Kansas Administrative Regulations

Department of Health and Environment

Article 19.—Ambient Air Quality Standards and Air Pollution Control—Volatile Organic Compound Emissions.

28-19-61. Definitions.

The following words, terms and abbreviations are in addition to those defined in K.A.R. 28-19-7 and shall have the following meanings, unless the context clearly indicates otherwise:

(a) "Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser.

(b) "Affected facility" means facility or emission unit subject to an applicable regulation.

(c) "Air-dried coating" means coatings which are dried by the use of air or forced warm air at temperatures up to 194°F.

(d) "Asphalt prime coat" means an application of low viscosity liquid asphalt to an absorbent surface to prepare it for the application of an asphalt concrete surface.

(e) "ASTM" means the American society for testing and materials.

(f) "Automobile" means all passenger cars or passenger car derivatives capable of seating no more than 12 passengers.

(g) "Automobile and light duty truck body" means the body section rearward of the windshield and front-end sheet metal forward of the windshield of an automobile or light duty truck.

(h) "Automobile and light duty truck part" means a metal part intended to be attached to an automobile or light duty truck body for inclusion into a finished product for sale to vehicle dealers and to which surface coatings have been applied in the vehicle assembly plant.

(i) "Baseline transfer efficiency" means the transfer efficiency of coating applicators in use during the baseline period.

(1) Baseline transfer efficiencies have been established for use with volatile organic compounds (VOC) emission limits recommended in certain U.S. environmental protection agency (EPA) published control technique guidelines (CTG) documents.

(2) Baseline transfer efficiencies are:

(A) 30 percent for primer-surfacer coat and top coat operations in the automobile and light truck manufacturing industry; and

(B) 60 percent for surface coating operations in metal furniture manufacturing industries.

(3) Baseline transfer efficiency for surface coating in the metal parts and products manufacturing industry has not been established, however, the default value is 60 percent except where higher baseline transfer efficiencies are probable, as in dip or flow coating and spraying of interior surfaces. This default value will be used if the facility chooses not to test to determine a baseline transfer efficiency and insufficient information exists to determine an applicable baseline transfer efficiency.

(j) "Baseline period" means the 12-month period immediately preceding the date a facility becomes subject to applicable regulations.

(k) "Bottom filling" means the filling of a gasoline delivery vessel through an opening that is flush with the tank bottom, or filling of a stationary storage vessel through an opening near the bottom of the tank.

(l) "Bulk gasoline plant" means a gasoline storage and distribution facility with an average throughput of less than 20,000 gallons which receives gasoline from bulk terminals by trailer transport, stores it in tanks and subsequently dispenses it via account trucks to local farms, businesses and service stations.

(m) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by delivery vessels, and has an average daily throughput of more than 20,000 gallons of gasoline.

(n) "Carbon adsorption system" means a volatile organic compounds (VOC) emissions control device containing adsorbent material, including but not limited to activated carbon, alumina and silica gel, an inlet and outlet for exhaust gases and a

system to regenerate the saturated adsorbent. The carbon adsorption system shall provide for the proper disposal or reuse of all VOC adsorbed.

(o) "Clear coat" means a transparent coating which uses the undercoat as a reflectant base or undertone color.

(p) "Coating applicator" means any device or equipment designed for the purpose of applying a coating material to a surface. The devices or equipment may include, but not be limited to, sprayers, flow coaters, dip tanks, rollers, knife coaters, extrusion coaters and gravure devices.

(q) "Coating application system" means all operations and equipment within each line which apply, convey and dry a surface coating, including spray booths, flow coaters, flash-off areas, air dryers and ovens.

(r) "Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces with solvents by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

(s) "Condenser" means any heat transfer device used to liquefy vapors by removing their latent heat of vaporization. Such devices include shell and tube, coil, surface, or contact condensers.

(t) "Condensate" means hydrocarbon liquids which condensed due to changes in the temperature or pressure, or both, and which remain as a liquid.

(u) "Conveyorized degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

(v) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons or any sulfur, nitrogen or oxygen derivatives of hydrocarbons, or any combination of these compounds, and which is liquid at standard conditions.

(w) "Custody transfer" means the transfer of produced crude oil or condensate, or both, after processing or treating, or both, in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(x) "Cutback asphalt" means any asphalt cement which has been liquefied by blending with volatile organic compounds (VOC) liquid diluents.

(y) "Delivery vessel" means a tank truck or trailer that is equipped with a storage tank having a capacity greater than 1,000 gallons and that is used for transport of gasoline.

(z) "Emissions unit" means any part of a stationary facility which emits or would have the potential to emit any pollutant subject to regulation under the federal clean air act, 42 U.S.C. 7407 et seq., as amended August 7, 1977.

(aa) "Emulsified asphalt" means asphalt cement which has been liquefied by blending with water and an emulsifier containing seven percent or less by volume volatile organic compounds (VOC) as a diluent as determined by ASTM standard D-244, "Standard methods of testing emulsified asphalts," as in effect October 28, 1977.

(bb) "Exempt solvents" means those designated negligibly photochemically reactive compounds listed under definition of volatile organic compounds (VOC).

(cc) "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 volatile organic compounds (VOC) liquid being contained and which is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

(dd) "Extreme environmental conditions" means exposure to the weather all the time or to temperatures consistently above 203°F, or to detergents, abrasives, scouring agents, solvents, corrosive atmospheres or similar environmental conditions.

(ee) "Extreme performance coatings" means coatings designed for extreme environmental conditions.

(ff) "Facility" means any building, structure, installation, activity or all combinations thereof which contains a stationary source of air contaminants on the premises.

(gg) "Federally enforceable" means:

(1) All limitations and conditions that are enforceable by the administrator of the U.S. environmental protection agency;

(2) requirements of regulations included in the federally-approved Kansas implementation plan; and

(3) any permit requirements established pursuant to these requirements.

(hh) "Final repair" means the surface coatings applied to correct topcoat imperfections on a completely assembled vehicle.

(ii) "Firebox" means the chamber or compartment of a boiler or furnace in which fuels are burned, but does not mean the combustion chamber of an incinerator.

(jj) "Flash-off area" means the structure of an assembly line between an application area and oven where solvents applied with the coating material are evaporated.

(kk) "Flexographic printing" means a method of printing in which the image areas are raised above the non-image areas, and the image carrier is made of an elastomeric material.

(ll) "Forebay" means the primary sections of a waste water separator. Wastewater is a mixture of oil and water.

(mm) "Freeboard height" means the distance from the top of the vapor zone to the top of the degreaser tank.

(nn) "Freeboard ratio" means the freeboard height divided by the width of the degreaser.

(oo) "Gasoline" means any fuel sold in any state for use in motor vehicles and motor vehicle engines and commonly or commercially known or sold as gasoline.

(pp) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(qq) "Glass pull rate" means the mass of molten glass utilized in the manufacture of wood fiberglass insulation at a single manufacturing line in a specified time period.

(rr) "Heat sensitive materials" means materials which cannot consistently be exposed to temperatures greater than 203°F.

(ss) "Hot well" means the reservoir of a condensing unit receiving the warm condensate from the condenser.

(tt) "Internal floating roof" means a cover in a fixed roof tank which rests upon or is floated upon the volatile organic compounds (VOC) liquid being contained, and which is equipped with a sliding seal or seals to close the space between the edge of the covers and the tank shell.

(uu) "Light duty truck" means any motor vehicle rated at 8,500 pounds gross weight or less which is designed primarily for purpose of transportation of property, or a derivative of such a vehicle.

(vv) "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

(ww) "Loading rack" means the loading arms, pumps, meters, shut-off valves, relief valves and other piping and valves necessary to fill delivery vessels.

(xx) "Lower explosive limit (LEL)" means the concentration of a compound in air below which a flame will not propagate if the mixture is ignited.

(yy) "Low solvent coating" means a coating which contains less volatile organic compounds (VOC) solvent than the conventional solvent borne coatings used by the industry. Low solvent coating could include water-borne, higher solids and powder coatings.

(zz) "Miscellaneous metal parts and products" means those metal parts and products not otherwise specified and includes, but is not limited to: large farm machinery, small farm machinery, small appliances, commercial machinery, industrial machinery, fabricated metal products and any other industrial category which includes the coating of metal parts and products under standard industrial classification code of major groups 33 through 41 as listed in the standard industrial classification manual, 1972, U.S. office of management and budget.

(aaa) "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

(bbb) "Offset lithography" means the printing process in which the image and non-image areas are on the same plate and the image is transferred from a plate to a rubber blanket cylinder before being transferred to the substrate surface to be printed.

(ccc) "Open top vapor degreasing" means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(ddd) "Operator or owner" means any person who owns, leases, operates, controls or supervises an affected facility or a stationary source of which an affected facility is a part.

(eee) "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

(fff) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film and other substrates, which are, in subsequent operations, formed into packaging products and labels.

(ggg) "Petroleum liquids" means crude oil condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(hhh) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of crude oils, or through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

(iii) "Primer coat" means the initial coating applied to a surface.

(jjj) "Primer-surfacer coat" means the surface coating applied over the primer coat and beneath the top coat.

(kkk) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements and other types of printed materials.

(lll) "Purging" means the volatile organic compounds (VOC) cleaning material expelled from the coating applicator to maintain operating conditions or prior to using the same equipment for coating with different color or composition coatings.

(mmm) "Reasonably available control technology (RACT)" means the lowest emission limit of control technology that is reasonably available considering technological and economic feasibility.

(nnn) "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.

(ooo) "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids, except liquified petroleum gases, as determined by ASTM, D-323-82, as approved August 27, 1982, unless an alternative method is specifically required by regulation.

(ppp) "Roll printing" means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

(qqq) "Rotary spinning" means a process used to produce wool fiberglass insulation by forcing molten glass through numerous small orifices in the side wall of a spinner to form continuous glass fibers that are then broken into discrete lengths by high velocity air flow.

(rrr) "Rotogravure printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique which involves an intaglio or recessed image areas in the form of cells.

(sss) "Solvent" means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents.

(ttt) "Solvent-borne" means a coating which contains five percent or less water by weight in its volatile fraction.

(uuu) "Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning, open-top vapor degreasing or conveyorized degreasing.

(vvv) "Standard conditions" means a temperature of 68°F and pressure of 760 millimeters of mercury or 29.92 inches of mercury.

(www) "Submerged filling" means the filling of a storage tank or a delivery vessel tank through a pipe or hose discharging within six inches of the tank bottom.

(xxx) "Surface coat" means a protective, decorative or functional thin film applied to the surface of an object.

(yyy) "Surface coating of metal furniture" means the coating of any metal part which will be assembled with other metal, wood, fabric, plastic or glass parts to form business, institutional or household furniture.

(zzz) "Top coat" means the coating applied to a surface for the purpose of establishing color and surface appearance which includes both base coat and clear coat in base coat/clear coat operations.

(aaaa) "Transfer efficiency" means the amount of coating solids transferred onto the surface of a part or product divided by the total amount of coating solids used.

(bbbb) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American petroleum institute bulletin 2517, "evaporation loss from floating roof tanks," 1962. This information is available from the department upon written request.

(cccc) "Turnaround" means the procedure of shutting a refinery unit down after a run, to do necessary maintenance and repair work, and putting the unit back on stream.

(dddd) "Vacuum producing system" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from below atmospheric pressure and discharges against atmospheric pressure.

(eeee) "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.

(ffff) "Vapor collection system" means any equipment, including but not limited to, hoods and ventilation systems, that captures or contains displaced organic compounds vapors that they may be directed to a vapor processing system.

(gggg) "Vapor processing system" means all equipment used for recovery of oxidizing organic compound vapors displaced from an affected facility and generally includes a vapor collection system.

(hhhh) "Volatile organic compounds (VOC)" means any organic compound which participates in atmospheric photochemical reactions including any organic compound other than those which the department designates as having negligible photochemical reactivity. The department has designated the following organic compounds as negligibly reactive:

(1) methane;

(2) ethane;

(3) 1,1,1-trichloroethane (methyl chloroform);

(4) methylene chloride;

(5) trichlorofluoromethane (CFC-11);

(6) dichloro-difluoromethane (CFC-12);

(7) chlorodifluoromethane (CFC-22);

(8) trifluoromethane (CFC-23);

(9) trichlorotrifluoroethane (CFC-113);

(10) dichlorotetrafluoroethane (CFC-114);

(11) chloropentafluoroethane (CFC-115);

(12) dichlorotrifluoroethane (HCFC-123);

(13) tetrafluoroethane (HCFC-134a);

(14) dichlorofluoroethane (HCFC-141b); and

(15) chlorodifluoroethane (HCFC-142b).

(iiii) "Volume fraction solids" means the arithmetic value determined by dividing the volume of surface coating solids contained in specific volume of surface coating material by the volume of the surface coating material. Calculation of volume fraction solids shall be determined by method 24, 40 CFR Part 60, appendix A, as in effect July 1, 1985.

(jjjj) "Waste water separator" means any device or piece of equipment which utilizes the difference in density between oil and water to remove oil and associated chemicals from water, or any device, including but not limited to a flocculation tank, clarifier, or other similar device, which removes petroleum derived compounds from waste water.

(kkkk) "Waxy, heavy-pour crudes" means any crude oil with a pour point of 30°F or higher as determined by ASTM standard D-97-66, "test for pour point of petroleum oils," as in effect 1966, or with a Reid vapor pressure less than two pounds per square inch absolute as determined by ASTM standard D-323-82, "standard test method for vapor pressure of petroleum products (Reid method)," as in effect August 27, 1982.

(llll) "Wool fiberglass insulation" means a thermal insulation material composed of glass fibers and made from glass produced or melted at the same facility where the manufacturing line is located.

(mmmm) "Wool fiberglass manufacturing line" means the manufacturing equipment comprising the forming section, where molten glass is fiberized and a fiberglass mat is formed; the curing section, where the binder resin in the mat is thermally "set"; and the cooling section, where the mat is cooled.

(Authorized by K.S.A. 65-3005, 65-3010; effective, E-81-28, Sept. 10, 1980; effective May 1, 1981; amended May 1, 1987; amended, T-88-55, Dec. 16, 1987; amended May 1, 1988; amended Oct. 7, 1991.)

***** Authenticated Kansas Administrative Regulation *****