

## Environmental Protection Agency

## § 63.1402

otherwise, refer to the standard calendar periods.

(1) Notwithstanding time periods specified in this subpart for completion of required tasks, such time periods may be changed by mutual agreement between the owner or operator and the Administrator, as specified in subpart A of this part (*e.g.*, a period could begin on the compliance date or another date, rather than on the first day of the standard calendar period). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(2) Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraph (e)(2)(i) or (ii) of this section, as appropriate:

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided that the task is conducted at a reasonable interval after completion of the task during the previous period.

### § 63.1402 Definitions.

(a) The following terms used in this subpart shall have the meaning given them in §§ 63.2, 63.101, 63.111, and 63.161 as specified after each term:

Act (§ 63.2)

Administrator (§ 63.2)

Annual average concentration (§ 63.111)

Annual average flow rate (§ 63.111)

Automated monitoring and recording system (§ 63.111)

Boiler (§ 63.111)

Bottoms receiver (§ 63.161)

By compound (§ 63.111)

By-product (§ 63.101)

Car-seal (§ 63.111)

Closed-vent system (§ 63.111)

Combustion device (§ 63.111)

Commenced (§ 63.2)

Compliance date (§ 63.2)

Connector (§ 63.161)

Construction (§ 63.2)

Continuous monitoring system (§ 63.2)

Distillation unit (§ 63.111)

Duct work (§ 63.161)

Emission standard (§ 63.2)

EPA (§ 63.2)

External floating roof (§ 63.111)

First attempt at repair (§ 63.111)

Flame zone (§ 63.111)

Floating roof (§ 63.111)

Flow indicator (§ 63.111)

Fuel gas (§ 63.101)

Fuel gas system (§ 63.101)

Hard-piping (§ 63.111)

Hazardous air pollutant (§ 63.2)

Impurity (§ 63.101)

Inorganic hazardous air pollutant service (§ 63.161)

Incinerator (§ 63.111)

Instrumentation system (§ 63.161)

Internal floating roof (§ 63.111)

Lesser quantity (§ 63.2)

Major source (§ 63.2)

Open-ended valve or line (§ 63.161)

Operating permit (§ 63.101)

Organic monitoring device (§ 63.111)

Owner or operator (§ 63.2)

Performance evaluation (§ 63.2)

Performance test (§ 63.2)

Permitting authority (§ 63.2)

Plant site (§ 63.101)

Potential to emit (§ 63.2)

Primary fuel (§ 63.111)

Process heater (§ 63.111)

Process unit shutdown (§ 63.161)

Process wastewater (§ 63.111)

Reactor (§ 63.111)

Reconstruction (§ 63.2)

Routed to a process or route to a process (§ 63.161)

Run (§ 63.2)

Secondary fuel (§ 63.111)

Sensor (§ 63.161)

Specific gravity monitoring device (§ 63.111)

Start-up, shutdown, and malfunction plan (§ 63.101)

State (§ 63.2)

Surge control vessel (§ 63.161)

Temperature monitoring device (§ 63.111)

Test method (§ 63.2)

Total resource effectiveness (TRE) index value (§ 63.111)

Treatment process (§ 63.111)

Unit operation (§ 63.101)

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(b) All other terms used in this subpart shall have the meaning given them in this section. If a term is defined in §§ 63.2, 63.101, 63.111, or 63.161 or defined in 40 CFR part 63, subparts SS, UU, or WW and in this section, it shall have the meaning given in this section for purposes of this subpart.

*Aggregate batch vent stream* means a process vent containing emissions from at least one reactor batch process vent and at least one additional reactor or non-reactor batch process vent where the emissions are ducted, hardpiped, or otherwise connected together for a continuous flow.

*Amino resin* means a thermoset resin produced through the reaction of formaldehyde, or a formaldehyde containing solution (e.g., aqueous formaldehyde), with compound(s) that contain the amino group; these compounds include melamine, urea, and urea derivatives. Formaldehyde substitutes are exclusively aldehydes.

*Amino/phenolic resin* means one or both of the following:

- (1) Amino resin; or
- (2) Phenolic resin.

*Amino/phenolic resin. Process unit (APPU)* means a collection of equipment assembled and connected by hardpiping or ductwork used to process raw materials and to manufacture an amino/phenolic resin as its primary product. This collection of equipment includes unit operations; process vents; storage vessels, as determined in §63.1400(h); and the equipment that is subject to the equipment leak provisions as specified in §63.1410. Utilities, lines and equipment not containing process fluids, and other non-process lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not part of the amino/phenolic resin process unit. An amino/phenolic resin process unit consists of more than one unit operation.

*Batch cycle* means the operational step or steps, from start to finish, that occur as part of a batch unit operation.

*Batch emission episode* means a discrete emission venting episode associated with a single batch unit operation. Multiple batch emission episodes

may occur from a single batch unit operation.

*Batch mode* means the discontinuous bulk movement of material through a unit operation. Mass, temperature, concentration, and other properties may vary with time. For a unit operation operated in a batch mode (i.e., batch unit operation), the addition of material and withdrawal of material do not typically occur simultaneously.

*Batch process vent* means a process vent from a batch unit operation within an affected source. Batch process vents are either reactor batch process vents or non-reactor batch process vents.

*Batch unit operation* means a unit operation operated in a batch mode.

*Block* means the time period that comprises a single batch cycle.

*Combustion device burner* means a device designed to mix and ignite fuel and air to provide a flame to heat and oxidize waste organic vapors in a combustion device.

*Continuous mode* means the continuous movement of material through a unit operation. Mass, temperature, concentration, and other properties typically approach steady-state conditions. For a unit operation operated in a continuous mode (i.e., continuous unit operation), the simultaneous addition of raw material and withdrawal of product is typical.

*Continuous process vent* means a process vent from a continuous unit operation within an affected source. Process vents that are serving as control devices are not subject to additional control requirements.

*Continuous record* means documentation, either in hard copy or computer readable form, of data values measured at least once every 15 minutes and recorded at the frequency specified in §63.1416(c) or (h).

*Continuous recorder* means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 1 hour or more frequent block average values.

*Continuous unit operation* means a unit operation operated in a continuous mode.

*Control device* means any combustion device, recovery device, or recapture device. Such equipment includes, but is

not limited to, absorbers, carbon adsorbers, condensers, incinerators, flares, boilers, and process heaters. For continuous process vents, recapture devices are considered control devices but recovery devices are not considered control devices. Condensers operating as process condensers are not considered control devices. For a condenser that sometimes operates as a process condenser to be considered a control device, it shall not be operating as a process condenser for a given batch emission episode, and it shall recycle of the recovered material within the process.

*Control technology* means any process modification or use of equipment that reduces organic HAP emissions. Examples include, but are not limited to, product reformulation to reduce solvent content and/or use, batch cycle time reduction to reduce the duration of emissions, reduction of nitrogen purge rate, and the lowering of process condenser coolant temperatures.

*Controlled organic HAP emissions* means the quantity of organic HAP discharged to the atmosphere from a control device.

*Emission point* means an individual continuous process vent, batch process vent, aggregate batch vent stream, storage vessel, equipment leak, or heat exchange system.

*Equipment* means, for the purposes of the provisions in §63.1410, each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems required by §63.1410. For purposes of this subpart, surge control vessels and bottom receivers are not equipment for purposes of regulating equipment leak emissions. Surge control vessels and bottoms receivers are regulated as non-reactor batch process vents for the purposes of this subpart.

*Equipment leak* means emissions of organic HAP from a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, or instrumentation system that either contains or contacts a fluid (liquid or gas) that is at

least 5 percent by weight of total organic HAP.

*Existing process unit* means any process unit that is not a new process unit.

*Flexible operations process unit* means a process unit that periodically manufactures different chemical products, polymers, or resins by alternating raw materials or operating conditions. These units are also referred to as campaign plants or blocked operations.

*Heat exchange system* means any cooling tower system or once-through cooling water system (e.g., river or pond water) designed and intended to operate to not allow contact between the cooling medium and process fluid or gases (i.e., a noncontact system). A heat exchange system may include more than one heat exchanger and may include recirculating or once-through cooling systems.

*Highest-HAP recipe* for a product means the recipe of the product with the highest total mass of organic HAP charged to the reactor during the production of a single batch of product.

*Initial start-up* means the first time a new or reconstructed affected source begins production, or, for equipment added or changed, the first time the equipment is put into operation. Initial start-up does not include operation solely for testing equipment. Initial start-up does not include subsequent start-ups of an affected source or portion thereof following malfunctions or shutdowns, or following changes in product for flexible operation process units, or following recharging of equipment in batch operation. Further, for purposes of §§63.1401 and 63.1410, initial start-up does not include subsequent start-ups of affected sources or portions thereof following malfunctions or process unit shutdowns.

*Inprocess recycling* means a recycling operation in which recovered material is used by a unit operation within the same affected source. It is not necessary for recovered material to be used by the unit operation from which they were recovered.

*Maintenance wastewater* means wastewater generated by the draining of process fluid from components in the APPU 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 shutdown. Examples of activities that can generate maintenance wastewaters 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 APPU for repair. The generation of wastewater from the routine rinsing or washing of equipment in batch operation between batches is not maintenance wastewater for the purposes of this subpart.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment, or failure of a process to operate in a normal or usual manner, or opening of a safety device which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Maximum representative operating conditions* means, for purposes of testing or measurements required by § 63.1413, those conditions which reflect the highest organic HAP emissions reasonably expected to be vented to the control device or emitted to the atmosphere. For affected sources that produce the same product(s) using multiple recipes, the production of the highest-HAP recipe is reflective of maximum representative operating conditions.

*Maximum true vapor pressure* means the equilibrium partial pressure exerted by the total organic HAP in the stored liquid at the temperature equal to the highest calendar-month average of the liquid storage temperature for liquids stored above or below the ambient temperature, or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored at the ambient temperature, as determined:

(1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks (incorporated by reference as specified in § 63.14); or

(2) As obtained from standard reference texts; or

(3) As determined by the American Society for Testing and Materials Method D2879-83 (incorporated by reference as specified in § 63.14); or

(4) Any other method approved by the Administrator.

*Multicomponent system* means, as used in conjunction with batch process vents, a stream whose liquid and/or vapor contains more than one compound.

*Net heating value* means the difference between the heat value of the recovered chemical stream and the minimum heat value required to ensure a stable flame in the combustion device. This difference must have a positive value when used in the context of "recovering chemicals for fuel value" (e.g., in the definition of "recovery device" in this section).

*New process unit* means a process unit for which the construction or reconstruction commenced after December 14, 1998.

*Non-reactor batch process vent* means a batch process vent originating from a unit operation other than a reactor. Non-reactor batch process vents include, but are not limited to, batch process vents from filter presses, surge control vessels, bottoms receivers, weigh tanks, and distillation systems.

*Non-solvent-based resin* means an amino/phenolic resin manufactured without the use of a solvent as described in the definition of solvent-based resin.

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

*Operating day* means the period defined by the owner or operator in the Notification of Compliance Status required by § 63.1417(e). The operating day is the period for which daily average monitoring values and batch cycle daily average monitoring values are determined.

*Organic hazardous air pollutant(s) (organic HAP)* means one or more of the chemicals listed in Table 2 of this subpart or any other chemical which is:

(1) Knowingly produced or introduced into the manufacturing process other than as an impurity; and

(2) Listed in Table 2 of subpart F of this part.

*Phenolic resin* means a thermoset resin that is a condensation product of formaldehyde and phenol, or a formaldehyde substitute and/or a phenol substitute. Substitutes for formaldehyde are exclusively aldehydes and include acetaldehyde or furfuraldehyde. Substitutes for phenol include other phenolic starting compounds such as cresols, xylenols, p-tert-butylphenol, p-phenylphenol, nonylphenol, and resorcinols.

*Process condenser* means a condenser functioning so as to recover material as an integral part of a unit operation(s). A process condenser shall support a vapor-to-liquid phase change for periods of equipment operation that are at or above the boiling or bubble point of substance(s) at the liquid surface. Examples of process condensers include distillation condensers, reflux condensers, and condensers used in stripping or flashing operations. In a series of condensers, all condensers up to and including the first condenser with an exit gas temperature below the boiling or bubble point of the substance(s) at the liquid surface are considered to be process condensers. All condensers in line prior to a vacuum source are considered process condensers when the vacuum source is being operated. A condenser may be a process condenser for some batch emission episodes and, when meeting certain conditions, may be a control device for other batch emission episodes.

*Process unit* means a collection of equipment assembled and connected by hardpiping or ductwork used to process raw materials and to manufacture a product.

*Process vent* means a gaseous emission stream from a unit operation where the gaseous emission stream is discharged to the atmosphere either directly or after passing through one or more control, recovery, or recapture devices. Unit operations that may have

process vents are condensers, distillation units, reactors, or other unit operations within the APPU. Emission streams that are undiluted and uncontrolled containing less than 50 parts per million volume (ppmv) organic HAP, as determined through process knowledge that no organic HAP are present in the emission stream or using an engineering assessment as discussed in §63.1414(d)(6); test data using the test methods specified in §63.1414(a); or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part are not considered process vents. Process vents exclude relief valve discharges, gaseous streams routed to a fuel gas system(s), and leaks from equipment regulated under §63.1410. Process vents that are serving as control devices are not subject to additional control requirements.

*Product* means a resin, produced using the same monomers and varying in additives (e.g., initiators, terminators, etc.), catalysts, or in the relative proportions of monomers, that is manufactured by a process unit. With respect to resins, more than one recipe may be used to produce the same product. Product also means a chemical that is not a resin that is manufactured by a process unit. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

*Reactor batch process vent* means a batch process vent originating from a reactor.

*Recapture device* means an individual unit of equipment capable of and used for the purpose of recovering chemicals, but not normally for use, reuse, or sale. For example, a recapture device may recover chemicals primarily for disposal. Recapture devices include, but are not limited to, absorbers, carbon adsorbers, and condensers.

*Recipe* means a specific composition from among the range of possible compositions that may occur within a product, as defined in this section. A recipe is determined by the proportions of monomers and, if present, other reactants and additives that are used to make the recipe. For example, a methylated amino resin and a non-

methylated amino resin are both different recipes of the same product, amino resin.

*Recovery device* means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for use, reuse, fuel value (i.e., net heating value); or for sale for use, reuse, or fuel value (i.e., net heating value). Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. For the purposes of the monitoring, recordkeeping, or reporting requirements of this subpart, recapture devices are considered recovery devices.

*Safety device* means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

*Shutdown* means for purposes including, but not limited to, periodic maintenance, replacement of equipment, or repair, the cessation of operation of an affected source, an APPU(s) within an affected source, or equipment required

or used to comply with this subpart, or the emptying or degassing of a storage vessel. For purposes of the batch process vent provisions in §§ 63.1406 through 63.1408, the cessation of equipment in batch operations is not a shutdown, unless the equipment undergoes maintenance, is replaced, or is repaired.

*Solvent-based resin* means an amino/phenolic resin that consumes a solvent (i.e., methanol, xylene) as a reactant in the resin producing reaction. The use of a solvent as a carrier (i.e., adding methanol to the product/water solution after the reaction is complete) does not meet this definition.

*Start-up* means the setting into operation of an affected source, an APPU(s) within an affected source, a unit operation within an affected source, or equipment required or used to comply with this subpart, or a storage vessel after emptying and degassing. For both continuous and batch unit operations, start-up includes initial start-up and operation solely for testing equipment. For both continuous and batch unit operations, start-up does not include the recharging of equipment in batch operation. For continuous unit operations, start-up includes transitional conditions due to changes in product for flexible operation process units. For batch unit operations, start-up does not include transitional conditions due to changes in product for flexible operation process units.

*Steady-state conditions* means that all variables (temperatures, pressures, volumes, flow rates, etc.) in a process do not vary significantly with time; minor fluctuations about constant mean values may occur.

*Storage vessel* means a tank or other vessel that is used to store liquids that contain one or more organic HAP. Storage vessels do not include:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Vessels with capacities smaller than 38 cubic meters;
- (4) Vessels and equipment storing and/or handling material that contains no organic HAP and/or organic HAP as impurities only;

- (5) Wastewater storage tanks;
- (6) Surge control vessels or bottoms receivers; and
- (7) Vessels and equipment storing and/or handling amino/phenolic resin.

*Supplemental combustion air* means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental combustion air. Air required to operate combustion device burner(s) is not considered supplemental combustion air.

*Uncontrolled organic HAP emissions* means the organic HAP emitted from a unit operation prior to introduction of the emission stream into a control device. Uncontrolled HAP emissions are determined after any condenser that is operating as a process condenser. If an emission stream is not routed to a control device, uncontrolled organic HAP emissions are those organic HAP emissions released to the atmosphere.

*Vent stream*, as used in reference to batch process vents, aggregate batch vent streams, continuous process vents, and storage vessels, means the emissions from that emission point.

*Waste management unit* means the equipment, structure(s), and/or device(s) used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include: wastewater tanks, surface impoundments, individual drain systems, and biological wastewater treatment units. Examples of equipment that may be waste management units include containers, air flotation units, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. If such equipment is used for recovery, then it is part of an APPU and is not a waste management unit.

*Wastewater* is either a process wastewater or maintenance wastewater and means water that:

- (1) Contains either:
  - (i) An annual average concentration of organic HAP, as indicated on Table 2 of this subpart, of at least 5 parts per million by weight and has an annual average flow rate of 0.02 liter per minute or greater; or

- (ii) An annual average concentration of organic HAP, as indicated on Table 2 of this subpart, of at least 10,000 parts per million by weight at any flow rate.

- (2) Is discarded from an APPU that is part of an affected source.

- (3) Does not include:

- (i) Stormwater from segregated sewers;
- (ii) Water from fire-fighting and deluge systems in segregated sewers;
- (iii) Spills;
- (iv) Water from safety showers;
- (v) Water from testing of deluge systems; and
- (vi) Water from testing of fire-fighting systems.

*Wastewater stream* means a stream that contains wastewater as defined in this section.

[65 FR 3290, Jan. 20, 2000, as amended at 71 FR 20460, Apr. 20, 2006]

#### § 63.1403 Emission standards.

(a) *Provisions of this subpart.* Except as allowed under paragraph (b) of this section, the owner or operator of an affected source shall comply with the provisions of §§ 63.1404 through 63.1410, as appropriate. When emissions are vented to a control device or control technology as part of complying with this subpart, emissions shall be vented through a closed vent system meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices).

(b) *Combined emission streams.* When emissions of different kinds (e.g., emissions from continuous process vents, storage vessels, etc.) are combined at a new affected source, and at least one of the emission streams would be required by this subpart to apply controls in the absence of combination with other emission streams, the owner or operator shall comply with the requirements of paragraph (b)(1) or (2) of this section, as appropriate.

- (1) For any combined vent stream that includes one or more aggregate batch vent streams, comply with the provisions for aggregate batch vent streams.

- (2) For any combined vent stream that does not include one or more aggregate batch vent streams: