Definitions. 3745-21-01

- (A) Except as otherwise provided in this rule, the definitions in rule 3745-15-01 of the Administrative Code shall apply to this chapter.
- (B) As used in Chapter 3745-21 of the Administrative Code:
 - (1) "Day" means a period of twenty-four consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.
 - (2) "Exempt solvent" means any of the compounds which are specifically identified in paragraph (B)(6) of this rule as not being volatile organic compounds.
 - (3) "Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned.
 - (4) "Organic compound" means any chemical compound containing carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, ammonium carbonate, methane (except methane from landfill gases), and ethane.
 - (5) "Potential to emit" means the maximum capacity of a facility or stationary source to emit an organic compound or VOC under its physical and operational design. Any physical or operational limitation on the capacity of the facility or stationary source to emit an organic compound or VOC, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or legally and practicably enforceable by the state, except as otherwise provided in rule 3745-21-11 of the Administrative Code.
 - (6) "Volatile organic compound" (also denoted as "VOC") means any organic compound which participates in atmospheric photochemical reactions. (This includes any organic compound other than the following compounds: methane, ethane, methyl chloroform (1,1,1-trichloroethane), CFC-113 (1,1,2-trichloro-1,2,2-trifluoroethane), methylene CFC-11 (trichlorofluoromethane), (dichlorodifluoromethane), HCFC-22 CFC-12 (chlorodifluoromethane), HFC-23 (trifluoromethane), CFC-114 (1,2-dichloro-1,1,2,2-tetrafluoroethane), CFC-115 (chloropentafluoroethane), HCFC-123 (1,1,1-trifluoro-2,2-dichloroethane), HFC-134a HCFC-141b (1,1-dichloro-1-fluoroethane), (1,1,1,2-tetrafluoroethane),

HCFC-142b (1-chloro-1,1-difluoroethane), HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane), HFC-125 (pentafluoroethane), HFC-134 (1,1,2,2-tetrafluoroethane), HFC-143a (1,1,1-trifluoroethane), HFC-152a (1,1-difluoroethane), PCBTF (parachlorobenzotrifluoride), cyclic, branched, or linear completely methylated siloxanes, acetone, perchloroethylene (tetrachloroethylene), HCFC-225ca (3,3-dichloro-1,1,1,2,2-pentafluoropropane), HCFC-225cb (1,3-dichloro-1,1,2,2,3-pentafluoropropane), **HFC** 43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane), HFC-32 (difluoromethane), HFC-161 (ethylefluoride), HFC-236fa (1,1,1,3,3,3-hexafluoropropane), HFC-245ca (1,1,2,2,3-pentafluoropropane), HFC-245ea (1,1,2,3,3-pentafluoropropane), HFC-245eb (1,1,1,2,3-pentafluoropropane), HFC-245fa (1,1,1,3,3-pentafluoropropane), HFC-236ea (1,1,1,2,3,3-hexafluoropropane), (1,1,1,3,3-pentafluorobutane), HFC-365mfc HCFC-31 (chlorofluoromethane), HCFC-151a (1-chloro-1-fluoroethane), HCFC-123a (1,2-dichloro-1,1,2-trifluoroethane), HFE-7100 $C_1F_0OCH_2$ or (1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane), (CF₂)₂CFCF₂OCH₂(2-(difluoromethoxymethyl) -1,1,1,2,3,3,3-heptafluoropropane), $C_1F_0OC_2H_5$ HFE-7200 or (1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane), (CF₂)₂CFCF₂OC₂H₂ (2-(ethoxydifluoromethyl) -1,1,1,2,3,3,3-heptafluoropropane), methyl acetate, n-C3F7OCH3 or HFE-7000 (1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane), HFE-7500 (3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane), HFC 227ea (1,1,1,2,3,3,3-heptafluoropropane), methyl formate, t-butyl acetate, any organic compound listed in 40 CFR 51.100(s)(1) or (s)(5), and any class of perfluorocarbon compounds that consists of (a) cyclic, branched, or linear, completely fluorinated alkanes, (b) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations, (c) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, or (d) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. These compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by the approved test methods. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emission standard.)

- (C) As used in rule 3745-21-07 of the Administrative Code (pertaining to the control of emissions of organic materials from stationary sources):
 - (1) (Reserved)
 - (2) "Effluent water separator" means any tank, box, sump, or other container in

which any volatile photochemically reactive material floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

- (3) "Liquid organic material" means any organic material which is a liquid at standard conditions.
- (4) "Organic material" means any chemical compound containing carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.
- (5) "Photochemically reactive material" means any liquid organic material with an aggregate of more than twenty percent of its total volume composed of the chemical compounds classified below or which exceed any of the following individual percentage composition limitations, referred to the total volume of liquid:
 - (a) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers or ketones having an olefinic or cyclo-olefinic type of unsaturation except perchloroethylene: five percent;
 - (b) A combination of aromatic hydrocarbons with eight or more carbon atoms to the molecule except ethylbenzene: eight percent;
 - (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: twenty percent.

Whenever any organic material or any constituent of an organic material may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of liquid.

- (6) "Submerged fill pipe" means any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe with the discharge opening entirely submerged when the liquid level is eighteen inches above the bottom of the tank.
- (7) "Volatile photochemically reactive material" means any photochemically reactive material which has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions.

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(D) As used in paragraphs (B), (C), (D), (E), (F), (G), (H), (I), (J), (K), (S), (U), (Y), (FF), (II) and (PP) of rule 3745-21-09 of the Administrative Code (pertaining to coating lines and printing lines) and in rules 3745-21-04, and 3745-21-10 and 3745-21-18 of the Administrative Code:

- (1) "Aqueous coating" means a water-based surface coating applied directly over ink on a printed substrate for the purpose of enhancing or protecting the printed surface.
- (2) "Automobile" means a passenger car or passenger car derivative capable of seating not more than twelve passengers.
- (3) "Automobile or light-duty truck assembly plant" means a facility where automobile and/or light-duty truck bodies, frames and associated parts, are assembled for eventual inclusion into a finished product ready for sale to vehicle dealers. Customizers, body shops and other repainters are excluded from this definition.
- (4) "Basecoat" means, for can coating lines, the exterior base coating of a two-piece can or the exterior and interior base coating of a three-piece can or three-piece can end.
- (5) "Can" means a single walled metal container constructed wholly of tin plate, terne plate, black plate (including tin-free steel), waste plate, aluminum sheet, or impact extrusions designed for packaging products. It excludes "steel pails" defined as single walled shipping containers having capacities of one gallon or greater and which are cylindrically constructed of steel of 29-gauge or heavier.
- (6) "Capture system" means all equipment, including but not limited to hoods, ducts, fans, ovens and dryers, used to contain, collect, and route VOC vapors released from a coating line or printing line.
- (7) "Clear coating" means a varnish or any coating which is transparent or lacks pigment.
- (8) "Coating or surface coating" means a material applied onto or saturated within a substrate for decorative, protective or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, adhesives and inks.
- (9) "Coating applicator" means an apparatus used to apply a surface coating.

(10) "Coating line" means an operation consisting of a series of one or more coating applicators and any associated flash-off areas, drying areas and ovens wherein a surface coating is applied, dried, and/or cured. It is not necessary for an operation to have an oven, or flash-off area, or drying area in order to be included within this definition.

- (11) "Coil" means a flat metal sheet or strip that is packaged in a roll and that has a thickness of 0.006 inch or more.
- (12) "Commercial motor vehicle and mobile equipment refinishing operation" means any company or individual, other than the original manufacturer, that applies a coating containing a volatile organic compound (VOC) as a pretreatment, primer, sealant, basecoat, clear coat, or topcoat to mobile equipment for commercial purposes.
- (12)(13) "Control system" means any device or combination of devices designed to recover or incinerate VOC vapors received from a capture system.
- (13)(14) "Enamel" means a type of surface coating in which drying occurs by evaporation of the solvent and polymerization of the pigmented drying oils.
- (14)(15) "End sealing compound" means a synthetic rubber or plastic compound which is applied onto can ends and which functions as a gasket when the end is assembled on the can.
- (15)(16) "Electrodeposition" means the application of a surface coating to an object by immersing the object into a water bath containing the surface coating material and inducing an electric potential between the object and the bath.
- (16)(17) "Excluding water" means subtracting the volume of water and other volatile materials which are not VOC.
- (17)(18) "Exterior base coating" means a coating applied to the exterior of a can to provide exterior protection to the metal and/or to provide background for the lithographic or printing operation.
- (18)(19) "Exterior bottom end" means the outside surface of the bottom side of a two-piece can.
- (19)(20) "Extreme performance coating" means a coating designed for exposure to any of the following: year-round outdoor weather, temperatures consistently

- above two hundred three degrees Fahrenheit, detergents, scouring, solvents, corrosive materials, corrosive atmospheres or similar harsh conditions.
- (20)(21) "Extrusion coater" means an apparatus in which a coating material is applied by means of a slotted die to a moving substrate, which is fed from an unwinding roll.
- (21)(22) "Fabric coating" means a coating applied to a textile substrate by dipping or by means of a knife or roll coater.
- (22)(23) "Final repair" means a surface coating which is applied off the main production line or after trim assembly to repair topcoat imperfections.
- (23)(24) "Flashoff area" means the area of a facility through which coated materials travel from the coating applicator to the oven.
- (24)(25) "Flexographic printing line" means a printing line in which each roll printer uses a roll with raised areas for applying an image to the substrate. The image carrier on the roll is made of rubber or other flexible elastomeric material.
- (25)(26) "Food can ends" means can ends used for cans that store food products other than soft drinks or alcoholic beverages.
- (26)(27) "Fountain solution" means a surface coating applied to the plate roll of an offset lithographic printing line for the purpose of wetting only the nonimage areas so that they are not ink receptive.
- (27)(28) "Guidecoat" means a surface coating applied to the body of an automobile or light-duty truck between the electrodeposition prime coat and the topcoat.
- (28)(29) "High performance architectural aluminum coating" means a coating that is applied to aluminum used in architectural subsections and that meets the requirements of publication number AAMA 2605-02, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels," of the Architectural Aluminum Manufacturer's Association.
- (30) "High volume, low pressure (HVLP) sprayer" means an air atomized sprayer that operates at a maximum air pressure of ten pounds per square inch gauge (psig) as measured at the nozzle.

- (29)(31) "Ink" means a coating applied by a roll printer.
- (30)(32) "Interior base coating" means a coating applied to the interior of a can.
- (31)(33) "Interior body coating" means a coating applied subsequent to the application of an interior base coating to the interior of a can body.
- (32)(34) "Knife coater" means an apparatus in which a coating material is applied to a moving substrate, which is fed from an unwinding roll, by drawing the substrate beneath a knife (blade) that is designed to spread the coating evenly over the width of the substrate.
- (33)(35) "Lacquer" means a type of surface coating in which drying occurs by evaporation of the solvent and deposition of the resin and any pigment.
- (34)(36) "Large appliance" means door, case, lid, panel, interior part, and/or interior support part of a residential or commercial washer, dryer, range, refrigerator, freezer, water heater, dishwasher, trash compactor, air conditioner or other similar product.
- (35)(37) "Light-duty truck" means a motor vehicle rated at eight thousand five hundred pounds gross weight or less which is designed primarily for highway use and for the transportation of property, or is a derivative of such vehicle.
- (36)(38) "Line" means the same as "coating line."
- (37)(39) "Lithographic printing line" means a printing line, except that the substrate is not necessarily fed from an unwinding roll, in which each roll printer uses a roll where both the image and nonimage areas are essentially in the same plane (planographic).
- (38)(40) "Magnet wire coating" means a coating of electrically insulating varnish or enamel which is applied to aluminum or copper wire prior to its formation into an electromagnetic coil.
- (39)(41) "Metal furniture" means any metal part of household, business, institutional or office furniture, excluding hardware. Such furniture includes, but is not limited to, cabinets, cases, desks, chairs, tables, partitions, shelving, lockers, storage racks, indoor waste receptacles and fixtures.

(40)(42) "Miscellaneous metal part or product" means any metal part or metal product except the following: cans, coils, metal furniture, large appliances, and aluminum or copper wire prior to its formation into an electromagnetic coil.

- (43) "Mobile equipment" means any equipment that may be drawn or is capable of being driven on a roadway, including, but not limited to, automobiles, trucks, truck bodies, truck trailers, cargo vaults, utility bodies, camper shells, construction equipment, farming equipment, and motorcycles.
- (41)(44) "Offset lithographic printing line" means a lithographic printing line where the image is applied from a plate roll to an intermediate (blanket) roll and then transferred onto the substrate.
- (42)(45) "Oven" means a chamber within which heat is used for one or more of the following purposes: dry, bake, cure or polymerize a surface coating or ink.
- (43)(46) "Overvarnish" means a surface coating applied directly over ink on the exterior of a can.
- (44)(47) "Packaging rotogravure printing line" means a rotogravure printing line in which surface coatings are applied to paper, paperboard, metal foil, plastic film, or other substrates which are subsequently formed into packaging products or labels for articles.
- (45)(48) "Paper coating" means a coating applied by dipping or by means of a knife, roll or extrusion coater to paper, paperboard, pressure sensitive tapes or labels, plastic film, or metal foil. Excluded from this definition are coatings applied within a printing line which is in compliance with the emission requirements contained in paragraph (Y) of rule 3745-21-09 of the Administrative Code.
- (46)(49) "Paper treater" means a coating line in which a uniform layer of phenolic or melamine resin is applied by dipping a continuously moving paper substrate into the resin and then using rollers to squeeze the excess resin from the paper.
- (47)(50) "Prime coat" means a surface coating which is used to aid the adhesion of a topcoat to a surface and/or prevent corrosion of the metal being coated. For the purpose of emission limitations, guidecoat and surfacer are included in the definition of prime coat.

(48)(51) "Printing line" means an operation consisting of a series of one or more roll printers and any associated in-line roll coaters, in-line extrusion coaters, drying areas and ovens wherein one or more surface coatings are applied, dried, and/or cured. It is not necessary for an operation to have an oven or drying area in order to be included within this definition.

- (49)(52) "Publication rotogravure printing line" means a rotogravure printing line in which surface coatings are applied to paper which is subsequently formed into books, catalogues, brochures, directories, newspaper supplements or other types of printed materials.
- (50)(53) "Roll coater" means an apparatus in which a uniform layer of coating material is applied by means of a roll or rolls across the entire width of a moving substrate, which is fed from an unwinding roll.
- (51)(54) "Roll printer" means an apparatus in which a surface coating is applied by means of a roll or rolls with only partial coverage across the width of a moving substrate, which is fed from an unwinding roll. The partial coverage results in the formation of words, designs or pictures on the substrate.
- (52)(55) "Rotogravure printing line" means a printing line in which each roll printer uses a roll with recessed areas for applying an image to the substrate.
- (53)(56) "Single coat" means a single film of coating applied directly to the substrate omitting the primer application.
- (54)(57) "Side-seam" means the welded, cemented, or soldered seam of a three-piece can.
- (55)(58) "Sound-proofing material" means a surface coating applied for the primary purpose of reducing the transmission of noise into or through the coated object.
- (56)(59) "Steel pail or drum" means any single walled shipping container which has a capacity of one gallon or greater and which is cylindrically constructed of steel of 29-gauge or heavier.
- (57)(60) "Surfacer" means a surface coating applied to the body of an automobile or light-duty truck between the electrodeposition prime coat and the topcoat.
- (58)(61) "Topcoat" means one or more surface coatings, excluding final repair,

- which are applied after the prime coat for desired aesthetic effects.
- (59)(62) "Transfer efficiency" means the percentage of total coating solids employed by a coating applicator which adheres to the object being coated.
- (60)(63) "Varnish coating" means an oil-based surface coating applied directly over ink on a printed substrate for the purpose of enhancing or protecting the printed surface.
- (61)(64) "Vinyl coating" means a coating or ink applied to the surface of vinyl coated fabric, vinyl sheets, or other vinyl products by means of a knife coater, roll coater, or roll printer. For purposes of this rule, "vinyl coating" shall not include organisol or plastisol coatings.
- (62)(65) "Zinc rich primer coating" means any coating which contains primarily zinc pigment on a weight basis, which is applied as a prime coat to a metal part or product prior to assembly, and which is dried at ambient or in-plant temperature.
- (E) As used in paragraphs (L), (M), (T) and (Z) of rule 3745-21-09 of the Administrative Code (pertaining to storage tanks and to petroleum refinery equipment) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:
 - (1) "Component" means any piece of equipment which has the potential to leak organic compounds into the atmosphere. Such equipment includes, but is not limited to, pump seals, compressor seals, seal oil degassing vents, pipeline valves, pressure relief devices, process drains and open ended pipes.
 - (2) "Condensate" means any organic compound separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.
 - (3) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.
 - (4) "Custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
 - (5) "External floating roof tank" means an open top storage vessel with a cover,

- consisting of a double deck or pontoon single deck, which rests upon and is supported by the contained liquid and which is equipped with a closure seal or seals to close the space between the roof edge and tank wall.
- (6) "Firebox" means the chamber or compartment of a boiler or furnace in which materials are burned, but does not mean the combustion chamber of an incinerator.
- (7) "Fixed roof tank" means a steel cylindrical shell with a permanently affixed roof.
- (8) "Flexible wiper primary seal" means a continuous sealing device mounted on the floating roof and equipped with an elastomeric blade which contacts the tank wall. It uses its own stiffness or other mechanical means to maintain contact with the tank wall.
- (9) "Gas service" means equipment which processes, transfers or contains an organic compound or mixture of organic compounds in the gaseous phase.
- (10) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (11) "Liquid-mounted primary seal" means a seal constructed of an elastomeric coated fabric envelope and mounted onto the floating roof in such a manner that it touches the surface of the stored liquid.
- (12) "Liquid service" means equipment which processes, transfers or contains an organic compound or mixture of organic compounds in the liquid phase.
- (13) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.
- (14) "Mechanical shoe primary seal" means a seal constructed of metal sheets (shoes) which are joined together to form a ring, springs or levers which attach the shoes to the floating roof and hold the shoes against the tank wall, and a coated fabric which is suspended from the shoes to the floating roof.
- (15) "Petroleum refinery" means any facility engaged in producing gasoline, Kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oil, or through redistillation, cracking, extraction,

- or reforming of unfinished crude oil derivatives.
- (16) "Process unit turnaround" means a work practice or operational procedure that stops production from a refinery unit or part of a refinery unit. An unscheduled work practice or operational procedure that stops production from a refinery unit or part of a refinery unit for less than twenty-four hours is not a process unit turnaround. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit turnarounds.
- (17) "Refinery fuel gas" means any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas.
- (18) "Refinery unit" means equipment assembled to produce intermediate or final products from crude oil, unfinished crude oil derivatives, or other intermediates. A refinery unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.
- (19) "Rim-mounted secondary seal" means a continuous sealing device located over the primary seal, mounted on the floating roof and extended to the tank wall. This device is not a weather shield.
- (20) "Shoe-mounted secondary seal" means a continuous sealing device extending from the top of the shoe (see the definition of mechanical shoe primary seal) to the tank wall.
- (21) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in "American Petroleum Institute Publication 2517, Evaporation Loss from External Floating-Roof Tanks."
- (22) "Vacuum producing system" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.
- (23) "Valves not externally regulated" means valves that have no external controls, such as in-line valves.
- (24) "Vapor-mounted primary seal" means a seal constructed of an elastomeric coated fabric envelope and mounted onto the floating roof in such a manner

- that it does not touch the surface of the stored liquid.
- (25) "Wastewater separator" means a device in which oil- contaminated water is skimmed to remove the floating oil prior to the discharge or further treatment of the water.
- (26) "Weather shield" means a device which is attached to a floating roof to protect the fabric of a liquid-mounted or vapor-mounted primary seal from weather and debris, thereby generally providing a longer primary seal life. The device is usually of leaf-type construction and has numerous radial joints to allow for roof movement or irregularities in the tank wall.
- (F) As used in paragraph (N) of rule 3745-21-09 of the Administrative Code (pertaining to the use of cutback asphalts and emulsified asphalts in road construction and maintenance) and in rule 3745-21-04 of the Administrative Code:
 - (1) "Asphalt" means a dark brown to black cement-like material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.
 - (2) "Asphalt paving mixture" means a mixture of mineral aggregate and cutback asphalt, emulsified asphalt, or other asphaltic material.
 - (3) "Cutback asphalt" means a mixture of asphalt and petroleum solvents (distillates), produced by blending those materials or by distilling petroleum.
 - (4) "Dense-graded mix" means an asphalt paving mixture in which the air voids are less than ten per cent when compacted, as determined by "ASTM D 3203-94, Standard Test Methods for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures."
 - (5) "Emulsified asphalt" means an emulsion of water and asphalt which may also contain emulsifying agents, special additives, and petroleum solvents (distillates).
 - (6) "Maintenance mix" means an asphalt paving mixture for patching holes, depressions, and distressed areas in existing pavements.
 - (7) "Open-graded mix" means an asphalt paving mixture in which the air voids are equal to or greater than ten per cent when compacted, as determined by "ASTM D 3203-94, Standard Test Methods for Percent Air Voids in

Compacted Dense and Open Bituminous Paving Mixtures."

(8) "Prime coat" means an application of low-viscosity cutback asphalt or emulsified asphalt to an absorptive surface, designed to penetrate, bond and stabilize the existing surface and to promote adhesion between it and the construction course that follows.

- (G) As used in paragraph (O) of rule 3745-21-09 of the Administrative Code (pertaining to solvent metal cleaning) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:
 - (1) "Cold cleaner" means a batch-operated device that employs a solvent for cleaning and removing soils from metal surfaces by spraying, brushing, flushing, agitation or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.
 - (2) "Conveyorized degreaser" means a continuous-operated device for cleaning and removing soils from metal surfaces by the use of either non-vaporized or vaporized solvents.
 - (3) "Electronic component" means all portions of an electronic assembly, including, but not limited to, circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and associated electronic component manufacturing equipment such as screens and filters.

(3)(4) "Freeboard height" means:

- (a) For a cold cleaner, the distance from the solvent surface to the top edge of the degreaser tank; and
- (b) For an open top vapor degreaser, the distance from the top of the vapor zone to the top of the degreaser tank.
- (4)(5) "Freeboard ratio" means the freeboard height divided by the width of the degreaser air/solvent area. The same units of measurement should be used for all dimensions.
- (5)(6) "Open top vapor degreaser" means a batch-operated device for cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(6)(7) "Solvent" means any VOC which is liquid at standard conditions and which is used as a cleaning agent.

- (7)(8) "Solvent metal cleaning" means a process that employs a solvent for cleaning and removing soils from metal surfaces.
- (H) As used in paragraphs (P), (Q), (R), (V), (GG), and (DDD) of rule 3745-21-09 of the Administrative Code (pertaining to bulk gasoline plants, bulk gasoline terminals, gasoline dispensing facilities, and gasoline tank trucks) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:
 - (1) "Bottom filling" means the filling of a delivery vessel through an opening that is flush with the bottom of the delivery vessel's compartment.
 - (2) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline primarily via delivery vessel, stores it in one or more stationary tanks, and subsequently dispenses it via delivery vessel.
 - (3) "Bulk gasoline terminal" means a gasoline storage and distribution facility which receives gasoline primarily via pipeline, ship, or barge; stores it in one or more stationary tanks; and subsequently dispenses it primarily via delivery vessel.
 - (4) "CARB certification" and "CARB certified" means: subject
 - (a) <u>subject</u> to executive orders, approval letters, equipment advisories, and equivalent test procedures issued by California air resources board for phase I and phase II vapor control systems, parts, components, and test procedures used at gasoline dispensing facilities as follows:
 - (a)(i) Issued on or before March 31, 2001 under pre-enhanced vapor recovery (pre-EVR) standards and certification procedures and issued after March 31, 2001 as a correction or revision, not related to enhanced vapor recovery (EVR) standards, of phase I and phase II vapor control systems, parts, components, and test procedures previously approved under pre-EVR standards, however, gasoline dispensing facilities in Ohio shall not be subject to any provision or statement that specifies an expiration or decertification due to EVR standards and certification procedures; or
 - (b)(ii) Issued after March 31, 2001 under EVR standards and

certification procedures for parts and components to be used in conjunction with pre-EVR systems, however, gasoline dispensing facilities in Ohio shall not be subject to any provision or statement that specifies an expiration or decertification due to EVR standards and certification procedures.

Additionally, where an owner or operator of a gasoline dispensing facility elects to use phase I or phase II vapor control systems, parts, components, or test procedures subject to executive orders, approval letters, equipment advisories, and equivalent test procedures issued by California air resources board under EVR standards and certification procedures, "CARB certification" and "CARB certified" shall also mean such executive orders, approval letters, equipment advisories, and equivalent test procedures issued by California air resources board under EVR standards and certification procedures. (Executive orders that begin with "G" generally refer to pre-EVR systems, but may include provisions or statements on expiration or decertification due to EVR standards. Executive orders that begin with "VR" generally refer to EVR systems.)

- (b) subject to executive orders, approval letters, equipment advisories, and equivalent test procedures issued by California air resource Board that become effective for portable fuel containers and spouts on or after July 1, 2007.
- (5) "Delivery vessel" means a tank truck, a tank equipped trailer, a railroad tank car, or other mobile source, except ship or barge, equipped with a storage tank used for the transport of gasoline from a source of supply to stationary tanks at a gasoline dispensing facility or bulk gasoline plant.
- (6) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (7) "Gasoline" means any petroleum distillate which is used as a motor fuel and has a Reid vapor pressure of 4.0 pounds or greater.
- (8) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
- (9) "Gasoline tank truck" means any truck or trailer equipped with a storage tank which is used for the transport of gasoline to a stationary storage tank at a

gasoline dispensing facility, bulk gasoline plant or bulk gasoline terminal.

(10) "Independent small business marketer" means any owner of a gasoline dispensing facility engaged in the marketing of gasoline who would be required to pay for procurement and installation of a vapor control system pursuant to paragraph (DDD) of rule 3745-21-09 of the Administrative Code, except any owner that:

- (a) Is a refiner;
- (b) Controls, is controlled by, or is under common control with a refiner;
- (c) Is otherwise directly or indirectly affiliated (as determined under the regulations of the U.S. environmental protection agency) with a refiner or with a person who controls, is controlled by, or is under a common control with a refiner (unless the sole affiliation referred to herein is by means of a supply contract or an agreement or contract to use as a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person); or
- (d) Receives less than fifty per cent of his annual income from refining or marketing of gasoline.

For purposes of this definition, the term "refiner" shall not include any refiner whose total refinery capacity (including the refinery capacity of any person who controls, is controlled by, or is under common control with, such refiner) does not exceed sixty-five thousand barrels per day, and the term "control" of a corporation means ownership of more than fifty per cent of its stock.

- (11) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (12) "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by ASTM D6897-03a, "Standard Test Method for Vapor Pressure of Liquefied Petroleum Gases (LPG) (Expansion Method).".
- (13) "Submerged fill pipe" means any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches above the bottom of the tank, or when applied to a tank which is loaded from the side, shall mean any

- fill pipe the discharge opening of which is entirely submerged when the liquid level is eighteen inches above the bottom of the tank.
- (14) "Top submerged filling" means the filling of a delivery vessel by means of a fill pipe which descends through an open hatch on the top of the delivery vessel to within six inches of the bottom of the delivery vessel's compartment.
- (15) "Topping off" means attempting to pump additional gasoline into a motor vehicle fuel tank after the dispensing nozzle has shut off automatically because the tank is full.
- (16) "Ullage" means the maximum storage tank capacity, in gallons, minus the gallons of gasoline present in the tank.
- (17) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.
- (18) "Vapor collection system" means a vapor transport system which forces vapors from a delivery vessel or storage tank into a vapor control system.
- (19) "Vapor control system" means control equipment designed to recover or incinerate organic compounds received from the vapor collection system.
- (20) "Vapor tight" means free of any vapor leaks to the extent possible based upon good engineering design and practice.
- (I) As used in paragraph (W) of rule 3745-21-09 of the Administrative Code (pertaining to synthesized pharmaceutical manufacturing facilities) and in rule 3745-21-04 of the Administrative Code:
 - (1) "Production equipment exhaust system" means a device for collecting and directing out of the work area any fugitive emissions of organic compounds from openings on reactors, centrifuges and other vessels for the purpose of protecting workers from excessive exposure to such emissions.
 - (2) "Surface condenser" means a device which cools a gas stream to a temperature at which vapors are removed by means of condensation, where the coolant does not directly contact the condensed vapors.

(3) "Synthesized pharmaceutical manufacturing facility" means a facility in which drugs are produced by means of chemical synthesis.

- (J) As used in paragraph (X) of rule 3745-21-09 of the Administrative Code (pertaining to rubber tire manufacturing facilities) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:
 - (1) "Bead dipping" means the dipping of an assembled tire bead into a solvent based cement.
 - (2) "Capture system" means any device or combination of devices designed to contain, collect, and route VOC vapors released from an operation at a rubber tire manufacturing facility.
 - (3) "Control system" means any device or combination of devices designed to recover or incinerate VOC vapors received from a capture system.
 - (4) "Green tires" means assembled tires before molding and curing have occurred.
 - (5) "Green tire spraying" means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.
 - (6) "Recapped tread stock" means vulcanized or unvulcanized rubber which is used for recapping tire carcasses and which is delivered to a recapping facility with a cement coating on one side.
 - (7) "Rubber tire manufacturing facility" means a facility in which rubber tires or recapped tread stock are manufactured on a mass production basis.
 - (8) "Tread end cementing" means the application of a solvent based cement to the tire tread ends.
 - (9) "Undertread cementing" means the application of a solvent based cement to the underside of a tire tread.
- (K) As used in paragraphs (AA) and (BB) of rule 3745-21-09 of the Administrative Code (pertaining to dry cleaning facilities) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:

(1) "Cartridge filter" means a discrete filter unit containing one or more disposable cartridges that contain both filter paper and activated carbon which trap and remove contaminants from the cleaning solvent.

- (2) "Dry cleaning facility" means a facility engaged in the cleaning of articles of fabric in an essentially nonaqueous cleaning solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an air stream. The facility includes, but is not limited to, washers, dryers, filtration and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and ductwork.
- (3) "Dryer" means a machine used to remove cleaning solvent from articles, after washing and removing of excess cleaning solvent.
- (4) "Manufacturer's rated capacity" means the capacity per load that is typically found on the manufacturer's name plate located on the equipment or in the manufacturer's equipment specifications.
- (5) "Perchloroethylene dry cleaning facility" means a dry cleaning facility that uses perchloroethylene as the cleaning solvent.
- (6) "Petroleum dry cleaning facility" means a dry cleaning facility that uses petroleum solvent as the cleaning solvent.
- (7) "Petroleum solvent" means a material that is produced by petroleum distillation, that is composed mainly of hydrocarbons having a range of eight to twelve carbon atoms per molecule, and that exists as a liquid under standard conditions.
- (8) "Solvent filter" means a discrete filter unit containing a porous medium that traps and removes contaminants from the cleaning solvent.
- (9) "Solvent recovery dryer" means a class of dryers that employ a condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air.
- (L) As used in paragraph (CC) of rule 3745-21-09 of the Administrative Code (pertaining to continuous, polystyrene resin manufacturing process) and in rule 3745-21-04 of the Administrative Code:
 - (1) "Continuous, polystyrene resin manufacturing process" means a process unit in

- which polystyrene resin is produced by the continuous polymerization or co-polymerization of styrene monomer.
- (2) "Material recovery section" means the section of the continuous, polystyrene resin manufacturing process that includes the vacuum devolatizer and its associated condenser and vacuum system, and the styrene recovery distillation column and its associated condenser and vacuum system.
- (3) "Styrene recovery distillation column" means a distillation column used to separate and recover styrene monomer from the vacuum devolatizer stream containing unreacted styrene monomer and byproducts.
- (4) "Vacuum devolatizer" means a device in which the products from a polystyrene reactor are separated into a stream containing unreacted styrene monomer and byproducts and a stream containing molten polystyrene.
- (M) As used in paragraph (DD) of rule 3745-21-09 of the Administrative Code (pertaining to leaks from process units that produce organic chemicals) and in rules 3745-21-04 and 3745-21-10 of the Administrative Code:
 - (1) "Btu/scf" means British thermal unit(s) per standard cubic feet.
 - (2) "Closed vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and if necessary, flow inducting devices that transport gas or vapor from a piece or pieces of equipment to control equipment.
 - (3) "Connector" means a flanged, screwed, welded, or other joined fitting used to connect two pipelines or a pipeline and a piece of process equipment.
 - (4) "Distance piece" means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.
 - (5) "Double block and bleed system" means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.
 - (6) "Equipment" means a pump, compressor, pressure relief device, sampling connection system, openended valve or line, valve, flange, connector, closed vent system, and any other device or system within a process unit.
 - (7) "First attempt at repair" means to take rapid action for the purpose of stopping

or reducing leakage from equipment.

- (8) (Reserved)
- (9) "In gas/vapor service" means that the piece of equipment contains or contacts process fluid that is in the gaseous state at the operating conditions.
- (10) "In heavy liquid service" means that the piece of equipment is not in gas/vapor service or in light liquid service.
- (11) "In light liquid service" means that the piece of equipment contains or contacts process fluid that meets the conditions specified in paragraph (O)(3) of rule 3745-21-10 of the Administrative Code.
- (12) "Insitu sampling system" means a nonextractive sampler or an in-line sampler.
- (13) "In vacuum service" means that the piece of equipment is operating at an internal pressure that is at least 0.7 pound per square inch below ambient pressure.
- (14) "In VOC service" means that the piece of equipment contains or contacts a process fluid that is at least ten per cent VOC by weight.
- (15) "Liquids dripping" means any visible leakage from the seal including spraying, misting, clouding, and ice formation.
- (16) "Open-ended valve or line" means any valve having one side of the valve seat in contact with the process fluid and one side open to the atmosphere, either directly or through open piping, but excluding any pressure relief valve.
- (17) "ppmv" means parts per million by volume.
- (18) "Pressure release" means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.
- (19) "Pressure relief device" means a pressure relief valve or a rupture disk.
- (20) "Pressure relief valve" means any valve designed to open when the process pressure exceeds a set pressure, allowing the release of vapors or liquids until the process pressure is reduced to its normal operating level.

(21) "Process unit" means equipment assembled to produce, as intermediate or final products, one or more organic chemicals. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

- (22) "Process unit shutdown" means a work practice or operational procedure that stops production for a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than twenty-four hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.
- (23) "Repaired" means that leaking equipment are successfully adjusted, or otherwise altered, in order to eliminate the leak.
- (24) "Rupture disk" means a disk made of a material that ruptures when the process pressure exceeds a set pressure, allowing the release of vapors or liquids until the process pressure is reduced to ambient pressure.
- (25) "Sensor" means a device that measures a physical quantity or the change in a physical quantity such as temperature, flow rate, "pH," or liquid level.
- (N) As used in paragraph (EE) of rule 3745-21-09 of the Administrative Code (pertaining to air oxidation processes that produce organic chemicals) and in rule 3745-21-04 of the Administrative Code:
 - (1) "Air oxidation process" means a unit operation or process wherein organic chemicals are produced by reacting one or more compounds with oxygen which is supplied as air or air enriched with oxygen.
 - (2) "Process vent stream" means any gas stream within the air oxidation process that vents to the ambient air.
- (O) As used in paragraph (HH) of rule 3745-21-09 of the Administrative Code (pertaining to "The Goodyear Tire and Rubber Company"), "polyvinyl chloride film casting line" means an operation consisting of a casting unit and multiple drying chambers wherein a solution containing polyvinyl chloride resin is cast in a thin film by a knife or extrusion die onto a moving belt and dried.
- (P) As used in paragraph (LL) of rule 3745-21-09 of the Administrative Code (pertaining to "The Lubrizol Corporation"):

(1) "Air-bearing vent stream" means a process vent stream that contains a mixture of air and organic vapors.

- (2) "Reactor process" means reactor vessel equipment and associated material recovery equipment that are assembled to produce an organic chemical.
- (3) "Reactor process vent stream" means any gas stream within the reactor process that is vented to the ambient air, an enclosed combustion device, or a flare.
- (4) "Wastewater separator" means a device in which contaminated water is skimmed to remove the floating organic materials prior to the discharge or further treatment of the water.
- (Q) As used in paragraph (MM) of rule 3745-21-09 of the Administrative Code (pertaining to "PPG Industries, Inc."):
 - (1) "Control system" means any device or combination of devices designed to recover or incinerate VOC vapors received from a capture system.
 - (2) "Grinding mill" means a device used to grind or disperse pigment throughout a paint.
 - (3) "Paint manufacturing facility" means a facility engaged in the production of paints and includes, but is not limited to, mixing tanks, paint transfer equipment, grinding mills, equipment cleaning stations, and process tanks for paint tinting and thinning.
- (R) As used in paragraph (NN) of rule 3745-21-09 of the Administrative Code (pertaining to "Midwest Mica and Insulation Company"):
 - (1) "Mica coating or laminating line" means a series of one or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein an adhesive coating or binder is applied to mica.
 - (2) "Oven" means a chamber within which heat is used for one or more of the following purposes: dry, bake, cure or polymerize an adhesive coating or binder.
- (S) As used in paragraph (OO) of rule 3745-21-09 of the Administrative Code (pertaining to "Armco Inc. Middletown Works"):

(1) "Aluminum coating operation" means an operation wherein a layer of aluminum is applied to the surface of metal coil by immersion into a bath of molten aluminum.

- (2) "Anti-galling material" means a coating material applied directly to metal coil for the purpose of protecting the surface of the coil from damage during shipment.
- (3) "Metal coil treatment operation" means any operation where coating materials are applied directly to metal coil for the purpose of lubrication, rust prevention, or galling prevention.
- (4) "Rolling oil" means a coating material which is applied directly to metal coil, for the purpose of lubrication, prior to processing at any temper mill.
- (5) "Rust preventive oil" means a coating material which is applied directly to metal coil after processing at any temper mill or shear.
- (T) As used in paragraph (YY) of rule 3745-21-09 of the Administrative Code (pertaining to "PMC Specialties Group"), paragraph (ZZ) of rule 3745-21-09 of the Administrative Code (pertaining to "Firestone Synthetic Rubber & Latex Company"), and paragraph (BBB) of rule 3745-21-09 of the Administrative Code (pertaining to "BF Goodrich Company Akron Chemical Plant"):
 - (1) "Air-bearing vent stream" means a process vent stream that contains a mixture of air and organic vapors.
 - (2) "Reactor process" means reactor vessel equipment and associated material recovery equipment that are employed to produce an organic chemical.
 - (3) "Reactor process vent stream" means any gas stream within the reactor process that is vented to control equipment or to the ambient air.
- (U) As used in rule 3745-21-12 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-12 of the Administrative Code (pertaining to "Control of Volatile Organic Compound Emissions from Commercial Bakery Oven Facilities").

(1) "Baker's percent" means, for a given ingredient, the weight of that ingredient per 100 pounds of flour, expressed as a percentage.

- (2) "Bakery oven" means an oven which bakes yeast-leavened products.
- (3) "Commercial bakery oven facility" means an establishment that is primarily engaged in the manufacture, for sale at wholesale or retail, of fresh or frozen bread, bread-type rolls, or dry bakery products, including biscuits, crackers, or cookies, in which the products are made using yeast leavening.
- (4) "Purge stack" means a bakery oven stack used only for exhausting exhaustingresidual gases from the bakery oven during burner ignition.
- (5) "Spike yeast" means any yeast added to the dough beyond the initial yeast added to the dough.
- (6) "Spiking time" means the elapsed time between the addition of the spike yeast to the dough and the placement of the dough into the oven.
- (7) "Subject to this rule" means the commercial bakery oven facility has met the applicability criteria of paragraph (A)(1) of rule 3745-21-12 of the Administrative Code and is subject to the requirements of paragraphs (D) to (I) of rule 3745-21-12 of the Administrative Code.
- (8) "Total uncontrolled potential to emit" means the capability at maximum capacity of a commercial bakery oven facility to emit VOC under its physical and operational design, excluding air pollution control equipment. Any physical or operational limitation on the capacity of the commercial bakery oven facility to emit VOC, including restrictions on the hours of operation or on the type or amount of material processed, but not including restrictions pertaining to air pollution control equipment, shall be treated as part of its physical and operational design if the limitation or the effect it would have on VOC emissions is federally enforceable.
- (9) "Uncontrolled bakery oven" means a bakery oven in which the oven's VOC emissions are not vented to a VOC emission control device.
- (10) "Yeast action time" means the elapsed time between the initial addition of the yeast and the placement of the dough into the oven.
- (V) As used in rule 3745-21-13 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-13 of the Administrative Code (pertaining to "Control of Volatile Organic Compound Emissions from Reactors and Distillation Units Employed in SOCMI Chemical Production").

- (1) "Batch operation" means a noncontinuous operation in which a discrete quantity or batch of feed is charged into a unit operation within a process unit and distilled or reacted at one time. Batch operation includes noncontinuous operations in which the equipment is fed intermittently or discontinuously. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. After each batch operation, the equipment is generally emptied before a fresh batch is started.
- (2) "Boiler" means any enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator or a process heater.
- (3) "Btu" means British thermal unit.
- (4) "Car-seal" means a seal that is placed on a device that is used to change the position of a valve (e.g., from opened to closed) in such a way that the position of the valve cannot be changed without breaking the seal.
- (5) "Combustion device" means an individual unit of equipment, such as an incinerator, flare, boiler, or process heater, used for combustion of a vent stream discharged from the process vent.
- (6) "Compliance test" means the collection of data resulting from the execution of a test method used to demonstrate compliance with an emission limit or control requirement based on the average of three runs.
- (7) "Continuous record" means documentation, either in hard copy or computer readable form, of data values measured at least once every fifteen minutes and recorded as follows:
 - (a) Each measured value; or
 - (b) Block average values for fifteen-minute or shorter periods calculated from all measured data values during each period or at least one measured data value per minute if measured more frequently than once per minute; or

(c) Values under an alternative recordkeeping that is implemented in accordance with paragraph (H)(8) of rule 3745-21-13 of the Administrative Code.

- (8) "Continuous recorder" means a data recording device that either records an instantaneous data value at least once every fifteen minutes or records fifteen-minute or more frequent block average values.
- (9) "Control device" means any combustion device or recapture device. A recovery device is not considered a control device., except as otherwise provided under paragraph (F)(1)(f) of rule 3745-21-13 of the Administrative Code.
- (10) "Distillation operation" means an operation separating one or more feed stream(s) into two or more exit stream(s), each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.
- (11) "Distillation unit" means a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.
- (12) "Engineering assessment" means best estimate of a vent stream parameter (e.g., flow rate, VOC concentration, VOC emission rate, net heating value, etc.) that includes, but is not limited to, the following:
 - (a) Previous test results provided the tests are representative of current operating practices at the process unit.
 - (b) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.
 - (c) Maximum flow rate, VOC emission rate limit, VOC concentration limit, or net heating value limit specified or implied within a permit applicable to the process vent.
 - (d) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) Use of material balances based on process stoichiometry to estimate maximum VOC concentrations.

- (ii) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities.
- (iii) Estimation of VOC concentrations based on saturation conditions.
- (iv) Estimation of maximum expected net heating value based on the vent stream concentration of each organic compound or, alternatively, as if all organic compounds in the vent stream were the organic compound with the highest heating value.
- (13) "Flame zone" means the portion of the combustion chamber in a boiler or process heater occupied by the flame envelope.
- (14) "Flow indicator" means a device that indicates whether gas flow is present in a vent stream.
- (15) "Fuel gas system" means the off-site and on-site piping and flow and pressure control system that gathers gaseous stream(s) generated by on-site operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment such as furnaces and gas turbines either singly or in combination.
- (16) "Group 1 process vent" means a process vent for which a control device is required due to the TRE <u>index</u> value index being less than or equal to 1.0. Also, monitoring of the control device is required, except when the control device is a boiler or process heater specified under paragraph (F)(1)(b) or (F)(1)(c) of rule 3745-21-13 of the Administrative Code.
- (17) "Group 2A process vent" means a process vent from a recovery system for which monitoring of the recovery system is required due to the TRE index value being less than or equal to 4.0, but a control device is not required due to the TRE index value being greater than 1.0.
- (18) "Group 2B process vent" means a process vent for which a control device and monitoring are not required due to any of the following:
 - (a) the VOC concentration is less than five hundred ppmv; or

- (b) the flow rate is less than 0.30 scfm; or
- (c) the TRE index value is greater than 1.0 for a vent stream not from a recovery system; or
- (d) the TRE index value is greater than 4.0 for a vent stream from a recovery system.
- (19) "Halogenated vent stream" means a vent stream determined to have a mass emission rate of halogen atoms contained in organic compounds equal to or greater than 0.99 pound per hour.
- (20) "Halogens and hydrogen halides" means hydrogen chloride (HCl), chlorine (Cl2), hydrogen bromide (HBr), bromine (Br2), and hydrogen fluoride (HF).
- (21) "Incinerator" means an enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one manufactured or assembled unit with the combustion section; rather, the energy recovery section is a separate section following the combustion section and the two are joined by ducts or connections carrying flue gas. The above energy recovery section limitation does not apply to an energy recovery section used solely to preheat the incoming vent stream or combustion air.
- (22) "Monitoring device" means the total equipment used to measure and record (if applicable) process parameters.
- (23) "Nonhalogenated vent stream" means a vent stream that is not a halogenated vent stream.
- (24) "Organic monitoring device" means a device used to indicate the concentration level of organic compounds based on a detection principle such as infrared, photoionization, or thermal conductivity.
- (25) "Permit" means a permit issued by the director pursuant to Chapter 3745-31, 3745-35, or 3745-77 of the Administrative Code.
- (26) "Ppmv" means parts per million by volume.

(27) "Primary fuel" mean the fuel that provides the principal heat input to the device. To be considered primary, the fuel must be able to sustain operation without the addition of other fuels.

- (28) "Process heater" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that is heated to produce steam.
- (29) "Process unit" means equipment assembled and connected by pipes or ducts to produce, as a product (by-product, co-product, intermediate, or final product), one or more SOCMI chemicals. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.
- (30) "Process vent" means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream from a distillation unit or reactor. Gas streams excluded from this definition are the following:
 - (a) A relief valve discharge.
 - (b) A leak from any device or equipment within a reactor or distillation unit (e.g., a leak from a pump, compressor, relief valve, or sampling system).
 - (c) A gas stream going to a fuel gas system.
 - (d) A gas stream exiting a control device used to comply with rule 3745-21-13 of the Administrative Code.
 - (e) A gas stream transferred to other processes (on-site or off-site) for reaction or other use in another process (i.e., for chemical value as a product, isolated intermediate, by-product, or co-product, or for heat value).
 - (f) A gas stream transferred for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse.
 - (g) A gas stream exiting an analyzer.
- (31) "Product" means any SOCMI chemical which is produced for sale as a final

product as that chemical, or for use in the production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products.

- (32) "Reactor" means a device or vessel in which reactor processes occur, including the product separator, any associated vacuum pump or steam jet, and any associated recovery system.
- (33) "Reactor process" means a process in which one or more chemicals, or reactants other than air, are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed.
- (34) "Recapture device" means an individual unit of equipment capable of and used for recovering chemicals from a gas stream, but not normally or primarily for use, reuse, or sale. For example, a recapture device may recover chemicals primarily for disposal or for air pollution control. Recapture devices include, but are not limited to, absorbers, carbon adsorbers, and condensers.
- (35) "Recovery device" means an individual unit of equipment, such as an absorber, carbon adsorber, or condenser, capable of and used for the purpose of recovering chemicals from a gas stream for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse.
- (36) "Recovery system" means an individual recovery device or series of such devices applied to the same vent stream.
- (37) "Relief valve" means a valve used only to release an unplanned, nonroutine discharge. A relief valve discharge results from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage.
- (38) "Run" means the net period of time during which an emission sample is collected or a test method is conducted.
- (39) "Scfm" means standard cubic feet per minute.
- (40) "Sensor" means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

(41) "Shutdown" means for purposes including, but not limited to, periodic maintenance, replacement of equipment, or repair, the cessation of operation of a reactor, distillation unit, or equipment required or used to comply with rule 3745-21-13 of the Administrative Code.

- (42) "SOCMI chemical" means a chemical listed in "Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, Appendix A List of Synthetic Organic Chemical Manufacturing Industry Chemicals, Table A-1 List of Synthetic Organic Chemical Manufacturing Industry Chemicals" in the column titled reactor and distillation CTG, EPA-450/4-91-031.
- (43) "Specific gravity monitoring device" means a unit of equipment used to monitor specific gravity and having a minimum accuracy of +/- 0.02 specific gravity units.
- (44) "Start-up" means the setting into operation of a reactor, distillation unit, or equipment required or used to comply with this rule. Start-up includes initial start-up, operation solely for testing equipment, and transitional conditions due to changes in product.
- (45) "Steam jet ejector" means a steam nozzle that discharges a high-velocity jet across a suction chamber that is connected to the equipment to be evacuated.
- (46) "Subject to this rule" means the reactor or distillation unit has met the applicability criteria of paragraph (A)(1) of rule 3745-21-13 of the Administrative Code.
- (47) "Temperature monitoring device" means a unit of equipment used to monitor temperature and having a minimum accuracy of +/- 1 percent of the temperature being monitored expressed in degrees Celsius or +/- 0.5 degree Celsius, whichever is greater.
- (48) "Total organic compounds" or "TOC" means those compounds measured according to the procedures of USEPA method 18.
- (49) Total resource effectiveness index value" or "TRE index value" means a measure of the supplemental total resource requirement per unit reduction of VOC associated with a vent stream, based on vent stream flow rate, emission rate of VOC, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds) as determined using the

equation in paragraph (E)(8)(a) of rule 3745-21-13 of the Administrative Code. The TRE index is a decision tool used to determine if the annual cost of controlling a given gas stream is reasonable when considering the emissions reduction achieved.

- (50) "TRE determination test" means the collection of data resulting from the execution of test methods used to demonstrate process vent flow rate and concentration, that are used to determine the process vent flow rate, net heating value, emission rates of TOC, VOC, and halogen atoms, each based on the average of three runs, for the determination of the TRE index value of a process vent.
- (51) "Vent stream" means the gas stream flowing through the process vent.
- (52) "Visible emission" means the observation of an emission of opacity or optical density above the threshold of vision.
- (W) As used in rule 3745-21-14 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-14 of the Administrative Code (pertaining to "Control of Volatile Organic Compound Emissions from Batch Operations").

- (1) "Aggregate" means the summation of all process vents containing VOC within a process.
- (2) "Batch operation" means a noncontinuous operation in which a discrete quantity or batch of feed is charged into a unit operation within a batch process train and processed at one time. Batch operation includes noncontinuous operations in which the equipment is fed intermittently or discontinuously. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. After each batch operation, the equipment is generally emptied before a fresh batch is started.
- (3) "Batch cycle" means a manufacturing event of an intermediate or product from start to finish in a batch process train.
- (4) "Batch process train" means the collection of equipment (e.g., reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks and product separators) configured to produce a specific product or intermediate by a batch operation. A batch process train

terminates at the point of storage or product handling of the product or intermediate being produced in the batch process train. Irrespective of the product being produced, a batch process train which is independent of other processes shall be considered a single batch process train for purposes this rule.

- (5) "Boiler" means any enclosed combustion device that extracts useful energy in the form of steam.
- (6) "Btu" means British thermal unit.
- (7) "Continuous recorder" means a data recording device that either records an instantaneous data value at least once every fifteen minutes or records fifteen-minute or more frequent block average values.
- (8) "Control device" means any device or combination of devices designed to recover or destroy VOC vapors received from the process vents. A recovery device which is a required part of the process, for example, but not limited to, condensers operating under reflux conditions, is not a control device.
- (9) "Emission event" shall be defined as a discrete period of venting that is associated with a unit operation. For example, a displacement of vapor resulting from the charging of a unit operation with VOC will result in a discrete emission event that will last through the duration of the charge and will have an average flow rate equal to the rate of the charge. The expulsion of expanded unit operation vapor space when the vessel is heated is also an emission event. Both of these examples of emission events and others may occur in the same unit operation during the course of the batch cycle. If the flow rate measurement for any discrete period of venting is zero, then such event is not an emission event for purposes of rule 3745-21-14 of the Administrative Code.
- (10) "Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.
- (11) "Incinerator" means any enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one section; rather, the energy recovery system is a separate section following the combustion section and the two are joined by ducting or connections that carry fuel gas.

- (12) "MmHg" means millimeters of mercury.
- (13) "Permit" means a permit issued by the director pursuant to Chapter 3745-31, 3745-35, or 3745-77 of the Administrative Code.
- (14) "Ppmv" means parts per million by volume.
- (15) "Process vent" means a vent gas stream that is discharged from a unit operation or multiple unit operations within the same batch process train that are manifolded together into a common header. A process vent begins at the inlet to the control device prior to mixing with vent gas streams from other process trains or unrelated operations, or in the absence of a control device, at the point of discharge to the atmosphere. Not included in this definition are exhaust streams from exhaust hood and building ventilation fans which are used to provide ventilation for workers and not to collect and discharge emissions from specific unit operations. Process vents exclude relief valve discharges, leaks from equipment, vents from storage tanks, vents from transfer or loading operations, and vents from wastewater.
- (16) "Recovery device" means an individual unit of equipment, such as an absorber, carbon adsorber, or condenser, capable of and used for the purpose of recovering chemicals for use, reuse, or sale.
- (17) "Recovery system" means an individual recovery device or series of such devices applied to the same vent stream.
- (18) "Standard industrial classification code" (also denoted as "SIC code") means a series of four-digit codes devised by the office of management and budget (OMB) of the federal government to classify establishments according to the type of economic activity in which they are engaged.
- (19) "Scfm" means standard cubic feet per minute.
- (20) "Subject to this rule" means the facility has met the applicability criteria of paragraph (A)(1) of rule 3745-21-14 of the Administrative Code, or the batch process train is at a facility that has met the applicability criteria of paragraph (A)(1) of rule 3745-21-14 of the Administrative Code.
- (21) "Unit operation" means one or more pieces of process equipment used to make a single change to the physical or chemical characteristics of one or more process streams. Equipment used for these purposes includes, but is not

limited to, reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks, and product separators.

(22) "USEPA" means the United States Environmental Protection Agency, the Administrator of the USEPA, or his/her designee.

(X) As used in rule 3745-21-15 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-15 of the Administrative Code (pertaining to "Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations").

- (1) "Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives.
- (2) "Aerosol adhesive" means an adhesive that is dispensed from a pressurized container as a suspension of fine solid or liquid particles in gas.
- (3) "As applied" means the VOC and solids content of the coating that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the coating.
- (4) "Basecoat" means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials, and is usually topcoated for protection.
- (5) "Capture device" means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a control device such as an incinerator or carbon adsorber.
- (6) "Capture efficiency" means the fraction of all organic vapors generated by a process that are directed to a control device.
- (7) "Capture system" means one or more capture devices intended to collect emissions generated by a finishing operation in the use of finishing materials,

both at the point of application and at subsequent points where emissions from the finishing materials occur, such as flashoff, drying, or curing. Multiple capture devices that collect emissions generated by a finishing operation are considered a single capture system.

- (8) "Car-seal" means a seal that is placed on a device that is used to change the position of a valve (e.g., from opened to closed) in such a way that the position of the valve cannot be changed without breaking the seal.
- (9) "Certified product data sheet" (also denoted as "CPDS") means documentation furnished by a coating supplier or an outside laboratory that provides the VOC content in percent by weight, the solids content in percent by weight, other contents that may be of interest in percent by weight, and the density of a coating (finishing material or strippable stray booth material) or solvent, based on formulation data or measurement methods. For data based on a measurement method, the measurement method should be identified within the CPDS. The purpose of the CPDS is to assist the facility in demonstrating compliance with the emission limitations presented in paragraphs (D) and (E) of rule 3745-21-15 of the Administrative Code. Therefore, the VOC content should represent the maximum VOC emission potential of the coating or solvent. A CPDS includes, but is not limited to, technical data sheets, material specification sheets, material safety data sheets, and laboratory test reports pertaining to a coating or solvent.
- (10) "Cleaning operations" means operations in which organic solvent is used to remove coating materials from equipment used in wood furniture manufacturing operations.
- (11) "Coating" means a protective, decorative, or functional film applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, enamels, inks, and temporary protective coatings. Aerosol spray paints used for touch-up and repair are not considered coatings under rule 3745-21-15 of the Administrative Code.
- (12) "Coating operation" means those activities in which a coating is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.
- (13) "Compliant coating" means a finishing material or strippable spray booth material that meets the VOC content limits specified in paragraphs (D) and (E) of rule 3745-21-15 of the Administrative Code.

(14) "Continuous coater" means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor. Finishing materials that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

- (15) "Continuous compliance" means that the affected source is meeting the emission limitations and other requirements of the rule at all times and is fulfilling all monitoring and recordkeeping provisions of the rule in order to demonstrate compliance.
- (16) "Continuous recorder" means a data recording device that either records an instantaneous data value at least once every fifteen minutes or records fifteen-minute or more frequent block average values.
- (17) "Control device" means any equipment that reduces the quantity of an air pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery and includes, but is not limited to, thermal oxidizers, catalytic oxidizers, regenerative carbon adsorbers, and concentrators.
- (18) "Control device efficiency" means the ratio of the pollutant released by a control device and the pollutant introduced to the control device.
- (19) "Conventional air spray" means a spray coating method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than ten pounds per square inch (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.
- (20) "Day" means a period of twenty-four consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.
- (21) "Dip coater" means a finishing operation that applies finishing materials by means of dip coating onto furniture parts.
- (22) "Emission" means the release or discharge, whether directly or indirectly, of

VOC into the ambient air.

(23) "Enamel" means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or previously applied enamel coat. In some cases, another finishing material may be applied as a topcoat over the enamel. Under rule 3745-21-15 of the Administrative Code, an enamel is a topcoat.

- (24) "Finishing material" means a coating used in the wood furniture manufacturing industry. Such materials include, but are not limited to, stains, basecoats, washcoats, enamels, sealers, and topcoats. Under rule 3745-21-15 of the Administrative Code, adhesives and nonpermanent final finish materials shall not be considered finishing materials.
- (25) "Finishing operation" means those operations in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.
- (26) "Flow indicator" means a device that indicates whether gas flow is present in a vent stream.
- (27) "Gluing operation" means those operations in which adhesives are used to join components, for example, to apply a laminate to a wood substrate or foam to fabric.
- (28) "Monitoring device" means the total equipment used to measure and record (if applicable) process parameters.
- (29) "Natural draft opening" means any opening in a room, building, or total enclosure that remains open during operation of the finishing operation and that is not connected to a duct in which a fan is installed. The rate and direction of the natural draft across such an opening is a consequence of the difference in pressures on either side of the wall or barrier containing the opening.
- (30) "Noncompliant coating" means a finishing material or strippable spray booth material that has a VOC content greater than the VOC content limit specified in paragraphs (D) and (E) of rule 3745-21-15 of the Administrative Code.
- (31) "Nonpermanent final finish material" means a material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a surface over its lifetime to maintain or restore the reapplied material's

intended effect.

(32) "Operating parameter value" means a minimum or maximum value established for a control device, capture system, or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

- (33) "Organic monitoring device" means a device used to indicate the concentration level of organic compounds based on a detection principle such as infrared, photoionization, or thermal conductivity.
- (34) "Overall control efficiency" means the efficiency of a VOC emission control system, calculated as the product of the capture system and control device efficiencies, expressed as a percentage.
- (35) "Permanent total enclosure" (also denoted as "PTE") means a permanently installed enclosure that meets the criteria for a PTE in accordance with USEPA method 204 specified within paragraph (C)(3)(c) of rule 3745-21-10 of the Administrative Code, and that directs all the exhaust gases from the enclosure to a control device.
- (36) "Permit" means a permit issued by the director pursuant to Chapter 3745-31, 3745-35, or 3745-77 of the Administrative Code.
- (37) "Responsible official" has the meaning given to it in rule 3745-77-01 of the Administrative Code.
- (38) "Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Special purpose finishing materials that are used in some finishing systems to optimize aesthetics are not sealers.
- (39) "Solids" means the nonvolatile portion of the coating that makes up the dry film.
- (40) "Solvent" means a liquid used in a coating to dissolve or disperse constituents and/or to adjust viscosity. It evaporates during drying and does not become a part of the dried film.
- (41) "Stain" means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the

substrate. It includes, but is not limited to, nongrain raising stains, equalizer stains, prestains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

- (42) "Strippable spray booth material" means a coating that:
 - (a) is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;
 - (b) is subsequently peeled off and disposed; and
 - (c) reduces or eliminates the need to use VOC solvents to clean spray booth walls due to achieving the other two provisions of this definition.
- (43) "Subject to this rule" means the facility has met the applicability criteria of paragraph (A) of rule 3745-21-15 of the Administrative Code.
- (44) "Substrate" means the surface onto which a coating is applied (or into which a coating is impregnated).
- (45) "Temperature monitoring device" means a unit of equipment used to monitor temperature and having a minimum accuracy of +/- 1 percent of the temperature being monitored expressed in degrees Celsius or +/- 0.5 degree Celsius, whichever is greater.
- (46) "Thinner" means a volatile liquid that is used to dilute coatings (to reduce viscosity, color strength, and solids, or to modify drying conditions).
- (47) "Topcoat" means the last film-building finishing material that is applied in a finishing system. Nonpermanent final finishes are not topcoats.
- (48) "Touchup and repair" means the application of finishing materials to cover minor finishing imperfections.
- (49) "VOC emission control system " means the combination of capture and control devices used to reduce VOC emissions to the atmosphere.
- (50) "VOC solvent" means a VOC liquid used for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, or cleaning equipment. When used in a coating, the VOC solvent evaporates during drying and does not become a part of the dried film.

(51) "Washcoat" means a transparent special purpose finishing material having a solids content by weight of 12.0 percent by weight or less. Washcoats are applied over initial stains to protect, to control color, and to stiffen the wood fibers in order to aid sanding.

- (52) "Washoff operations" means those operations in which VOC solvent is used to remove coating from wood furniture or a wood furniture component.
- (53) "Wood furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification (SIC) codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.
- (54) "Wood furniture component" means any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. However, foam seat cushions manufactured and fabricated at a facility that does not engage in any other wood furniture or wood furniture component manufacturing operation are excluded from this definition.
- (55) "Wood furniture manufacturing operations" means the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.
- (Y) As used in rule 3745-21-16 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-16 of the Administrative Code (pertaining to "Control of Volatile Organic Compound Emissions from Industrial Wastewater").

- (1) "Affected industrial category" means any of the following industrial categories:
 - (a) Organic chemicals, plastics, and synthetic fibers manufacturing industry under standard industrial classification (SIC) codes 2821, 2823, 2824, 2865, and 2869.
 - (b) Pesticides manufacturing industry under SIC code 2879.

(c) Pharmaceutical manufacturing industry under SIC codes 2833, 2834, and 2836.

- (d) Hazardous waste treatment, storage, and disposal facilities industry under SIC codes 4952, 4953, and 4959.
- (2) "Affected residual" means a residual that is removed from an affected VOC wastewater stream.
- (3) "Affected VOC" means VOC with a Henry's Law Constant greater than or equal to 1.8×10^{-6} atm-m³/mole (0.1 y/x) at twenty-five degrees Celsius.
- (4) "Affected VOC wastewater stream" means a process wastewater stream from a process unit at an affected industrial category with either an annual average concentration of affected VOC greater than or equal to ten thousand parts per million by weight (ppmw) or an annual average concentration of affected VOC greater than or equal to one thousand ppmw and an annual average flow rate greater than or equal to 10.0 liters per minute (2.64 gallons per minute), as determined in accordance with paragraph (I) of rule 3745-21-16 of the Administrative Code (relating to "Determination of Wastewater Characteristics"). The following are excluded from this definition:
 - (a) maintenance wastewaters;
 - (b) stormwater from segregated sewers;
 - (c) Water from fire-fighting and deluge systems, including testing of such systems;
 - (d) Spills;
 - (e) Water from safety showers;
 - (f) Samples of a size not greater than reasonably necessary for the method of analysis that is used;
 - (g) Equipment leaks;
 - (h) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and

- (i) Noncontact cooling water.
- (5) "Annual average concentration" means the flow-weighted annual average concentration, as determined according to the procedures specified 40 CFR 60.782(b).
- (6) "Annual average flow rate" means the annual average flow rate, as determined according to the procedures specified in paragraph (I) of rule 3745-21-16 of the Administrative Code.
- (7) "Closed biological treatment process" means a tank or surface impoundment where biological treatment occurs and VOC emissions from the treatment process are routed either to a control device by means of a closed vent system or to a fuel gas system by means of hard-piping. The tank or surface impoundment has a fixed roof, as defined in this rule, or a floating flexible membrane cover that meets the requirements specified in paragraph (I) of rule 3745-21-16 of the Administrative Code.
- (8) "Closed-vent system" means a system that is not open to the atmosphere and is composed of hard-piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device.
- (9) "Combustion device" means an individual unit of equipment, such as a flare, incinerator, process heater, or boiler, used for the combustion of volatile organic compound emissions.
- (10) "Continuous seal" means a seal that forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof. A continuous seal may be a vapor-mounted, liquid-mounted, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.
- (11) "Continuously monitor and record" means to measure data values of a parameter at least once every fifteen minutes and to record either each measured data value or block average values for a fifteen-minute or shorter time period. A block average value is the average of all measured data values during the time period; or if data values are measured more frequently than once per minute, the average of measured data values taken at least once per minute during the time period.
- (12) "Control device means" any combustion device, recovery device for vapor

vents, or recapture device. Such equipment includes, but is not limited to, absorbers, carbon adsorbers, condensers, incinerators, flares, boilers, and process heaters. For a steam stripper, a primary condenser is not considered a control device.

- (13) "Cover" means a device or system which is placed on or over a waste management unit containing wastewater or residuals so that the entire surface area is enclosed to minimize air VOC emissions. A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit such as access hatches, sampling ports, and gauge wells provided that each opening is closed when not in use. Examples of covers include a fixed roof installed on a wastewater tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.
- (14) "Ductwork" means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.
- (15) "Enhanced biological treatment process" means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than one kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) by either submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.
- (16) "External floating roof" means a pontoon-type or double-deck-type cover that rests on the liquid surface in a storage vessel or waste management unit with no fixed roof.
- (17) "Fixed roof" means a cover that is mounted on a waste management unit or storage vessel in a stationary manner and that does not move with fluctuations in liquid level.
- (18) "Floating roof" means a cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and waste management unit.

- (19) "Fbio" means site-specific fraction of VOC biodegraded, unitless.
- (20) "Fe" means fraction emitted value, unitless.
- (21) "Fm" means compound-specific fraction measured factor, unitless.
- (22) "Fr" means fraction removed value for VOC, unitless.
- (23) "Fuel gas system" means the off-site and on-site piping and control system that gathers gaseous stream(s) generated by on-site operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in in-process combustion equipment such as furnaces and gas turbines, either singly or in combination.
- (24) "Hard-piping" means pipe or tubing that is manufactured and properly installed using good engineering judgment and standards, such as ANSI B31-3.
- (25) "Incinerator" means an enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one manufactured or assembled unit with the combustion section; rather, the energy recovery section is a separate section following the combustion section and the two are joined by ducts or connections carrying flue gas. The above energy recovery section limitation does not apply to an energy recovery section used solely to preheat the incoming vent stream or combustion air.
- (26) "Individual drain system" means the stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. The term includes hard-piping, all process drains and junction boxes, together with their associated sewer lines and other junction boxes, manholes, sumps, and lift stations, conveying wastewater streams or residuals. A segregated storm water sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall-runoff at a facility, and which is segregated from all other individual drain systems, is excluded from this definition.
- (27) "Internal floating roof" means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it) inside a waste management unit that has a fixed roof.

(28) "Junction box" means a manhole or a lift station, or access point to a wastewater sewer line.

- (29) "Liquid-mounted seal" means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.
- (30) "Maintenance wastewater" means wastewater generated by the draining of process fluid from components in the process unit into an individual drain system prior to or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Any generation of wastewater that is routine or is generated by designed manufacturing processes is not maintenance wastewater. Examples of activities that can generate maintenance wastewaters include descaling 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 process unit for repair.
- (31) "Maximum true vapor pressure" means the equilibrium partial pressure exerted by the organics in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the national weather service for liquids stored or transferred at the ambient temperature, as determined:
 - (a) in accordance with methods described in "American Petroleum Institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks;" or
 - (b) as obtained from standard reference texts; or
 - (c) as determined by the "American Society for Testing and Materials Method" (ASTM) D2879-97; or
 - (d) any other method approved by the director.
- (32) "Mechanical shoe seal" means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated

fabric (envelope) spans the annular space between the metal sheet and the floating roof.

- (33) "Oil-water separator" or "organic-water separator" means a waste management unit, used to separate oil or organics from water. An oil-water or organic-water separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to additional treatment units such as an air flotation unit, clarifier, or biological treatment unit. Examples of an oil-water or organic-water separator include, but are not limited to, an American Petroleum Institute separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.
- (34) "Open biological treatment process" means a biological treatment process that is not a closed biological treatment process as defined in this rule.
- (35) "Plant" means the same as facility.
- (36) "Point of generation" means the location where process wastewater exits a process unit.
- (37) "Point of determination" means each point where process wastewater exits a process unit.
- (38) "Pressure relief valve" means a valve used only to release an unplanned, non-routine discharge. A relief valve discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage.
- (39) "Process drain" means any opening (including a covered or controlled opening) that is installed or used to receive or convey wastewater into the wastewater system.
- (40) "Process unit" means the smallest set of process equipment that can operate independently and includes all operations necessary to achieve its process objective.
- (41) "Process wastewater" means wastewater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product,

or waste product. Examples are product tank drawdown or feed tank drawdown; water formed during a chemical reaction or used as a reactant; water used to wash impurities from organic products or reactants; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

- (42) "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.
- (43) "Recovery device" means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. 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 purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.
- (44) "Residual" means any liquid or solid material containing VOC that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organic compounds (nondestructive unit). Examples of residuals from nondestructive wastewater management units are: the organic layer and bottom residue removed by a decanter or organic-water separator and the overheads from a steam stripper or air stripper. Examples of materials which are not residuals are: silt; mud; leaves; bottoms from a steam stripper or air stripper; and sludges, ash, or other materials removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.
- (45) "Sewer line" means a lateral, trunk line, branch line, or other conduit including, but not limited to, grates, trenches, etc., used to convey wastewater streams or residuals to a downstream waste management unit.
- (46) "Single-seal system" means a floating roof having one continuous seal that completely covers the space between the wall of the storage vessel and the edge of the floating roof. This seal may be a vapor-mounted, liquid-mounted, or metallic shoe seal.

(47) "Steam jet ejector" means a steam nozzle which discharges a high-velocity jet across a suction chamber that is connected to the equipment to be evacuated.

- (48) "Steam stripper" means a column (including associated stripper feed tanks, condensers, or heat exchangers) used to remove compounds from wastewater.
- (49) "Surface impoundment" means a waste management unit which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or waste containing free liquids. A surface impoundment is used for the purpose of treating, storing, or disposing of wastewater or residuals, and is not an injection well. Examples of surface impoundments are equalization, settling, and aeration pits, ponds, and lagoons.
- (50) "Tank drawdown" means any material or mixture of materials discharged from a product tank, feed tank, or intermediate tank for the purpose of removing water or other contaminants from the tank.
- (51) "Temperature monitoring device" means a unit of equipment used to monitor temperature and having a minimum accuracy of (a) plus or minus one percent of the temperature being monitored expressed in degrees Celsius or (b) plus or minus 0.5 degree Celsius, whichever number is greater (i.e., has the highest absolute value).
- (52) "Treatment process" means a specific technique that removes or destroys the organics in a wastewater or residual stream such as a steam stripping unit (steam stripper), thin-film evaporation unit, waste incinerator, biological treatment unit, or any other process applied to wastewater streams or residuals to comply with paragraph (D)(8) or (E) of rule 3745-21-16 of the Administrative Code. Most treatment processes are conducted in tanks. Treatment processes are a subset of waste management units.
- (53) "USEPA" means the United States environmental protection agency, the administrator of the USEPA, or his/her designee.
- (54) "Vapor-mounted seal" means a continuous seal that completely covers the annular space between the wall of the storage vessel or waste management unit and the edge of the floating roof and is mounted such that there is a vapor space between the stored liquid and the bottom of the seal.
- (55) "Waste management unit" means the equipment, structure(s), 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 a process unit and is not a waste management unit.

- (56) "Wastewater stream" means a stream that contains process wastewater.
- (57) "Wastewater tank" means a stationary waste management unit that is designed to contain an accumulation of wastewater or residuals and is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support. Wastewater tanks used for flow equalization are included in this definition.
- (58) "Water seal controls" means a seal pot, p-leg trap, or other type of trap filled with water (e.g., flooded sewers that maintain water levels adequate to prevent air flow through the system) that creates a water barrier between the water level of the seal and the atmosphere. The water level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.
- (59) "Wet weather retention basin" means an impoundment or tank that is used to store rainfall runoff that would exceed the capacity of the wastewater treatment system until it can be returned to the wastewater treatment system or, if the water meets the applicable discharge limits, discharged without treatment. These units may also be used to store wastewater during periods when the wastewater treatment system is shut down for maintenance or emergencies.

(Z) As used in rule 3745-21-17 of the Administrative Code:

Except as otherwise provided in this paragraph, the definitions in rule 3745-15-01 of the Administrative Code and paragraph (B) of rule 3745-21-01 of the Administrative Code shall apply to rule 3745-21-17 of the Administrative Code (pertaining to Portable Fuel Containers).

- (1) "Fuel" means all gasoline, gasoline-alcohol mixtures or blends, diesel, kerosene or petroleum derivatives, having a true vapor pressure within the range of 1.5 to eleven pounds per square in absolute (psia) (10.3 to 75.6 kilonewtons/square meter) for use in internal combustion engines or aircraft.
- (2) "Manufacturer" means any person who imports, manufactures, assembles,

- packages, repackages, or re-labels a portable fuel container or spout or both portable fuel container and spout.
- (3) "Nominal capacity" means the volume indicated by the manufacturer that represents the maximum recommended filling level.
- (4) "Outboard engine" means a spark-ignition marine engine that, when properly mounted on a marine water-craft in the position to operate, houses the engine and drive unit external to the hull of the marine water-craft.
- (5) "Person" means any individual, public or private corporation, political subdivision, government agency, department or bureau of the State, municipality, industry, co-partnership, association, firm, estate or any legal entity whatsoever.
- (6) "Portable fuel container" means any container or vessel with a nominal capacity of ten gallons or less intended for reuse that is designed, or used, sold, advertised or offered for sale primarily for receiving, transporting, storing, and dispensing fuel or kerosene. Portable fuel containers do not include containers permanently embossed, or affixed with a permanent durable label with wording indicating such containers are solely intended for use with non-fuel or non-kerosene products.
- (7) "Spout" means any device that can be firmly attached to a portable fuel container for conducting pouring or fueling through which the contents of a portable fuel container can be dispensed.
- (8) "Target fuel tank" means any receptacle that receives fuel from a portable fuel container.
- (Z)(AA) Incorporation by reference. This chapter includes references to certain matter or materials. The text of the incorporated materials is not included in the regulations contained in this chapter. The materials are hereby made a part of the regulations in this chapter. For materials subject to change, only the specific version specified in the regulation are incorporated. Material is incorporated as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not incorporated unless and until this rule has been amended to specify the new dates.
 - (1) Availability. The materials incorporated by reference are available as follows:
 - (a) "American National Standards Institute" (ANSI). Information and copies of publications may be obtained by writing to: Global Engineering Documents 15 Inverness Way, East Englewood, CO 80112.

Publications are also available for ordering at http://webstore.ansi.org/ansidocstore/default.asp. The ANSI publications are also available for inspection and copying at most public libraries and "The State Library of Ohio."

- (b) "American Petroleum Institute" (API). Information and copies of publications may be obtained by writing to: "API Publications Global Engineering Documents, 15 Inverness Way East, M/S C303B, Englewood, CO 80112-5776." Publications are also available for ordering at www.global.ihs.com. The API publications are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (c) "American Society for Testing Materials" (ASTM). Information and copies of documents may be obtained by writing to: "ASTM International, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19426-2959." These documents are also available for purchase at www.astm.org. ASTM documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (d) "Architectural Aluminum Manufacturers Association" (AAMA). Information and copies of documents may be obtained by writing to: "AAMA, 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173." These documents area also available for purchase at www.aamanet.org. AAMA documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (e) "California air resources board (CARB)" certification. Information and copies of Information and copies of executive orders, approval letters, equipment advisories, certification procedures and equivalent test procedures may be obtained by writing to: "California Air Resources Board, Monitoring and Laboratory Division, P.O. Box 2815, Sacramento, CA, 95812-2815" or by calling (916) 327-0900. The full text of all CARB certification documents are also available in electronic format at http://www.arb.ca.gov/vapor/vapor.htm."
- (f) "California Code of Regulations." Copies of regulations may be obtained by writing to: "West Customer Service, P.O. Box 64833, St. Paul, MN 55164-0833" or by calling 1-800-888-3600. The full text of regulations are also available in electronic format at http://ccr.oal.ca.gov/."
- (g) Clean Air Act as defined in this rule. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of

the Act as amended in 1990 is also available in electronic format at www.epa.gov/oar/caa/. A copy of the Act is also available for inspection and copying at most public libraries and "The State Library of Ohio."

- (e)(h) "Code of Federal Regulations" (CFR). Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the CFR is also available in electronic format at www.access.gpo.gov/nara/cfr/. The CFR compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (f)(i) "Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry." Information and copies may be obtained by writing to: "U.S. EPA/NSCEP, P.O. Box 42419, Cincinnati, Ohio 45242-0419." This document is also available for ordering at http://yosemite.epa.gov/ncepihom/nsCatalog.nsf/SearchPubs?OpenForm. A copy of the this document is also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (g)(j) "Federal Register" (FR). Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." Online access to the Federal Register is available at http://www.gpoaccess.gov/nara/index.html. A copy of the Federal Register is also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (h)(k) "Methods and Guidance for Analysis of Water." Information and copies may be ordered by writing to: "National Technical Information Service, Springfield, Virginia, 22161." or by calling 1-703-605-6000. This document is also available for ordering at http://www.ntis.gov/index.asp. A copy of the document is also available for inspection and copying at most public libraries and "The State Library of Ohio".
- (1) National Fire Protection Association. Information on the National Fire Protection Association codes may be obtained by contacting the association at 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, 617-770-3000. Codes may be ordered on line at www.nfpa.org/catalog/home/index.asp. Copies of the code are available at most public libraries and "The State Library of Ohio."

(m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations." EPA 450-3-88-018. Information and copies may be ordered by writing to: "US EPA Office of Air Quality Planning and Standards (OAQPS) TTN EMC, Research Triangle Park, NC 27711 " or by calling 1-919-541-5233. A copy of protocol is also available for inspection and copying at most public libraries and "The State Library of Ohio."

- (i)(n) "Standard Industrial Classification Manual" (SICM). Information and copies may be ordered by writing to: "U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia, 22161." or by calling 1-800-553-6847. A copy of the manual is also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (j)(o) "Standard Methods for the Examination of Water and Wastewater." Information and copies may be ordered by writing to: "American Public Health Association, Publications Sales, PO Box 753, Waldorf, MD 20604-0753." or by calling 1-301-893-1894. This document is also available for ordering at www.apha.org. A copy of the document is also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (k)(p) "SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." These documents area also available in electronic format at http://www.epa.gov/epaoswer/hazwaste/test/main.htm. SW-846 methods are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (<u>h)(q)</u> USEPA-approved alternative test methods. Information and copies may be obtained by writing to: "Source Measurement Technology Group Emission Measurement Center, U.S. EPA (D205-02), Research Triangle Park, NC 27711. These documents area also available in electronic format at http://www.epa.gov/ttnemc01/approalt.html. Alternative test methods are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (m)(r) USEPA conditional test method. Information and copies may be obtained by writing to: "Source Measurement Technology Group

Emission Measurement Center, U.S. EPA (D205-02), Research Triangle Park, NC 27711. These documents area also available in electronic format at Conditional test methods are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(n)(s) WATER9 is a Windows based computer wastewater treatment model. A copy of the program can be obtained by writing to: "US EPA Office of Air Quality Planning and Standards (OAQPS), Info CHIEF Help Desk, Mail Code D205-01, Research Triangle Park, NC 27711;" or calling 1-919-541-5610. This model is also available for downloading at http://www.epa.gov/ttn/chief/software/water/.

(2) Incorporated materials.

- (a) 29 CFR 1926, Subpart F; "Fire Protection and Prevention;" 44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 51 FR 25318, July 11, 1986; 58 FR 35162, June 30, 1993; 61 FR 31432, June 20, 1996; 63 FR 33469, June 18, 1998.
- (b) 40 CFR 60.13; "Monitoring requirements;" 40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000; 66 FR 44980, Aug. 27, 2001.
- (a)(c) 40 CFR 60.18(b); "General control device requirements;" 51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000.
- (b)(d) 40 CFR 63.134; "Process wastewater provisions--surface impoundments;" 62 FR 2754, Jan. 17, 1997, as amended at 64 FR 20191, Apr. 26, 1999.
- (e)(e) 40 CFR 264.228; "Closure and post-closure care;" 47 FR 32357, July 26, 1982, as amended at 50 FR 28748, July 15, 1985; 57 FR 3488, Jan. 29, 1992.
- (d)(f) 40 CFR 268.4; "Treatment surface impoundment exemption;" 51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25788, July 8, 1987; 53 FR 31212, Aug. 17, 1988; 62 FR 26019, May

- 12, 1997; 63 FR 28639, May 26, 1998.
- (e)(g) 40 CFR Part 60, appendix A; "Standards of Performance for New Stationary Sources;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (f)(h) 40 CFR Part 60, appendix J; proposed December 9, 1998; 63 FR 67988.
- (g)(i) 40 CFR Part 60, subpart BBB; "Standards of Performance for the Rubber Tire Manufacturing Industry;" 52 FR 34874, Sept. 15, 1987, as amended at 52 FR 37874, Oct. 9, 1987; 54 FR 38635-38638, Sept. 19, 1989; 65 FR 61764-61765, Oct. 17, 2000.
- (h)(j) 40 CFR Part 60, subpart III; "Standards of Performance for New Stationary Sources, Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes;" 55 FR 26922, June 29, 1990; as amended at 55 FR 26922, June 29, 1990; 55 FR 36932, Sept. 7, 1990; 65 FR 61769-61773, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000.
- (i)(k) 40 CFR Part 60, subpart NNN; "Standards of Performance for New Stationary Sources, Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations;" 55 FR 26922-26942, June 29, 1990 as amended at; 55 FR 36932, Sept. 7, 1990; 60 FR 58237, Nov. 27, 1995; 55 FR 26942, June 29, 2000; 65 FR 61774-61778, Oct. 17, 2000; 65 FR 78279, Dec. 14, 2000.
- (j)(1) 40 CFR Part 60, subpart RRR; "Standards of Performance for New Stationary Sources, Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes;" 58 FR 45962, Aug. 31, 1993 as amended at 60 FR 58238, Nov. 27, 1995; 65 FR 61778, Oct. 17, 2000; 65 FR 78279, Dec. 14, 2000.
- (k)(m) 40 CFR Part 63; "National Emission Standards for Hazardous Air Pollutants for Source Categories;" as published in the July 1, 2004 2005Code of Federal Regulations.
- (1)(n) 40 CFR Part 63, subpart G; "National emissions standards for hazardous air pollutants from the synthetic organic chemical

- manufacturing industry for process vents, storage vessels, transfer operations, and wastewater;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (m)(o) 40 CFR Part 63, subpart G, section 63.115; "Process vent provisions--methods and procedures for process vent group determination;" 59 FR 19468, Apr. 22, 1994, as amended at 62 FR 2746, Jan. 17, 1997; 66 FR 6931, Jan. 22, 2001.
- (n)(p) 40 CFR Part 63, subpart T; "National Emission Standards for Halogenated Solvent Cleaning;" 59 FR 61805-61818, Dec. 2, 1994; 59 FR 67750, Dec. 30, 1994, as amended at 60 FR 29485, June 5, 1995; 63 FR 24751, May 5, 1998; 63 FR 68400, Dec. 11, 1998; 64 FR 67798-67802, Dec. 3, 1999; 64 FR 69643, Dec. 14, 1999; 65 FR 54422-54423, Sept. 8, 2000; 68 FR 37349, June 23, 2003.
- (o)(q) 40 CFR Part 63, subpart JJ, section 63.801; "National Emission Standards for Wood Furniture Manufacturing Operations, Definitions; 60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30260, June 3, 1997; 62 FR 31363, June 9, 1997; 63 FR 71380, Dec. 28, 1998.
- (p)(r) 40 CFR Part 63, subpart JJ, section 63.803; "National Emission Standards for Wood Furniture Manufacturing Operations, Work Practice Standards; "60 FR 62936, Dec. 7, 1995, as amended at 63 FR 71380, Dec. 28, 1998; 68 FR 37353, June 23, 2003.
- (q)(s) 40 CFR Part 63, subpart JJJ; "National emissions standards for hazardous air pollutants: group IV polymers and resins;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (r)(t) 40 CFR Part 63, subpart FFFF; "National emission standards for hazardous air pollutants: miscellaneous organic chemical manufacturing;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (s)(u) 40 CFR Part 136; "Guidelines Establishing Test Procedures for the Analysis of Pollutants;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (t)(v) 40 CFR Part 122; "EPA Administered Permit Programs: The National Pollutant Discharge Elimination System;" as published in the July 1, 2004 2005 Code of Federal Regulations.

(u)(w) 40 CFR Part 144; "Underground Injection Control Program;" as published in the July 1, 2004 2005 Code of Federal Regulations.

- (v)(x) 40 CFR Part 261; "Identification and Listing of Hazardous Waste;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (w)(y) 40 CFR Part 264, subpart O; "Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities; Incinerators;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (x)(z) 40 CFR Part 265, subpart O; "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities; Incinerators;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (y)(aa) 40 CFR Part 266, subpart H; "Hazardous Waste Burned in Boilers and Industrial Furnaces;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (z)(bb) 40 CFR Part 270; "EPA Administered Permit Programs: The Hazardous Waste Permit Program;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (aa)(cc) "American Petroleum Institute Publication 2517;" "Evaporation Loss from External Floating-Roof Tanks;" second edition, 2003.
- (bb)(dd) AAMA 2605-02; "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels;" undated.
- (ee) (ee) ANSI B31-3; "Process Piping;" February 14, 2002.
- (dd)(ff) APHA method 2540D; contained in "Standard Methods for the Examination of Water and Wastewater;" 20th Edition, 1998.
- (ee)(gg) APHA method 5310D; contained in "Standard Methods for the Examination of Water and Wastewater;" 20th Edition, 1998.
- (hh) ASTM D97-04; "Standard Test Method for Pour Point of Petroleum Products"; undated.

(ii) ASTM D244-04; "Standard Test Methods for Testing Emulsified Asphalt"; undated.

- (ff)(jj) ASTM D323-99a; "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method);" undated.
- (gg)(kk) ASTM D1979-97; "Standard Test Method for Free Formaldehyde Content of Amino Resins;" undated.
- (hh)(ll) ASTM D2879-97; "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope;" 2002.
- (ii) ASTM D2879-97; "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope;" 2002
- (jj)(mm) ASTM D3203-94; "Standard Test Methods for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures;" 2000.
- (kk)(nn) ASTM D4953-99a; "Standard Specification for Low Silicate Ethylene Glycol Base Engine Coolant for Heavy Duty Engines Requiring a Pre-Charge of Supplemental Coolant Additive (SCA);" undated.
- (II)(oo) ASTM D5190-01; "Standard Test Method for Vapor Pressure of Petroleum Products (Automatic Method);" undated.
- (mm)(pp) ASTM D5191-04a; "Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method);" undated.
- (nn)(qq) ASTM D5910-96; "Standard Test Method for Determination of Free Formaldehyde in Emulsion Polymers by Liquid Chromatography;" undated.
- (00)(rr) ASTM D6191-97; "Standard Test Method for Measurement of Evolved Formaldehyde from Water Reducible Air-Dry Coatings;" 2003.
- (pp)(ss) ASTM D6897-03a; "Standard Test Method for Vapor Pressure of Liquefied Petroleum Gases (LPG) (Expansion Method);" undated.

(qq)(tt) ASTM D6902-04e1; "Standard Test Method for Laboratory Measurement of Formaldehyde Evolved During the Curing of Melamine-Formaldehyde-Based Coatings;" undated.

- (uu) ASTM F976-02; "Standard Specification for Portable Kerosene Containers for Consumer Use;" undated.
- (vv) ASTM F852-99e1; "Standard Specification for Portable Gasoline Containers for Consumer Use;" undated.
- (ww) ASTM F2234-03; "Standard Specification for Portable Gasoline and Kerosine Spill Resistant Fueling Systems for Consumer Use;" undated.
- (xx) Clean Air Act, as amended Nov.15, 1990; Pub.L. 101-549.
- (rr)(yy) "Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry;" EPA-45-/4-91-031; August 1993.
- (ss)(zz) "Early Reduction Program;" 57 Federal Register 61970; December 29, 1992.
- (tt)(aaa) "Methods for the Chemical Analysis of Water and Wastes;" EPA Report Number: EPA/821/C-99/004; published 5/01/99.
- (bbb) NFPA 30B; "Code for the Manufacture and Storage of Aerosol Products;" 2002 Edition.
- (ccc) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations;" EPA 450-3-88-018; December 1988.
- (uu)(ddd) "Standard Industrial Classification Manual." United States. Office of Management and Budget. Last amended 1988.
- (vv)(eee) "Standard Methods for the Examination of Water and Wastewater;" 20th Edition, published 1998.
- (ww)(fff) SW-846; "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;" last updated December 1996.

- (xx)(ggg) SW-846 Method 3810; "Headspace;" Revision 0, September 1986.
- (yy)(hhh) SW-846 Method 5030B; "Purge-and-trap for Aqueous Samples;" Revision 2, December 1996.
- (zz)(iii) SW-846 Method 8015B; "Nonhalogenated Organics Using GC/FID;" Revision 2, December 1996.
- (aaa)(jjj) SW-846 Method 8021B; "Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors;" Revision 2, December 1996.
- (bbb)(kkk) SW-846 Method 8260B; "Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS);" Revision 2, December 1996.
- (ece)(III) SW-846 Method 9060; "Total Organic Carbon;" Revision 0, September 1986.
- (ddd)(mmm) USEPA-approved alternative test method ALT-020; "Negative Pressure Enclosure Qualitative Test Method for Bakery Ovens;" posted November 15, 2000.
- (eee)(nnn) USEPA conditional test method CTM-042; "Use of Flame Ionization Detector-Methane Cutter Analysis Systems for VOC Compliance Testing of Bakeries;" revised August 18, 2004; posted September 3, 2004.
- (fff)(ooo) USEPA method 1; contained in 40 CFR part 60, appendix A; "Sample and velocity traverses for stationary sources;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (ggg)(ppp) USEPA method 2; contained in 40 CFR part 60, appendix A; "Determination of stack gas velocity and volumetric flow rate (Type S pitot tube);" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (hhh)(qqq) USEPA method 2A; contained in 40 CFR part 60, appendix A; "Direct measurement of gas volume through pipes and small ducts;" as published in the July 1, 2004 2005 Code of Federal Regulations.

(iii)(rrr) USEPA method 2B; contained in 40 CFR part 60, appendix A; "Determination of exhaust gas volume flow rate from gasoline vapor incinerators;" as published in the July 1, 2004 2005 Code of Federal Regulations.

- (jjj)(sss) USEPA method 2C; contained in 40 CFR part 60, appendix A; "Determination of gas velocity and volumetric flow rate in small stacks or ducts (standard pilot tube);" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (kkk)(ttt) USEPA method 2D; contained in 40 CFR part 60, appendix A; "Measurement of gas volume flow rates in small pipes and ducts;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (III)(uuu) USEPA method 3; contained in 40 CFR part 60, appendix A; "Gas analysis for the determination of dry molecular weight;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (mmm)(vvv) USEPA method 3B; contained in 40 CFR part 60, appendix A; "Gas analysis for the determination of emission rate correction factor or excess air;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (nnn)(www) USEPA method 4; contained in 40 CFR part 60, appendix A; "Determination of moisture content in stack gases;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (000)(xxx) USEPA method 18; contained in 40 CFR part 60, appendix A; "Measurement of Gaseous Organic Compound Emissions By Gas Chromatograph;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (ppp)(yyy) USEPA method 21; contained in 40 CFR part 60, appendix A; "Determination of volatile organic compound leaks;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (zzz) USEPA method 22; contained in 40 CFR part 60, appendix A; "Visual determination of fugitive emissions from material sources and smoke emissions from flares;" as published in the July 1, 2005 Code of Federal Regulations.
- (qqq)(aaaa) USEPA method 24; "Determination of volatile matter content,

- water content, density, volume solids, and weight solids of surface coatings;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (bbbb) USEPA method 24A; contained in 40 CFR part 60, appendix A; "Determination of volatile matter content and density of printing inks and related coatings;" as published in the July 1, 2005 Code of Federal Regulations.
- (rrr)(cccc) USEPA method 25; contained in 40 CFR part 60, appendix A; "Determination of total gaseous nonmethane organic emissions as carbon;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (sss)(dddd) USEPA method 25A; contained in 40 CFR part 60, appendix A; "Determination of volatile matter content and density of printing inks and related coatings;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (ttt)(eeee) USEPA method 25B; contained in 40 CFR part 60, appendix A; "Determination of total gaseous organic concentration using a nondispersive infrared analyzer;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (uuu)(ffff) USEPA method 25D; contained in 40 CFR part 60, appendix A; "Determination of the Volatile Organic Concentration of Waste Samples;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (vvv)(gggg) USEPA method 26; contained in 40 CFR part 60, appendix A; "Determination of Hydrogen Chloride Emissions From Stationary Sources;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (www)(hhhh) USEPA method 26A; contained in 40 CFR part 60, appendix A; "Determination of hydrogen halide and halogen emissions from stationary sources-isokinetic method;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (xxx)(iiii) USEPA method 160.2 contained in "Methods for Chemical Analysis of Water and Wastes;" contained in "Methods and Guidance for Analysis of Water;" EPA Report Number: EPA/821/C-99/004; published 5/01/99.

(yyy)(jijj) USEPA method 204; contained in 40 CFR part 51, appendix M; "Criteria for and Verification of a Permanent or Temporary Total Enclosure;" 59 FR 16715, Apr. 7, 1994.

- (zzz)(kkk) USEPA method 301; contained in 40 CFR part 63, appendix A; "Field Validation of Pollutant Measurement Methods from Various Waste Media;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (aaaa)(Ill1) USEPA method 305; contained in 40 CFR part 63, appendix A; "Measurement of Emission Potential of Individual Volatile Organic Compounds in Waste;" as published in the July 1, 2004 2005 Code of Federal Regulations.
- (bbbb)(mmmm) USEPA method 602; contained in 40 CFR part 136, appendix A; "Purgeable Aromatics;" 49 FR 43261, Oct. 26, 1984; 50 FR 692, 695, Jan. 4, 1985, as amended at 51 FR 23702, June 30, 1986; 62 FR 48405, Sept. 15, 1997; 65 FR 3044, Jan. 19, 2000; 65 FR 81295, 81298, Dec. 22, 2000.
- (eeee)(nnnn) USEPA method 624; contained in 40 CFR part 136, appendix A; "Purgeables;" 49 FR 43261, Oct. 26, 1984; 50 FR 692, 695, Jan. 4, 1985, as amended at 51 FR 23702, June 30, 1986; 62 FR 48405, Sept. 15, 1997; 65 FR 3044, Jan. 19, 2000; 65 FR 81295, 81298, Dec. 22, 2000.
- (dddd)(oooo) USEPA method 625; contained in 40 CFR part 136, appendix A; "Base/Neutrals and Acids;" 49 FR 43261, Oct. 26, 1984; 50 FR 692, 695, Jan. 4, 1985, as amended at 51 FR 23702, June 30, 1986; 62 FR 48405, Sept. 15, 1997; 65 FR 3044, Jan. 19, 2000; 65 FR 81295, 81298, Dec. 22, 2000.
- (eeee)(pppp) USEPA method 1624; contained in 40 CFR part 136, appendix A; "Volatile Organic Compounds by Isotope Dilution GC/MS;" 49 FR 43261, Oct. 26, 1984; 50 FR 692, 695, Jan. 4, 1985, as amended at 51 FR 23702, June 30, 1986; 62 FR 48405, Sept. 15, 1997; 65 FR 3044, Jan. 19, 2000; 65 FR 81295, 81298, Dec. 22, 2000.
- (ffff)(qqqq) USEPA method 1625; contained in 40 CFR part 136, appendix A; "Semivolatile Organic Compounds by Isotope Dilution GC/MS;" 49 FR 43261, Oct. 26, 1984; 50 FR 692, 695, Jan. 4, 1985, as amended at 51 FR 23702, June 30, 1986; 62 FR 48405, Sept. 15, 1997; 65 FR 3044,

Jan. 19, 2000; 65 FR 81295, 81298, Dec. 22, 2000.

(gggg)(rrrr) WATER9; version 2.0.0, August 16, 2001.

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