

3745-21-16

**Control of volatile organic compound emissions from industrial wastewater.**

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph ~~(HH)~~(JJ) of rule 3745-21-01 of the Administrative Code entitled "~~Referenced~~referenced materials."]

**(A) Applicability.**

(1) Except as otherwise provided in paragraphs (A)(4) and (A)(5) of this rule, ~~the requirements of~~ paragraph (C) of this rule shall apply to any facility that generates process wastewater from an affected industrial category and meets either ~~the following criteria in~~ paragraphs (A)(1)(a) and (A)(1)(b) of this rule or paragraphs (A)(1)(c) and (A)(1)(d) of this rule:

(a) The facility is located in Butler, Clermont, Hamilton or Warren county; ~~and,~~

(b) The facility has a combined total potential to emit for VOC emissions equal to or greater than one hundred tons of VOC per calendar year on or after May 27, 2005 from all of the following:

(i) Industrial wastewater sources (waste management units);

(ii) All non-CTG sources; ~~and,~~

(iii) Unregulated emissions from CTG sources except sources regulated under 40 CFR part 60, subparts~~Subparts~~ BBB, III, NNN, and RRR ~~of 40 CFR Part 60~~ and sources regulated under 40 CFR part 63, subpart~~Subpart T of 40 CFR Part 63.~~

(c) The facility is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county; ~~and,~~

(d) The facility has a combined total potential to emit for VOC emissions equal to or greater than one hundred tons of VOC per calendar year on or after August 25, 2008 from all of the following:

(i) Industrial wastewater sources (waste management units);

(ii) All non-CTG sources; ~~and,~~

- (iii) Unregulated emissions from CTG sources except sources regulated under 40 CFR part 60, subparts~~Subparts~~ BBB, III, NNN, and RRR ~~of 40 CFR Part 60~~ and sources regulated under 40 CFR part 63, subparts~~Subpart~~ T ~~of 40 CFR Part 63~~.
- (2) For the purposes of paragraphs (A)(1)(a) to (A)(1)(d) of this rule, a source shall be considered regulated by a paragraph, rule or subpart if ~~the source~~ the source is subject to the limits of that paragraph, rule, or subpart. A source is not considered regulated by a paragraph, rule, or subpart if ~~the source~~ the source is not subject to the limits of that paragraph, rule, or subpart. For example, if the source is covered by an exemption in the paragraph, rule, or subpart, or the applicability criteria of the paragraph or subpart are not met, then the source is not subject to that paragraph, rule, or subpart. A source is also not considered regulated if there is no rule contained in this chapter regulating the source category.
- (3) Once a facility has met the applicability ~~requirements~~ of paragraphs (A)(1)(a) and (A)(1)(b) of this rule on or after May 27, 2005, or the applicability requirements of paragraphs (A)(1)(c) and (A)(1)(d) of this rule on or after ~~the effective date of this rule~~ August 25, 2008, ~~the facility~~ the facility is always subject to ~~the requirements of~~ paragraph (C) of this rule, except as otherwise provided in paragraphs (A)(4) and (A)(5) of this rule.
- (4) In the event a facility meets the applicability ~~requirements~~ under paragraphs (A)(1)(a) and (A)(1)(b) of this rule, but reduces ~~its~~ the facility's potential to emit for volatile organic compounds by means of federally enforceable operational restrictions (e.g., production, hours of operation, or capacity utilization) to less than one hundred tons per year by no later than May 27, 2006 and documents that the actual VOC emissions from the above combined sources have never exceeded one hundred tons per year after the baseline year (1990) of the state implementation plan for ozone, the facility is not subject to ~~the requirements of~~ paragraph (C) of this rule.
- (5) In the event a facility meets the applicability ~~requirements~~ under paragraphs (A)(1)(c) and (A)(1)(d) of this rule, but reduces ~~its~~ the facility's potential to emit for VOCs by means of a federally enforceable operational ~~restriction(s)~~ restriction (e.g., production, hours of operation, or capacity utilization) to less than one hundred tons per year by no later than ~~twelve months after the effective date of this rule~~ August 25, 2009 and documents that the actual VOC emissions from the above combined sources have never exceeded one hundred tons per year after the baseline year (2002) of the state implementation plan for ozone, the facility is not subject to ~~the requirements of~~ paragraph (C) of this rule.

(B) Definitions.

The definitions applicable to this rule are contained in paragraph (Y) of rule 3745-21-01 of the Administrative Code.

(C) Overall requirements for industrial wastewater.

(1) Except as otherwise exempted under paragraph (C)(2) of this rule, the owner or operator of an affected industrial category at a facility that meets the applicability criteria of paragraph (A) of this rule shall comply with ~~the requirements of~~ paragraphs (D) to (L) of this rule.

(2) The following exemptions shall apply:

(a) Any plant with an annual affected VOCs loading in wastewater, as determined in accordance with paragraph (I) of this rule (relating to determination of wastewater characteristics), less than or equal to ten megagrams (11.03 tons) is exempt from ~~the control requirements of~~ paragraph (D) of this rule.

(b) At any plant with an annual affected VOC loading in wastewater, as determined in accordance with paragraph (I) of this rule, greater than ten megagrams (11.03 tons), the owner or operator of the plant may exempt from ~~the control requirements of~~ paragraph (D) of this rule one or more affected VOC wastewater streams for which the sum of the annual VOC loading in wastewater for all of the exempted streams is less than or equal to ten megagrams (11.03 tons).

(c) If compliance with ~~the control requirements of~~ paragraph (D) of this rule would create a safety hazard in a waste management unit, the owner or operator may request the USEPA to exempt that waste management unit from ~~the control requirements of~~ paragraph (D) of this rule. The USEPA shall approve the request if justified by the likelihood and magnitude of the potential injury and if the USEPA determines that reducing or eliminating the hazard is technologically or economically unreasonable. Such approval shall occur when the Ohio ~~environmental protection agency~~ EPA is informed, in writing, that USEPA has no objections to this exemption.

(d) Wet weather retention basins are exempt from ~~the requirements of~~ this rule.

(D) Control requirements for process wastewater.

- (1) The owner or operator of a facility with an affected industrial category shall comply with the following control requirements. Any waste management unit that receives, manages, or treats an affected VOC wastewater stream or affected residual shall be controlled in accordance with paragraph (D)(2) of this rule or with one of the alternate methods of control listed in paragraph (E) of this rule.
- (2) The owner or operator of a facility with an affected industrial category shall comply with the following control requirements. Any waste management unit that receives, manages, or treats an affected VOC wastewater stream or an affected residual shall be controlled in accordance with paragraphs (D)(3) to (D)(8) of this rule. The control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream, including any affected residual, is either returned to a process unit or treated in accordance with paragraph (D)(8) of this rule.
- (3) For each individual drain system that receives or manages an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with ~~the requirements of paragraph (D)(3)(a) or (D)(3)(b) of this rule.~~ either of the following:
  - (a) The owner or operator shall 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 as follows:
    - (i) The cover and all openings shall be maintained in a closed position at all times that an affected VOC wastewater stream or an affected residual is in the drain system except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.
    - (ii) The control device shall be designed and operated to reduce the affected VOC vented to it by at least ninety per cent by weight.
    - (iii) The individual drain system shall be designed and operated to segregate the vapors within the system from other drain systems and the atmosphere.
  - (b) The owner or operator shall comply with ~~the requirements of paragraphs (D)(3)(b)(i) to (D)(3)(b)(v) of this rule.~~ the following:

- (i) Each drain shall be equipped with water seal controls or a tightly fitting cap or plug.
- (ii) If a water seal is used on a drain receiving an affected VOC wastewater stream or an affected residual, the owner or operator shall either extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain, or install 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. (A water seal which is used on a hub receiving a wastewater stream that is not an affected VOC wastewater stream or an affected residual for the purpose of eliminating cross ventilation to drains carrying an affected VOC wastewater stream or an affected residual is not required to have an extended subsurface discharging pipe or a flexible shield.)
- (iii) Each junction box shall be equipped with a tightly fitting solid cover (i.e., no visible gaps, cracks, or holes) which shall be kept in place at all times except during inspection and maintenance.
- (iv) If the junction box is vented, the owner or operator shall comply with one of the following requirements:
  - (a) The junction box shall be vented to a process or through a closed vent system to a control device that is designed and operated to reduce the VOC vented to it by at least ninety per cent by weight.
  - (b) If the junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level, the owner or operator may vent the junction box to the atmosphere provided that the junction box complies with the following requirements:
    - (i) The vent pipe shall be at least ninety centimeters in length and no greater than 10.2 centimeters in nominal inside diameter.
    - (ii) Water seals shall be installed and maintained at the wastewater ~~entrance(s)~~entrance to or exit from the junction box restricting ventilation in the individual

drain system and between components in the individual drain system.

- (v) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces.

(4) For each surface impoundment that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with ~~the requirements of paragraph (D)(4)(a) or (D)(4)(b) of this rule.~~either of the following:

- (a) The surface impoundment shall be equipped with a cover (e.g., air-supported structure or rigid cover) and a closed-vent system which routes the VOC vapors vented from the surface impoundment to a control device that ~~meet~~meets the following ~~requirements:~~

- (i) Each opening (e.g., access hatch, sampling port, and gauge well) shall be maintained in a closed position (e.g., covered by a lid) at all times that an affected VOC wastewater stream or an affected residual is in the surface impoundment except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

- (ii) The cover shall be used at all times that an affected VOC wastewater stream or an affected residual is in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228.

- (iii) The control device shall be designed and operated to reduce the affected VOC vented to it by at least ninety per cent by weight.

- (b) The surface impoundment shall be equipped with a floating flexible membrane cover that meets the ~~requirements specified in paragraphs (D)(4)(b)(2)(i) to (D)(4)(b)(2)(vii) of this rule.~~following:

- (i) The flexible membrane cover shall be designed to float on the liquid surface during normal operations, and to form a continuous barrier over the entire surface area of the liquid.

- (ii) The flexible membrane cover shall be fabricated from a synthetic

membrane material that is either a high density polyethylene with a thickness no less than 2.5 millimeters (one hundred mils) or a material (or a composite of different materials) determined to have both organic permeability properties that are equivalent to those of the high density polyethylene material and chemical and physical properties that maintain the material integrity for the intended service life of the material.

- (iii) The flexible membrane cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.
  - (iv) Except as provided for in paragraph ~~(D)(4)(b)(2)(v)~~(D)(4)(b)(v) of this rule, each opening in the flexible membrane cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.
  - (v) The flexible membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least ninety per cent of the area of the opening or a flexible fabric sleeve seal.
  - (vi) Whenever an affected VOC wastewater stream or an affected residual is in the surface impoundment, the flexible membrane cover shall float on the liquid and each closure device shall be secured in the closed position. Opening of closure devices or removal of the flexible membrane cover is allowed to provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations ~~and/or~~ to remove accumulated sludge or other residues from the bottom of the surface impoundment.
- (5) For each oil-water separator that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with either of the requirements of paragraph (D)(5)(a) or (D)(5)(b) of this rule following:
- (a) The oil-water separator shall be equipped with a fixed roof and a closed

vent system that routes the vapors vented from the oil-water separator to a control device in accordance with following ~~requirements~~:

- (i) Each opening in the fixed roof (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the oil-water separator contains an affected VOC wastewater stream or an affected residual except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.
  - (ii) The control device shall be designed and operated to reduce the VOC vented to it by at least ninety per cent by weight.
- (b) The oil-water separator shall be equipped with a floating roof in accordance with the ~~requirements of paragraphs (D)(5)(b)(i) to (D)(5)(b)(v) of this rule.~~following:
- (i) The oil-water separator shall be equipped with a floating roof that has a closure device between the floating roof and the wall of the separator. For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the owner or operator shall operate and maintain a fixed roof, closed vent system, and control device that ~~meet the requirements specified in~~ meets paragraph (D)(5)(a) of this rule.
  - (ii) The closure device shall consist of a primary seal and a secondary seal. The primary seal shall be a liquid-mounted seal or a mechanical shoe seal. The secondary seal shall be above the floating roof and cover the annular space between the floating roof and the wall of the separator.
  - (iii) The floating roof shall be floating on the liquid (i.e., off the roof supports) at all times except during abnormal conditions (i.e., low flow rate).
  - (iv) Except as provided for in paragraph (D)(5)(b)(v) of this rule, each opening in the floating roof shall be equipped with a gasketed cover, seal or lid, which shall be maintained in the closed position at all times, except during inspection and maintenance.

- (v) The floating roof may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least ninety per cent of the area of the opening or a flexible fabric sleeve seal.
- (6) For each portable container that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall operate and maintain a cover on the portable container and shall comply with the requirements of paragraphs (D)(6)(a) to (D)(6)(e) of this rule following:
- (a) The cover shall remain in place and all openings (e.g., bungs, hatches, sampling ports, and pressure relief devices) shall be maintained in a closed position (e.g., covered by a lid) at all times that an affected VOC wastewater stream or an affected residual is in the portable container except when it is necessary to use the opening for filling, removal, inspection, sampling, or pressure relief events related to safety considerations to prevent physical damage or permanent deformation of the portable container or cover.
  - (b) For portable containers with a capacity greater than or equal to one hundred ten gallons, a submerged fill pipe shall be used when a container is being filled by pumping with an affected VOC wastewater stream or an affected residual. The submerged fill pipe outlet shall extend to no more than six inches or within two fill pipe diameters of the bottom of the container while the container is being filled.
  - (c) During treatment of an affected VOC wastewater stream or an affected residual, including aeration, thermal or other treatment, in a portable container, whenever it is necessary for the container to be open, the container shall be located within an enclosure with a closed-vent system that routes the VOC vapors vented from the container to a control device. The control device shall be designed and operated to reduce the VOC vented to it by at least ninety per cent by weight.
- (7) For each wastewater tank that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with either of the requirements of either paragraph (D)(7)(a) or (D)(7)(b) of this rule following:
- (a) The owner or operator shall operate and maintain a fixed roof for the wastewater tank, except ~~that if the~~ a wastewater tank that meets any of

the following conditions in paragraphs ~~(D)(7)(a)(i) to (D)(7)(a)(iv)~~ of this rule, the owner or operator shall operate and maintain one of the emission control techniques listed in paragraphs ~~(D)(7)(b)(i) to (D)(7)(b)(iii)~~ of this rule.:

(i) Used for heating wastewater.

(ii) Used for treating by means of an exothermic reaction.

(iii) The contents of the tank is sparged.

(iv) The wastewater tank has a capacity equal to or greater than forty thousand gallons and the maximum vapor pressure stored material is equal to or greater than 1.5 pounds per square inch absolute.

(b) The owner or operator shall operate and maintain one of the following emission control techniques ~~listed in paragraphs (D)(7)(b)(i) to (D)(7)(b)(iv)~~ of this rule.:

(i) A fixed roof and a closed-vent system that routes the VOC vapors vented from the wastewater tank to a control device that meets the following:

(a) Each opening in the fixed roof (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in a closed position (e.g., covered by a lid) at all times that the wastewater tank contains an affected VOC wastewater stream or an affected residual except when it is necessary to use the opening for wastewater sampling, removal, or for equipment inspection, maintenance, or repair.

(b) The control device shall be designed and operated to reduce the VOC vented to it by at least ninety per cent by weight.

(ii) A fixed roof and an internal floating roof that meets the ~~requirements specified in paragraphs (D)(7)(b)(ii)(a) to (D)(7)(b)(ii)(f)~~ of this rule following:

(a) The internal floating roof shall be floating on the liquid surface at all times except when the floating roof ~~must~~ shall be supported by the leg supports during initial fill, after the

tank has been completely emptied and degassed, and when the tank is completely emptied before being subsequently refilled.

- (b) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.
- (c) The internal floating roof shall be equipped with a closure device between the wall of the tank and the roof edge. The closure device shall consist of a liquid-mounted seal, or a metallic shoe seal, or two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both ~~must~~shall be continuous seals.
- (d) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.
- (e) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.
- (f) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.
- (g) Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least ninety per cent of the opening.
- (h) Each automatic bleeder vent shall be gasketed.
- (i) Each rim space vent shall be gasketed.

- (j) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
  - (k) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - (l) Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when the cover or lid ~~must~~shall be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
- (iii) An external floating roof that meets the ~~requirements specified in paragraphs (D)(7)(b)(iii)(a) to (D)(7)(b)(iii)(e) of this rule.~~following:
- (a) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal (primary seal) shall be either a metallic shoe seal or a liquid-mounted seal. The upper seal (secondary seal) shall be a rim-mounted or shoe-mounted seal.
  - (b) Except during inspections, both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.
  - (c) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in the noncontact external floating roof shall provide a projection below the liquid surface.
  - (d) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal or lid which is to be maintained in a closed position (i.e., no visible gap) at all

times except when the cover or lid ~~must~~shall be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed.

- (e) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.
- (f) Rim space vents are to be set to open only when the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
- (g) Automatic bleeder vents and rim space vents are to be gasketed.
- (h) Each roof drain that empties into the stored liquid is to be provided with a slotted membrane fabric cover that covers at least ninety per cent of the area of the opening.
- (i) Each unslotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.
- (j) Each unslotted guide pole shall have on the end of the pole a gasketed cap which is closed at all times except when gauging the liquid level or taking liquid samples.
- (k) Each slotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.
- (l) Each slotted guide pole shall have a gasketed float or other device which closes off the liquid surface from the atmosphere.
- (m) Each gauge hatch/sample well shall have a gasketed cover which is closed at all times except when the hatch or well ~~must~~shall be open for access.
- (n) The external floating roof shall be floating on the liquid surface at all times except when the floating roof ~~must~~shall be supported by the leg supports during the following

periods specified in paragraphs (D)(7)(b)(iii)(n)(i) to (D)(7)(b)(iii)(n)(iii) of this rule.

(i) During the initial fill.

(ii) After the tank has been completely emptied and degassed.

(iii) When the tank is completely emptied before being subsequently refilled.

(o) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(8) For each treatment process managing an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with ~~the requirements as specified in~~ paragraphs (D)(8)(a) to (D)(8)(g) of this rule. Once an affected VOC wastewater stream or an affected residual has been treated in accordance with ~~the requirements of~~ paragraphs (D)(8)(a) to (D)(8)(g) of this rule, it is no longer subject to ~~the requirements of~~ this rule.

(a) Each treatment process shall meet the applicable requirements of paragraphs (D)(3) to (D)(7) of this rule.

(b) Gases vented from a treatment process shall be routed by means of a closed vent system to a control device which is designed and operated to reduce the VOC vented to it by at least ninety per cent by weight. This requirement does not apply to any open biological treatment process that meets an alternative method of control under paragraph (E) of this rule. Vents from anaerobic biological treatment processes may be routed through hard-piping to a fuel gas system.

(c) For each of the affected VOC wastewater streams that are treated in a nonbiological treatment process (or a combination of nonbiological treatment processes), the owner or operator shall, by removal or destruction, reduce the mass flow rate of affected VOC by ninety per cent or more while reducing the affected VOC concentration to less than one thousand parts per million by weight. Dilution shall not be used to achieve compliance with this paragraph. This requirement is not applicable for wastewater of residuals that comply with the requirements for RCRA treatment options specified in paragraph

(D)(8)(f) of this rule.

(d) The owner or operator using a closed biological treatment process for at least one affected VOC wastewater stream shall reduce the mass flow rate for all affected VOC from all wastewater streams entering the biological treatment process by at least ninety per cent.

(e) (Design steam stripper option.) The owner or operator shall operate and maintain a steam stripper that meets all of the requirements of paragraphs (D)(8)(e)(i) to (D)(8)(e)(vi) of this rule.

(i) Minimum active column height of five meters.

(ii) Countercurrent flow configuration with a minimum of ten actual trays.

(iii) Minimum steam flow rate of 0.04 kilograms of steam per liter of wastewater feed within the column.

(iv) Minimum wastewater feed temperature to the steam stripper of ninety-five degrees Celsius, or minimum column operating temperature of ninety-five degrees Celsius.

(v) Maximum liquid loading of sixty-seven thousand one hundred liters per hour per square meter.

(vi) Operate at nominal atmospheric pressure.

(f) (RCRA treatment options.) The owner or operator may elect to treat the affected VOC wastewater stream or affected residual in a unit identified in, and complying with, paragraph (D)(8)(f)(i), (D)(8)(f)(ii), or (D)(8)(f)(iii) of this rule.

(i) The affected VOC wastewater stream or affected residual is discharged to a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR ~~Part~~part 270 and complies with ~~the requirements of~~ 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(ii) The affected VOC wastewater stream or affected residual is

discharged to a process heater or boiler burning hazardous waste for which the owner or operator:

- (a) Has been issued a final permit under 40 CFR part 270 and complies with ~~the requirements of~~ 40 CFR part 266, subpart H; or
  - (b) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.
- (iii) The affected VOC wastewater stream or affected residual is discharged to an underground injection well for which the owner or operator has been issued a final permit under 40 CFR part 270 or 40 CFR part 144 and complies with ~~the requirements of~~ 40 CFR part 122. The owner or operator shall comply with all applicable requirements of this subpart prior to the point where the wastewater enters the underground portion of the injection well.
- (g) (Affected residuals.) For each affected residual, the owner or operator shall control for air emissions by complying with paragraphs (D)(3) to (D)(7) of this rule and by complying with one of the ~~provisions in paragraphs (D)(8)(g)(i) to (D)(8)(g)(iv) of this rule.~~ following:
- (i) Recycle the affected residual to a production process or sell the affected residual for the purpose of recycling. Once an affected residual is returned to a production process, the affected residual is no longer subject to this rule.
  - (ii) Return the affected residual to the treatment process.
  - (iii) Treat the affected residual to destroy the total combined mass flow rate of affected VOC by ninety-nine per cent or more in a nonbiological treatment process.
  - (iv) Comply with the requirements for RCRA treatment options specified in paragraph (D)(8)(f) of this rule.

(E) Alternate methods of control.

The following alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this

rule may be utilized if approved by the USEPA. Such approval shall occur when the Ohio ~~environmental protection agency~~ EPA is informed, in writing, that USEPA has no objections to the alternate ~~method(s)~~ method of control.

- (1) (Ninety per cent overall control option) As an alternative to the control requirements of paragraph (D) of this rule (relating to control requirements), the owner or operator of waste management units may elect to ensure that the overall control of VOC emissions at the facility from wastewater from affected source industries is at least ninety per cent less than the calendar year baseline emissions inventory for VOC emissions to the ambient air from process wastewater, provided that adequate documentation is submitted which supports the accuracy of the calendar year baseline emission inventory and the following requirements are met.
  - (a) To qualify for the control option available under paragraph (E)(1) of this rule after ~~the effective date of this rule~~ May 27, 2005 for facilities located in Butler, Clermont, Hamilton, or Warren county or August 25, 2008 for facilities located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county, the owner or operator of a waste management unit for which a control plan was not previously submitted shall submit a control plan to the director and ~~any local air pollution control program with jurisdiction~~ the appropriate Ohio EPA district office or local air agency which demonstrates that the overall control of VOC emissions at the facility from wastewater from affected industrial categories will be at least ninety per cent less than the calendar year baseline emissions inventory. Any control plan submitted after ~~the effective date of this rule~~ May 27, 2005 for facilities located in Butler, Clermont, Hamilton, or Warren county or August 25, 2008 for facilities located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county, ~~must~~ shall be approved by the USEPA in writing before the owner or operator may use the control option available under paragraph (E)(1) of this rule for compliance. At a minimum, the control plan shall include the applicable emissions unit identification; the facility premise number (PN); the calendar year baseline emission rates of VOC from wastewater from affected industrial categories (consistent with the calendar year baseline emissions inventory); a plot plan showing the location, the emissions unit identification, and PN associated with a waste management units; the VOC emission rates for the preceding calendar year; and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance. The VOC emission rates shall be calculated in a manner consistent with the calendar year baseline emissions inventory.

- (b) The owner or operator shall submit an annual report no later than March thirty-first of each year to the director and the ~~local air pollution control program with jurisdiction~~ appropriate Ohio EPA district office or local air agency, which demonstrates that the overall control of VOC emissions at the account from wastewater from affected industrial categories during the preceding calendar year is at least ninety per cent less than the baseline emissions inventory. At a minimum, the report shall include the PN; the emissions unit identification; the throughput of wastewater from affected industrial categories; a plot plan showing the location; the emissions unit identification; and the premise number associated with waste management units; and the VOC emission rates for the preceding calendar year. The emission rates for the preceding calendar year shall be calculated in a manner consistent with the calendar year baseline emissions inventory.
- (c) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator submits a revised control plan to the director and the ~~local air pollution control agency with jurisdiction~~ appropriate Ohio EPA district office or local air agency no later than thirty days after the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions at the account from wastewater from affected source categories continues to be at least ninety per cent less than the calendar year baseline emissions inventory. The emission rates shall be calculated in a manner consistent with the calendar year baseline emissions inventory.
- (d) For waste management units located in Butler, Clermont, Hamilton or Warren county, the calendar year baseline is 1990.
- (e) For waste management units located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county, the calendar year baseline is 2002.
- (2) The owner or operator of an affected industrial category may elect to comply with the provisions of 40 CFR part 63, subpart G ("National Emission Standards for Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater"), 40 CFR part 63, subpart JJJ ("National Emission Standards for Hazardous Air Pollutants: Group IV Polymers and

Resins"), 40 CFR part 63, subpart FFFF ("National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing") or any other emission standard promulgated under 40 CFR part 63 that references the wastewater control requirements set forth in 40 CFR part 63, subpart G if the wastewater stream is subject to the national emission standards for hazardous air pollutants control requirements for that category, as alternatives to complying with this rule, provided ~~that~~ the following:

- (a) The term "affected VOC" is substituted each place that 40 CFR part 63, subpart G, subpart JJJ, subpart FFFF and any other 40 CFR part 63 emission standard references the term "organic hazardous air pollutant" or "organic HAP";
- (b) For affected VOC not specifically listed in table 9 of 40 CFR part 63, subpart G the corresponding fraction removed (Fr) value shall be determined ~~as follows~~ by one of the following:
  - (i) Determine the Fr value by the procedures in 40 CFR part 60, appendix J as proposed on December 9, 1998 in the Federal Register; ~~or~~,
  - (ii) Assign an Fr value of 0.99; ~~or~~,
  - (iii) Use WATER9, a wastewater treatment model of USEPA, to determine the Fr value of a chemical.
- (c) Before implementing the option available under paragraph (E)(2) of this rule, the owner or operator provides written notice of their intent to utilize this option to the director and ~~any local air pollution control program with jurisdiction~~ the appropriate Ohio EPA district office or local air agency of the intention to use this option.

(F) Inspection and monitoring.

The owner or operator of a waste management unit that is subject to ~~requirements under~~ paragraph (D) or (E) of this rule shall comply with the following inspection and monitoring requirements. An owner ~~and~~ or operator choosing to comply with a subpart in 40 CFR part 63 in paragraph (E)(2) of this rule, provided ~~it~~ the wastewater management unit is subject to that subpart, may comply with the inspection monitoring and record keeping requirements of the subpart instead of ~~the requirements in~~ this paragraph (F) of this rule.

- (1) ~~The owner or operator of a waste management unit that is subject to~~

~~requirements under paragraph (D) or (E) of this rule shall comply with the following inspection and monitoring requirements. An owner and operator choosing to comply with a subpart in 40 CFR part 63 in paragraph (E)(2) of this rule, provided it is subject to that subpart, may comply with the inspection monitoring and record keeping requirements of the subpart instead of the requirements in paragraph (F) of this rule. [Reserved.]~~

- (2) All seals, covers, closed vent systems, and other equipment used to comply with paragraph (D) or (E) of this rule (relating to control requirements) shall be visually inspected for leaks and improper condition initially, semiannually, and upon repair as specified under paragraphs (F)(2)(a) to (F)(2)(k) of this rule. If any seal, cover, closed vent system, or other equipment is found to have a leak or improper condition, a first attempt at repair shall be completed as soon as possible, but no later than fifteen calendar days after detection, unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown.
- (a) For a wastewater tank equipped with a fixed roof and vapor control system (closed vent system and control device), visually inspect the fixed roof, openings, and the closed vent system for leaks, except for a cover and closed vent system maintained under negative pressure.
- (b) For a wastewater tank equipped with an internal or external floating roof, visually inspect for the following improper conditions:
- (i) Leaving open any access door or other opening when such door or opening is not in use.
  - (ii) The floating roof is not resting on either the surface of the liquid or on the leg supports.
  - (iii) There is stored liquid on the floating roof.
  - (iv) A rim seal is detached from the floating roof.
  - (v) There are holes, tears, cracks or gaps in the rim seal or seal fabric of the floating roof.
  - (vi) There are visible gaps between the seal of an internal floating roof and the wall of the wastewater tank.

- (vii) 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 sixty-one centimeters above the surface of the stored liquid.
  - (viii) A gasket, joint, lid, cover, or door has a crack or gap, or is broken.
- (c) For a surface impoundment, visually inspect the cover and all openings for leaks, except for a cover and closed vent system maintained under negative pressure.
- (d) For a surface impoundment, visually inspect the following improper conditions:
  - (i) Leaving open any access hatch or other opening when such hatch or opening is not in use.
  - (ii) A joint, lid, cover, or door has a crack or gap, or is broken.
- (e) For a portable container, visually inspect the cover and all openings for leaks.
- (f) For a portable container that is located within an enclosure that is vented by means of a closed vent system to a control device, visually inspect the enclosure and closed vent system for leaks, except for an enclosure and closed vent system maintained under negative pressure.
- (g) For a portable container, visually inspect for the following improper conditions:
  - (i) Leaving open any access hatch or other opening when such hatch or opening is not in use.
  - (ii) A cover or door has a gap or crack, or is broken.
- (h) For an individual drain systems, visually inspect for the following improper conditions:
  - (i) A joint, lid, cover, or door has a gap, crack, hole or is broken.

- (ii) Leaving open any access hatch or other opening when such hatch or opening is not in use for sampling or removal, or for equipment inspection, maintenance, or repair.
  - (iii) Sufficient water is not present to properly maintain integrity of water seals.
  - (iv) Drains using tightly-fitted caps or plugs have caps and plugs that are not in place or not properly installed.
  - (v) Junction boxes do not have covers in place or covers have visible gaps, cracks, or holes.
  - (vi) Unburied portion of sewer lines have cracks or gaps.
- (i) For a junction box vented to a process or through a closed vent system to a control device, visually inspect for leaks in the closed vent system.
- (j) For oil-water separators, visually inspect fixed roof and all openings for leaks.
- (k) ~~Leaving open or ungasketed any access door or other opening when such door or opening is not in use.~~ For oil-water separators equipped with a floating roof, visually inspect for the following improper conditions:
- (i) Leaving open or ungasketed any access door or other opening when such door or opening is not in use.
  - (ii) The floating roof is not resting on either the surface of the liquid or on the leg supports.
  - (iii) There is stored liquid on the floating roof.
  - (iv) A rim seal is detached from the floating roof.
  - (v) There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.
  - (vi) A gasket, joint, lid, cover, or door has a gap or crack, or is broken.

- (3) For a wastewater tank or oil-water separator equipped with an external floating roof having primary and secondary seals used to comply with paragraph (D) or (E) of this rule, the secondary seal shall be inspected for seal gaps and repaired as follows:
  - (a) The secondary seal shall be measured for seal gaps initially, annually, and after repair, as determined under paragraph (I) of rule 3745-21-10 of the Administrative Code.
  - (b) The accumulated area of gaps that exceed one-eighth inch (0.32 cm) in width between the secondary seal and tank wall shall be no greater than 1.0 square inch per foot (twenty-one square centimeters per meter) of tank diameter.
  - (c) If the seal gap requirement of paragraph ~~(F)(2)(b)~~(F)(3)(b) of this rule is not being met, the secondary seal shall be repaired or replaced within forty-five days after detection of the improper seal gap unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown.
- (4) The following records shall be maintained on leaks, improper conditions, and improper seal gaps:
  - (a) The date on which a leak, improper condition, or improper seal gap is discovered;~~;~~
  - (b) The date on which a first attempt at repair was made to correct the leak or improper condition;~~and;~~
  - (c) The date on which a leak, improper condition, or improper seal gap is repaired.
- (5) Monitors shall be installed and maintained as required by this paragraph to measure operational parameters of any emission control device or other device installed to comply with paragraph (D) or (E) of this rule. Such monitoring and parameters shall be sufficient to demonstrate proper functioning of those devices to design specifications, and include the following monitoring and parameters ~~listed in paragraphs (F)(3)(a) to (F)(3)(g) of this rule, as applicable, except as provided in paragraph (F)(3)(a) of this rule.;~~

- (a) For an enclosed non-catalytic combustion device (including, but not limited to, a thermal incinerator, boiler, or process heater), continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange.
- (b) For a catalytic incinerator, ~~continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed.~~ one of the following:
  - (i) Continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed.
  - (ii) If an owner or operator elects to implement an inspection and maintenance plan for the catalytic incinerator that meets paragraph (F)(7) of this rule, continuously monitor and record the temperature of the gas stream immediately before the catalyst bed only.
- (c) For a condenser (chiller), continuously monitor and record the temperature of the gas stream at the condenser exit.
- (d) For a carbon adsorber, continuously monitor and record the VOC concentration of exhaust gas stream to determine if breakthrough has occurred. If the carbon adsorber does not regenerate the carbon bed directly in the control device (e.g., a carbon canister), the exhaust gas stream shall be monitored daily or at intervals no greater than twenty per cent of the design replacement interval, whichever is greater, or as an alternative to conducting monitoring, the carbon may be replaced with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorber.
- (e) For a flare, meet the requirements specified in 40 CFR 60.18(b).
- (f) For a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, and either the wastewater feed temperature or the column operating temperature (i.e., the temperature in the column top tray liquid phase at the downcomer).
- (g) For vapor control systems other than those specified in paragraphs

~~(F)(15)(a) to (F)(15)(g)~~ (F)(5)(a) to (F)(5)(f) of this rule, continuously monitor and record the appropriate operating parameters.

(h) In lieu of the monitoring and parameters listed in paragraphs ~~(F)(15)(a) to (F)(15)(g)~~ (F)(5)(a) to (F)(5)(g) of this rule, other monitoring and parameters may be approved or required by the USEPA. Such approval or requirement shall occur when the Ohio ~~environmental protection agency~~ EPA is informed, in writing, that USEPA has no objection to, or requires, the other monitoring and parameters that are indicated.

(6) For a closed-vent system that is used to comply with paragraph (D) or (E) of this rule and that is designed to operate at a pressure below atmospheric pressure, the closed-vent system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(7) For an owner or operator that elects to monitor the inlet temperature only of the catalytic incinerator, an inspection and maintenance plan shall be developed, maintained on-site, and made readily available upon the request of the appropriate Ohio EPA district office or local air agency. At a minimum, the plan shall include the following:

(a) Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(b) Monthly inspection of the oxidizer system including the burner assembly and fuel supply lines for problems.

(c) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, corrective action consistent with the manufacturer's recommendations shall be implemented and a new performance test to determine destruction efficiency in accordance with paragraph (C) of rule 3745-21-10 of the Administrative Code shall be conducted.

(d) Records, and a description of the results of each inspection and catalyst activity analysis.

(G) Approved test methods.

Compliance with the emission specifications, vapor control system efficiency, and certain control requirements, inspection requirements, and exemption criteria of paragraphs (D) to (F) and paragraph (C)(2) of this rule (relating to control

requirements, alternate control requirements, inspection and monitoring requirements, and exemptions) shall be determined by applying one or more of the following test methods and procedures, as appropriate.

- (1) (Gas flow rate) USEPA methods 1, 2, 3 and 4 are used for determining gas flow rates, as necessary.
- (2) Concentration of affected VOCs in a gas stream.
  - (a) USEPA method 18 is used for determining gaseous organic compound emissions by gas chromatography.
  - (b) USEPA method 25 is used for determining total gaseous nonmethane organic emissions as carbon.
  - (c) USEPA method 25A or 25B are used for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis.
- (3) Performance test for control devices.
  - (a) For flares, the performance test requirements of 40 CFR 60.18(b) shall apply. Compliance with ~~the requirements of~~ 40 CFR 60.18(b) will be considered to represent ninety-eight per cent control of the VOC in the flare inlet.
  - (b) For control devices other than flares, the VOC control efficiency shall be determined in accordance with paragraph (C) of rule 3745-21-10 of the Administrative Code where the flow rate and VOC concentration of the inlet and outlet gas streams of the control device are measured as specified under paragraphs (G)(1) and (G)(2) of this rule.
- (4) (Vapor pressure) Use standard reference texts or ASTM test methods ~~D323-99a~~D323-08, ~~D2879-97(2002)e~~D2879-10, ~~D4953-99a~~D4953-06(2012), ~~D5190-04~~D5190-07, or ~~D5191-04a~~D5191-12 for the measurement of vapor pressure, adjusted for actual storage temperature in accordance with ~~American petroleum institute publication 2517~~API "MPMS Chapter 19.2".
- (5) (Leak determination by instrument method) Use USEPA method 21 for determining VOC leaks and for monitoring a carbon canister in accordance

with paragraph ~~(F)(3)(d)~~(F)(5)(d) of this rule.

- (6) (Determination of VOC concentration of wastewater samples) Use SW-846 method 5030B (purge and trap) followed by SW-846 method ~~8015B~~8015C with a DB-5 boiling point (or equivalent column), and flame ionization detector, with the detector calibrated with benzene as required by 40 CFR ~~Part~~part 261; SW-846 methods ~~38105021~~, 5030B (followed by 8021B), 8260B, and ~~90609060A~~ as required by 40 CFR ~~Part~~part 261; USEPA methods 602, 624, 1624, 625, 1625; USEPA method 305; ~~APHA~~Standard method ~~5310(B)~~5310D contained in standard methods for the examination of water and wastewater; or USEPA method 25D. In the event of any conflict, USEPA method 25D takes precedence.
- (7) The measurement of wastewater flow rate shall be determined with flow measurement devices. Flow rate measurements shall be taken at the same time as the concentration measurements.
- (8) (Minor modifications) Minor modifications to these test methods may be used, if approved by the USEPA. Such approval shall occur when the Ohio ~~environmental protection agency~~EPA is informed, in writing, that USEPA has no objections to the minor modifications to the test methods.
- (9) (Alternate test methods) Test methods other than those specified in paragraphs ~~(J)(1) to (J)(8)~~(G)(1) to (G)(8) of this rule may be used if validated by USEPA method 301.

#### (H) Recordkeeping.

The owner or operator of an affected industrial category shall comply with the following recordkeeping requirements.

- (1) Complete and up-to-date records shall be maintained as needed to demonstrate compliance with paragraphs (D) and (E) of this rule (relating to control requirements and alternate control requirements) which are sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under paragraph (C)(2) of this rule (relating to exemptions).
- (2) Records shall be maintained of the results of any inspection or monitoring conducted in accordance with paragraph (F) of this rule (relating to inspection and monitoring requirements). Records shall be sufficient to demonstrate proper functioning of applicable control equipment to design specifications to ensure compliance with paragraphs (D) and (E) of this rule. In addition, if the

owner or operator elects to comply with paragraph (F)(5)(b)(ii) of this rule, records from the inspection and maintenance plan for the catalytic incinerator, as specified in paragraph (F)(7) of this rule, shall be maintained.

- (3) Records shall be maintained of the results of any testing conducted in accordance with paragraph (G) of this rule (relating to approved test methods).
- (4) All records shall be maintained at the plant for at least five years and be made available upon request to USEPA, or the appropriate Ohio ~~environmental protection agency~~ EPA district office or local air agency.

(I) Determination of wastewater characteristics.

The determination of the characteristics of a wastewater stream for purposes of this rule shall be made as follows:-:

- (1) The characteristics shall be determined at a location between the point of generation (as defined by this rule) and before the wastewater stream is exposed to the atmosphere, treated for VOC removal, or mixed with another wastewater stream. For wastewater streams at a facility meeting the applicability ~~requirements~~ under paragraphs (A)(1)(a) and (A)(1)(b) of this rule and which, prior to May 27, 2005, were either actually being mixed or construction had commenced which would result in the wastewater streams being mixed, this mixing shall not establish a limit on where the characteristics may be determined. For wastewater streams at a facility meeting the applicability ~~requirements~~ under paragraphs (A)(1)(c) and (A)(1)(d) of this rule and which, prior to ~~the effective date of this rule~~ August 25, 2008, were either actually being mixed or construction had commenced which would result in the wastewater streams being mixed, this mixing shall not establish a limit on where the characteristics may be determined.
- (2) The flow rate of a wastewater stream shall be determined on the basis of an annual average by one of the following methods:
  - (a) The highest annual quantity of wastewater managed, based on historical records for the most recent five years of operation, or for the entire time the wastewater stream has existed if less than five years, but at least one year:-:
  - (b) The maximum design capacity of the waste management unit:-:
  - (c) The maximum design capacity to generate wastewater of the process unit

generating the wastewater stream; or

- (d) Measurements that are representative of the actual, normal wastewater generation rates.
- (3) The VOC concentration of a wastewater stream shall be determined on the basis of a flow-weighted annual average by one of the following methods, or by a combination of the methods. If the director or USEPA determines that the VOC concentration cannot be adequately determined by knowledge of the wastewater, or by bench-scale or pilot-scale test data, the VOC concentration shall be determined in accordance with paragraph (I)(3)(c) of this rule, or by a combination of the methods in paragraphs (I)(3)(a), ~~(I)(3)(b)~~, and (I)(3)(c) of this rule. VOC with a "Henry's Law Constant" less than  $1.8 \times 10^{-6}$  ~~atm-m<sup>3</sup>/mole~~ atmosphere-cubic meter/mole (0.1 y/x) at twenty-five degrees Celsius shall not be included in the determination of VOC concentration.
- (a) (Knowledge of the wastewater) Sufficient information to document the VOC concentration. Examples of information include material balances, records of chemical purchases, or previous test results.
- (b) (Bench-scale or pilot-scale test data) Sufficient information to demonstrate that the bench-scale or pilot-scale test concentration data are representative of the actual VOC concentration.
- (c) (Measurements) Collect a minimum of three representative samples from the wastewater stream and determine the affected VOC concentration for each sample in accordance with paragraph (G) of this rule (relating to approved test methods). The affected VOC concentration of the wastewater stream shall be the flow-weighted average of the individual samples.
- (4) The annual affected VOC loading in wastewater for a wastewater stream shall be the annual average flow rate determined in paragraph (I)(2) of this rule multiplied by the annual average affected VOC concentration determined in paragraph (I)(3) of this rule.
- (5) The annual VOC loading in wastewater for a plant shall be the sum of the annual VOC loading in wastewater for each affected VOC wastewater stream.
- (6) The "Henry's Law Constant" shall be determined by the procedures in 40 CFR part 60, appendix J, as proposed on December 9, 1998 in the Federal

Register.

(J) Maintenance wastewater ~~requirements~~.

- (1) Each owner or operator of a source subject to this rule shall comply with ~~the requirements of~~ paragraphs (J)(2) and (J)(3) of this rule for maintenance wastewaters containing volatile organic compounds.
- (2) The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall specify the following:
  - (a) ~~Specify the~~The process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
  - (b) ~~Specify the~~The procedures that will be followed to properly manage the wastewater and control VOC emissions to the atmosphere.
  - (c) ~~Specify the~~The procedures to be followed when clearing materials from the process equipment.
- (3) The owner or operator shall modify and update the information required by paragraph (J)(2) of this rule as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.
- (4) The owner or operator shall maintain a record of the information required by paragraphs (J)(2) and (J)(3) of this rule.

(K) Compliance dates.

- (1) Except where otherwise specified within this rule, any owner or operator of a facility that is subject to this rule shall comply with ~~the requirements of~~ this rule by no later than the following dates:
  - (a) For a facility located in Butler, Clermont, Hamilton, or Warren county and for which installation commenced before May 27, 2005, the compliance date of any waste management unit within the facility is either May 27,

2006 or the date of initial startup of the waste management unit, whichever is later.

- (b) For a facility located in Butler, Clermont, Hamilton, or Warren county and for which installation commenced on or after ~~the effective date of this rule~~ May 27, 2005, the compliance date of any waste management unit is the date of initial startup of the waste management unit.
  - (c) For a facility located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county and for which installation commenced before ~~the effective date of this rule~~ August 25, 2008, the compliance date of any waste management unit within the facility is either ~~twelve months from the effective date of this rule~~ August 25, 2009 or the date of initial startup of the waste management unit, whichever is later.
  - (d) For a facility located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county and for which installation commenced on or after ~~the effective date of this rule~~ August 25, 2008, the compliance date of any waste management unit is the date of initial startup of the waste management unit.
- (2) For any emission control device that is used to comply with an emission control requirement of this rule, the owner or operator shall demonstrate compliance by testing the emission control device in accordance with paragraph (G) of this rule within ninety days after the compliance date.
  - (3) For any treatment process (or combined treatment processes) that is used to comply with this rule, the owner or operator shall demonstrate compliance by testing the treatment process (or combined treatment processes) in accordance with the methods in paragraph (G) of this rule within ninety days after the compliance date.
  - (4) Additional testing of the emission control device or the treatment process in accordance with paragraph (G) of this rule may be required by the director to ensure continued compliance.
  - (5) In the event the owner or operator reduces the facilities potential to emit pursuant to paragraph (A)(4) or (A)(5) of this rule, the date on which the facility subsequently meets the applicability criteria of paragraph (A)(1) of this rule is the date the facility becomes subject to this rule.

(L) ~~Requirements on applicability~~ Applicability notification and permit application.

- (1) The owner or operator of a facility that is subject to this rule, is located in Butler, Clermont, Hamilton or Warren county, and has an initial startup of a waste management unit before May 27, 2005 shall notify the appropriate Ohio ~~environmental protection agency~~ EPA district office or local air agency in writing that the facility is subject to this rule. The notification, which shall be submitted not later than July 26, 2005, shall provide the information specified in paragraph (L)(5) of this rule.
- (2) The owner or operator of a facility that is subject to this rule, is located in Butler, Clermont, Hamilton or Warren county, and has an initial startup of a waste management unit on or after ~~the effective date of this rule~~ May 27, 2005, shall notify the appropriate Ohio ~~environmental protection agency~~ EPA district office or local air agency in writing that the waste management unit is subject to this rule. The notification, which shall be submitted not later than either the date of initial startup of the waste management unit or July 26, 2005 (whichever is later), shall provide the information specified in paragraph (L)(5) of this rule. The application for an installation permit under rule 3745-31-02 of the Administrative Code may be used to fulfill the notification requirements of this paragraph.
- (3) The owner or operator of a facility that is subject to this rule, is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county, and has an initial startup of a waste management unit before ~~the effective date of this rule~~ August 25, 2008, shall notify the appropriate Ohio ~~environmental protection agency~~ EPA district office or local air agency in writing that the facility is subject to this rule. The notification, which shall be submitted not later than ~~sixty days after the effective date of this rule~~ October 24, 2008, shall provide the information specified in paragraph (L)(5) of this rule.
- (4) The owner or operator of a facility that is subject to this rule, is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit county, and has an initial startup of a waste management unit on or after ~~the effective date of this rule~~ August 25, 2008, shall notify the appropriate Ohio ~~environmental protection agency~~ EPA district office or local air agency in writing that the waste management unit is subject to this rule. The notification, which shall be submitted not later than either the date of initial startup of the waste management unit or ~~sixty days after the effective date of this rule~~ October 24, 2008 (whichever is later), shall provide the information specified in paragraph (L)(5) of this rule. The application for an installation permit under rule 3745-31-02 of the Administrative Code may be used to

fulfill the notification requirements of this paragraph.

(5) The notification required in paragraphs (L)(1) to (L)(4) of this rule shall include the following information:

- (a) Name and address of the owner or operator;
- (b) Address (i.e., physical location) of the facility;
- (c) Equipment description and Ohio EPA application number (if assigned) of any waste management unit;
- (d) Identification of the applicable requirements, the means of compliance, and the compliance date for the waste management unit;

(e) ~~Regarding a permit for any waste management unit, whichever of the following is applicable~~An application for an operating permit or an application for a modification to an operating permit in accordance with Chapter 3745-77 of the Administrative Code (for sources subject to the Title V permit program) or an application for a permit-to-install and operate or an application for a modification to a permit-to-install and operate in accordance with Chapter 3745-31 of the Administrative Code (for sources not subject to the Title V permit program) for each subject process that meets one of the following:

- (i) ~~Submission of an application for an operating permit, modification, or renewal of an operating permit, in accordance with paragraph (B) of rule 3745-35-02 of the Administrative Code; or~~The process does not possess an effective operating permit or permit-to-install and operate.

~~[Comment: Applications requiring submittal prior to June 30, 2008, were submitted in accordance with Chapter 3745-35 of the Administrative Code.]~~

- (ii) ~~Statement of intent to submit an application for a Title V permit or modification of a Title V permit in accordance with rule 3745-77-02 or rule 3745-77-08 of the Administrative Code, respectively~~The process possesses an effective operating permit or permit-to-install and operate and the owner or operator cannot certify in writing to the director that such subject process is in compliance with this rule. An application for an operating permit or permit-to-install and operate is not required provided the

subject process is operating under an effective permit and certifies compliance. Such certification shall include all compliance certification requirements under paragraph (H) of this rule.

[Comment: Applications for sources not subject to Chapter 3745-77, requiring submittal prior to June 30, 2008, were submitted in accordance with Chapter 3745-35 of the Administrative Code.]

Effective:

Five Year Review (FYR) Dates: 07/13/2015

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3704.03(E)  
Rule Amplifies: 3704.03(A), 3704.03(E)  
Prior Effective Dates: 5/27/05, 8/25/08, 4/2/2009