maximum expected annual production capacity, knowledge of the process, and/or mass balance information.</p> <p>Provide sufficient information to document to flow rate for Group 2 streams.</p>

Test Method/Procedures for Flow Rates	Comments
Historical Records	<p>Derive the highest annual average flow rate of wastewater from historical records representing the most recent 5 years. If in operation less than 5 years but greater than 1 year use all operating data for life of operation.</p> <p>Provide sufficient information to document the flow rate for wastewater streams determined to be Group 2 wastewater streams.</p>
Measurement of flow rates	<p>Measurement should be made at the point of determination or a location downstream of the point of determination with adjustments if two streams or more have been mixed or one or more streams have been treated.</p> <p>Provide sufficient information to document the flow rate for wastewater streams determined to be Group 2 wastewater streams.</p>

What are the general control requirements for a Group 1 Wastewater stream?

Comply with : wastewater tanks
 Surface impoundments
 Containers
 Individual drain systems
 Oil water separators

Comply with: Applicable requirements for control of Acetaldehyde, Acrylonitrile, 1,3 Butadiene, 1,4 Dioxane, methanol, or styrene.

Comply with: Recordkeeping and Reporting Requirements.

Owners or operators who are new sources that use 1,3 Butadiene cannot discharge it in liquid or solid form with a concentration greater than 10,000 ppm from a thermoplastic manufacturing unit to water or wastewater unless the stream is treated as a Group 1 stream. This does not apply to materials from the following activities: equipment leaks, maintenance, startup, shutdown, malfunction, spills, or samples of a size not greater than reasonably necessary for analysis.

What are the general requirements for Group 2 wastewater streams?

Comply with recordkeeping and reporting requirements.

Can I transfer Group 1 streams offsite or to onsite treatment (different owner and operator)? [63.132]

Yes, as long as the owner or operator accepting the material certifies to EPA that they will comply with the necessary requirements for the Group 1 stream and are willing to accept the stream. The person transferring the material must also include a notice with each shipment, or if continuous, an initial notice and notice when new treatment is required.

What are the wastewater tanks requirements for Group 1 wastewater streams? [63.133]

Comply with one of the following options:

- S** Operate and maintain a fixed roof, unless wastewater tank is used for heating wastewater or treatment with exothermic reaction or the contents of the tank is sparged.
 - S** Fixed roof and closed-vent system that routes the organic hazardous air pollutant vapors to a control device.
 - S** Fixed roof and internal floating roof that meets the storage tank requirements.
 - S** An external floating roof that meets the storage tank requirements.
 - S** An equivalent means of emission limitation. Must be submitted to the Administrator and contain the following information.
 - Actual emission tests that the full-size or scale model wastewater tanks that accurately collect and measure all organic hazardous air pollutants emissions from a given control technique and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure.
- Or
- An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

What types of inspections do I need to perform on Group 1 wastewater tanks? (63.133 & 63.148)

- A) The inspections found in the Storage Tanks section (see other portion of tool)
- B) Each tank should be initially, and semi-annually inspected for control equipment failures. Examples of these failures include:
 - S** The floating roof is not resting on either the surface of the liquid or on the leg supports.

- S** There is stored liquid on the floating roof
 - S** A rim seal is detached from the floating roof
 - S** There are holes, tears, cracks or gaps in the rim seal or seal fabric of the floating roof.
 - S** There are visible gaps between the seal of a internal floating roof and the wall of the wastewater tank
 - S** There are gaps between the metallic shoe seal or the liquid mounted primary seal of an external floating roof and the wall of the wastewater tank that exceed 212 square centimeters per meter of tank diameter or the width of any portion of any gap between the primary seal and the tank wall exceeds 3.81 centimeters.
 - S** There are gaps between the secondary seal of an external floating roof and the wall of the wastewater tank that exceed 21.2 square centimeters per meter of tank diameter or the width of any portion of any gap between the secondary seal and the tank wall exceeds 1.27 centimeters.
 - S** Where a metallic shoe seal is used on an external floating roof, one end of the metallic shoe does not extend into the stored liquid or one end of the metallic shoe does not extend a minimum vertical distance of 61 centimeters above the surface of the stored liquid.
 - S** A gasket, joint, lid, cover, or door has a crack or gap, or is broken.
- C) For a fixed roof closed vent system venting to a control device, the vent system must be checked for leaks.
- S** If the vapor collection system or closed vent system is constructed of hard piping, conduct an initial inspection using Method 21 and annual visual inspections for visible, audible, or olfactory indications of leaks.
 - S** If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct initial and annual inspections using Method 21. In addition, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - S** These inspections are not necessary if cover and closed vent system is operated under negative pressure.
 - S** For fixed roof, cover, and enclosure, the owner or operator shall conduct initial visual inspections and semi-annual visual inspections for visible, audible, or olfactory

indication of leaks.

* If leaks are found first attempt to repair must be within 5 calendar days and final repair within 15 calendar days. Leaks in vapor collection systems for transfer operations must be repaired within 15 calendar days, or at the beginning of the next transfer loading operation (whichever is later). If leaks are found the following information must be kept:

- S** The instrument identification numbers; operator name or initials, and identification of the equipment.
- S** The date the leak was detected and the date of the first attempt to repair the leak.
- S** Maximum instrument reading measured by the method after the leak is successfully repaired or determined to be non repairable.
- S** "Repair Delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery.
- S** The name, initials, or other form of identification for the owner or operator (or designee) whose decision it was that repair could not be done without a shutdown.
- S** The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- S** Dates of shutdowns that occur while the equipment is unrepaired.
- S** The date of successful repair of the leak.

If there are any bypass lines to the control device that vent directly to the atmosphere, you must comply with one of the following two options:

- a) Install, calibrate, maintain, and operate a flow indicator that determines whether flow is present at least once every 15 minutes. The same records for other bypass lines (see other portions of tool) must be kept.
- b) Secure the bypass line valve in the closed position with a cap-seal or a lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

What are the surface impoundment requirements for Group 1 wastewater streams? (63.134)

The owner or operator must operate and maintain on each surface impoundment either a cover (e.g. air supported structure or rigid cover) and a closed vent system that routes the organic hazardous air pollutants vapors vented from the surface impoundment to a control device, or a floating flexible membrane cover.

- A) The cover and all openings must (e.g. access hatches, sampling ports, and gauge wells) shall be maintained and Method 21 testing must be done on the following schedule:

For all covers or enclosures initial and semi-annual visual inspections done for visible, audible, or olfactory indications of leaks.

If the vapor collection system or closed vent system is constructed of hard piping, conduct an initial inspection using Method 21 and annual visual inspections for visible, audible, or olfactory indications of leaks.

If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct initial and annual inspections using Method 21. In addition, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

These inspections are not necessary if cover and closed vent system is operated under negative pressure.

- B) The floating flexible membrane covers should be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid. It must be made from a synthetic membrane material that is either:

- High Density Polyethylene (HDPE) with a thickness of at least 2.5 millimeters, or
- A material determined to have organic permeability properties equivalent to HDPE and chemical and physical properties that maintain the material integrity for the intended service life of the material.

The cover should be installed so there are no visible cracks, holes, gaps, or other open spaces between the cover seams or between the cover edge and the foundation mountings.

The cover should also be equipped with a closure device. This device, when closed, should have no visible cracks, holes, gaps, or other open spaces in the device or between the cover opening and the closure device.

The cover can be equipped with emergency cover drains for removal of storm water, but each should have a slotted membrane fabric cover that covers at least 90% of the area of the opening or a flexible fabric sleeve seal.

Unless routine inspection, maintenance or other normal operational activities, or remove

accumulate sludge or other residues from bottom of impoundment is occurring, cover be floating on liquid and each closure device should be in the closed position.

Each surface impoundment should be inspected initially and semi-annually for improper work practices (e.g. leaving open any access hatch when not in use) and any control equipment failures (e.g. any time a joint, lid, cover, or door has a crack or gap, or is broken). If any failure is identified, first attempt at repair must be within 5 calendar days and the repair should be completed within 45 calendar days.

For all covers and enclosures an initial and semi-annual visual inspections done for visible, audible, or olfactory indications of leaks must be done.

These inspections are not necessary if cover and closed vent system is operated under negative pressure.

What are the container requirements for Group 1 wastewater streams or residuals from Group 1 wastewater streams? (63.135)

If the container is #0.42 cubic meters, the owner must meet DOT specifications and testing under 49 CFR part 178, or cover and all openings (e.g. bungs, hatches, sampling ports, pressure relief devices) must be maintained without leaks. This is verified by initial semi-annual visual inspections done for visible, audible, or olfactory indications of leaks.

If the container is > 0.42 cubic meters, it must be covered and the cover on all openings and must be without leaks verified by initial semi-annual visual inspections done for visible, audible, or olfactory indications of leaks. In addition, when the container is being filled, a submerged fill pipe shall be used and shall extend no more than 6 inches or within 2 fill pipe diameters of the bottom of the container while being filled. The cover should remain in place and closed except for the openings for the submerged fill pipe and for venting of the container to prevent physical damage or permanent deformation of the container.

During treatment (aeration, thermal, or other treatment in the container) and the container must be open, the container must be located within an enclosure with a closed vent system that routes the organic HAPs to a control device.

The container also must be inspected initially and semi-annually for improper work practices (e.g. leaving open any access hatch or other opening when hatch or opening is not in use) or control equipment failures (e.g. anytime a cover or door has a gap, or crack, or is broken). If any failure is identified, first attempt at repair must be within 5 calendar days and the repair should be completed within 45 calendar days.

What are the individual drain system requirements for Group 1 wastewater streams?(63.136)

There are two sets of control options these are listed below and identified as Option 1 or

Option 2.

OPTION 1

Operate and maintain on each opening in the individual drain system a cover and if vented route the vapors to a process or through a closed vent system to a control device.

The cover and all openings must have initial and semi-annual visual inspections done for visible, audible, or olfactory indications of leaks.

The cover and all openings must be closed at all times a Group 1 stream or residual from Group 1 stream is in the drain. Openings are allowed only when necessary for sampling, removal, or equipment inspection, maintenance or repair.

Any control devices should be operated in accordance with the control device requirements. *(See control device requirements in this portion of the tool.)*

The closed vent system routing the vapors to the control device must:

If the vapor collection system or closed vent system is constructed of hard piping, conduct an initial inspection using Method 21 and annual visual inspections for visible, audible, or olfactory indications of leaks.

If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct initial and annual inspections using Method 21. In addition, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

These inspections are not necessary if cover and closed vent system is operated under negative pressure.

Each drain system should also be inspected initially then semi-annually for improper work practices (e.g. leaving open access hatches when not in use) and control equipment failures (e.g. joint, lid, cover or doors that has a gap or crack, or is broken). If any improper work practice or control equipment failure is found the first attempt of repair should be within 5 calendar day and repair should be completed within 15 days.

OPTION 2

Each drain should be equipped with water seal controls or tightly fitted caps or plugs.

The owner or operator must ensure that the water seal is maintained. Examples of maintenance include a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap or water being continuously dripped in to the trap by a hose could be used to verify flow of water to the trap. Visible observation is

also an acceptable alternative.

If a water seal is used the pipe discharging the wastewater must be below the liquid surface of the waterseal of the receiving drain, or a flexible shield (or other enclosure which restricts wind motion across the open area between the pipe and the drain) that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater.

Each junction box should be equipped with a tightly fitted solid cover (no visible gaps, cracks or holes) which should be kept in place at all times except during inspection and maintenance. If the junction box is vented, the owner should comply with one of the following two options:

The junction box should be vented to a process or through a closed vent system to a control device.

If the vapor collection system or closed vent system is constructed of hard piping, conduct an initial inspection using Method 21 and annual visual inspections for visible, audible, or olfactory indications of leaks.

If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct initial and annual inspections using Method 21. In addition, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

These inspections are not necessary if cover and closed vent system is operated under negative pressure

OR If the junction box is filled and emptied by gravity flow (no pump) or is operated with no more than slight fluctuations in the liquid level, the owner or operator may just vent the junction box to the atmosphere provided that the junction box complies with the following two requirements:

The vent pipe must be at least 90 cm in length and no greater than 10.2 cm in nominal inside diameter; and

Water seals should be installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system. The owner or operator shall demonstrate upon request by the Administrator that the junction box water seal is properly designed and restricts ventilation.

Each sewer line must not be opened to the atmosphere, and should be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals or other emission interfaces.

The following inspections must be completed:

Each drain using a tightly fitted cap or plug shall be visually inspected initially then semi-annually to ensure caps or plugs are in place and that there are no gaps cracks, or other holes in the cap or plug.

Each junction box shall be visually inspected initially then semi-annually to ensure that there are no gaps, cracks, or other holes in the cover.

The unburied portion of each sewer line shall be visually inspected initially, and semi-annually thereafter for indication of cracks or gaps that could result in air emissions.

If any gap, hole, or crack is found during these inspections the first attempt at repair should be within 5 calendar days and should be completed within 15 calendar days.

What are the oil-water separator requirements for Group 1 wastewater streams?(63.137)

There are three sets of control options as identified below:

OPTION 1

A fixed roof and closed vent system that routes the organic HAP vapors from the oil water separator to a control device. The control device should meet the control device requirements. (See *control device requirements below*). All covers and openings should remain closed unless opening is necessary for sampling or removal, or equipment inspection, maintenance or repair.

For a fixed roof closed vent system venting to a control device, the vent system must be checked for leaks.

- If the vapor collection system or closed vent system is constructed of hard piping, conduct an initial inspection using Method 21 and annual visual inspections for visible, audible, or olfactory indications of leaks.
- If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct initial and annual inspections using Method 21. In addition, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
- These inspections are not necessary if cover and closed vent system is operated under negative pressure.
- For fixed roof, cover, and enclosure, the owner or operator shall conduct initial visual inspections and semi-annual visual inspections for visible, audible, or olfactory indication of leaks.

* If leaks are found first attempt to repair must be within 5 calendar days and final

repair within 15 calendar days. Leaks in vapor collection systems for transfer operations must be repaired within 15 calendar days, or at the beginning of the next transfer loading operation (whichever is later). If leaks are found the following information must be kept:

- A) The instrument identification numbers; operator name or initials, and identification of the equipment.
- B) The date the leak was detected and the date of the first attempt to repair the leak.
- C) Maximum instrument reading measured by the method after the leak is successfully repaired or determined to be non repairable.
- D) "Repair Delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery.
- E) The name, initials, or other form of identification for the owner or operator (or designee) whose decision it was that repair could not be done without a shutdown.
- F) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- G) Dates of shutdowns that occur while the equipment is unrepaired.
- H) The date of successful repair of the leak.

If there are any bypass lines to the control device that vent directly to the atmosphere, you must comply with one of the following two options:

- a) Install, calibrate, maintain, and operate a flow indicator that determines whether flow is present at least once every 15 minutes. The same records for other bypass lines (see other portions of tool) must be kept.
- b) Secure the bypass line valve in the closed position with a car-seal or a lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

Inspections also must be done initially and semi-annually for improper work practices (e.g. leaving open or ungasketing any access door or other opening when not in use) and control equipment failures (e.g. gasket, joint, lid, cover, or door, has a gap, crack,

or is broken). If either an improper work practice or control equipment failure is found first attempt at repair must be within 5 calendar days and final repair within 45 calendar days.

OPTION 2

A floating roof meeting the requirements of 40 CFR part 60 subpart QQQ 60.693 (a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4). For portions where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the owner or operator should operate and maintain a fixed roof, closed vent system and control device.

Seal gaps must be measured in accordance to procedures in 40 CFR Part 60 Subpart QQQ 60.696 (d)(1) in the following schedule:

Measurement of the primary seal gaps within 60 calendar days after installation and introduction of the Group 1 wastewater stream or residual removed from the Group 1 wastewater stream and once every five years thereafter.

Measurement of the secondary seal gaps within 60 calendar days after installation and introduction of the Group 1 wastewater stream or residual removed from the Group 1 wastewater stream and once every year thereafter.

Inspections also must be done initially and semi-annually for improper work practices (e.g. leaving open or ungasketing any access door or other opening when not in use) and control equipment failures. Examples of control equipment failures include the following:

- S** The floating roof is not resting on either the surface of the liquid or on the leg supports.
- S** There is stored liquid on the floating roof.
- S** A rim seal is detached from the floating roof.
- S** There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.
- S** There are gaps between the primary seal and the separator wall that exceed 67 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the primary seal and the separator wall exceeds 3.8 centimeters.
- S** There are gaps between the secondary seal and the separator wall that exceed 6.7 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the secondary seal and the separator wall exceeds 1.3 cm.

- S** A gasket, joint, lid, cover, or door has a gap or crack or is broken.

If either an improper work practice or control equipment failure is found first attempt at repair must be within 5 calendar days and final repair within 45 calendar days.

OPTION 3

An equivalent means of emission limitation. Determination of equivalence to the reduction in emissions can be achieved in the following, and must be submitted and evaluated by the Administrator.

Actual emission tests that use full-size or scale-model oil water separators that accurately collect and measure all organic hazardous air pollutant emissions from a given control technique and that accurately simulate wind and account for other emission variations such as temperature and barometric pressure.

An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

What are the provisions for managing existing source Group 1 wastewater streams? (63.138)

Compliance Options: (Ethylene Glycol does not need to be included)

- S** Reduce, by removal or destruction, the total concentration of HAPs (defined in 63.1312 and found in Table 9 of 40 CFR Part 63 Subpart G compounds) to 50 ppmw. This option cannot be used when the treatment process is biological treatment.
- S** Operate and maintain a design steam stripper that has the following specifications:
 - S** Minimum active column height of 5 meters;
 - S** Countercurrent flow configuration fo minimum of 10 actual trays;
 - S** Minimum steam flow rate of 0.04 kg steam/L of wastewater feed in the column;
 - S** Minimum wastewater feed temperature of 95 C or minimum column operating temperature of 95 C;
 - S** Maximum liquid loading of 67,100 liters per hour per square meter and
 - S** Operate at nominal atmospheric pressure.
- S** Reduce mass flow rate of these compounds by 99 percent using removal or destruction. These efficiency's should be determined by procedures found in 63.145 (c) for non-combustion units and 63.145 (d) for combustion units.

Option cannot be used for biological treatment processes.

- S** Reduce mass flow rate of these compounds by the Fr value found in Table 9 in 40 CFR Part 63 Subpart G. These efficiency's should be determined by procedures found in 63.145 (c) for non-combustion units and 63.145 (d) for combustion units. Option cannot be used for biological treatment processes.
- S** Achieve the required mass removal (RMR)for the specific compounds. For non-biological treatment processes compliance is determined through procedures in 63.145 (e). For aerobic biological treatment using provisions in 63.145 (e) or (f). For closed anaerobic biological treatment in 63.145 (e), and for open biological treatment, 63.145 (f). Styrene in wastewater streams generated from the following processes do not need to be included: ABS, ABS latex, EPS, MABS, MBS, or SAN.
- S** For biological treatment processes that treat a stream that is at least Group 1 for one compound, meet 95- percent RMR for all Table 9 compounds. For open biological treatment compliance done using procedures in 63.145 (e) or (g). For closed anaerobic biological treatment 63.145(e). If you chose this option the each Group 1 and Group 2 stream must comply with the suppression requirements for wastewater tanks, junction boxes, oil water separators, containers, and individual drain systems. Styrene in wastewater streams generated from the following processes do not need to be included: ABS, ABS latex, EPS, MABS, MBS, or SAN.
- S** Treat in a RCRA unit. The hazardous waste incinerator must have been issued a final permit under 40 CFR part 270 and comply with 40 CFR part 264 subpart O, or have certified compliance with the interim status requirements in 40 CFR part 265 subpart O. The process heater or boiler burning hazardous waste must have been issued a final permit under 40 CFR Part 70 and copy with requirements of 40 CFR part 266 Subpart H or has certified compliance with the interim status requirements of 40 CFR part 266 subpart H. The underground injection well must have been issued a final permit under 40 CFR Part 70 or 40 CFR Part 144 and comply with the requirements of 40 CFR Part 122.
- S** All Group 1 wastewater streams can demonstrate that for HAPs defined in 63.1312 and found in Table 9 and/or 8 of 40 CFR Part 63 Subpart G, are below 1 megagram per year.

What are the provisions for managing new source Group 1 wastewater streams? (63.138)

Compliance Options: (Ethylene Glycol does not need to be included)

- S** Reduce HAPs defined in 63.1312 and found in Table 8 of 40 CFR Part 63 Subpart G,

by removal or destruction to 10 ppmw. This option cannot be used when the treatment process is biological treatment.

- S** Operate and maintain a design steam stripper that has the following specifications:
 - S** Minimum active column height of 5 meters;
 - S** Countercurrent flow configuration fo minimum of 10 actual trays;
 - S** Minimum steam flow rate of 0.04 kg steam/L of wastewater feed in the column;
 - S** Minimum wastewater feed temperature of 95 C or minimum column operating temperature of 95 C;
 - S** Maximum liquid loading of 67,100 liters per hour per square meter and
 - S** Operate at nominal atmospheric pressure.
- S** Reduce mass flow rate of these compounds by 99 percent using removal or destruction. These efficiency's should be determined by procedures found in 63.145 (c) for non-combustion units and 63.145 (d) for combustion units. Option cannot be used for biological treatment processes.
- S** Reduce mass flow rate of these compounds by the Fr value found in Table 9 in 40 CFR Part 63 Subpart G. These efficiency's should be determined by procedures found in 63.145 (c) for non-combustion units and 63.145 (d) for combustion units. Option cannot be used for biological treatment processes.
- S** Achieve the required mass removal (RMR)for the specific compounds. For non-biological treatment processes compliance is determined through procedures in 63.145 (e). For aerobic biological treatment using provisions in 63.145 (e) or (f). For closed anaerobic biological treatment in 63.145 (e), and for open biological treatment, 63.145 (f). Styrene in wastewater streams generated from the following processes do not need to be included: ABS, ABS latex, EPS, MABS, MBS, or SAN.
- S** For biological treatment processes that treat a stream that is at least Group 1 for one compound, meet 95- percent RMR for all Table 9 compounds. For open biological treatment compliance done using procedures in 63.145 (e) or (g). For closed anaerobic biological treatment 63.145(e). If you chose this option the each Group 1 and Group 2 stream must comply with the suppression requirements for wastewater tanks, junction boxes, oil water separators, surface impoundments, containers, and individual drain systems. Styrene in wastewater streams generated from the following processes do not need to be included: ABS, ABS latex, EPS, MABS, MBS, or SAN.
- S** Treat in a RCRA unit. The hazardous waste incinerator must have been issued a final permit under 40 CFR part 270 and comply with 40 CFR part 264 subpart O, or have certified compliance with the interim status requirements in 40 CFR part 265 subpart

O. The process heater or boiler burning hazardous waste must have been issued a final permit under 40 CFR Part 70 and copy with requirements of 40 CFR part 266 Subpart H or has certified compliance with the interim status requirements of 40 CFR part 266 subpart H. The underground injection well must have been issued a final permit under 40 CFR Part 70 or 40 CFR Part 144 and comply with the requirements of 40 CFR Part 122.

S All Group 1 wastewater streams can demonstrate that for HAPs defined in 63.1312 and found in Table 9 and/or 8 of 40 CFR Part 63 Subpart G, are below 1 megagram per year.

What are the treatment requirements for residuals from Group 1 wastewater streams? (63.138)

Comply with all requirements for the junction boxes, wastewater tanks, individual drain systems, containers, surface impoundments and oil-water separators. In addition, the residuals must be either recycled to the production process or sell the residual for the purpose of recycling, return the residual to the treatment process, treat the residual to destroy the total combined mass flow of Table 8 and or 9 compounds by 99% or more [use procedures in 63.145 (c) or (d)], or comply with one of the RCRA treatment options as mentioned in treatment of the Group 1 wastewater streams.

What are the control device requirements for Group 1 wastewater streams?

In general, whenever Group 1 wastewater vents are vented to a control device the control device must reduce the total organic compound emissions (less methane and ethane) or total organic hazardous air pollutants by 95 wt% or greater or achieve an outlet concentration of 20 ppmv on a dry basis. The 20 ppmv option is not valid for control devices used for containers or surface impoundments.

Optional Control Devices	Other possible compliance methods.
Combustion Device (e.g. vapor incinerator, boiler, or process heater [vapor must be introduced into flame zone])	Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760 C. The 20 ppmv option can be used for containers or surface impoundments.
Vapor recovery system (e.g. carbon adsorption system or condenser)	n/a
Flare	Comply with 63.11(b)
Scrubber	n/a

In order to determine if the control device is meeting the 95% destruction efficiency a performance test or design evaluation must be conducted. Unless the device is also being used to comply with other portions of the regulation and tests or design evaluations have already been conducted.

In addition, if the control device is a boiler or process heater with a design heat input capacity of 44 MW or greater, or the vent stream is introduced with the primary fuel, or is a hazardous waste boiler or process heater that has been issued a final permit under 40 CFR Part 270 and complies with the Requirements of 40 CFR part 266 subpart H or certified compliance with the interim status requirements of 40 CFR part 266 subpart H.

In addition, a hazardous waste incinerator which the owner or operator has been issued a final permit under 40 CFR Part 270 and complies with the Requirements of 40 CFR part 264 subpart O or certified compliance with the interim status requirements of 40 CFR part 265 subpart O.

What are my recordkeeping requirements? (63.147)

In general records must be kept for all inspections conducted under the regulation for tanks and control devices. This includes the seal gap measurements and results of all leak detection tests. All records used to determine Group status for wastewater streams must be kept. Records for all continuously monitored parameters for control devices must also be kept. For all Group 1 streams transferred offsite for treatment, records of the notices sent to the treatment operator must be kept that state that the contained wastewater or residuals must be treated in accordance to the regulation.