CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR POLLUTION CONTROL BOARD

# AIR MANAGEMENT REGULATION V

## CONTROL OF EMISSIONS OF ORGANIC SUBSTANCES FROM STATIONARY SOURCES

Approved by:

Air Pollution Control Board .....February 9, 1971

Board of Health.....March 3, 1971

Department of Law .....March 8, 1971

PUBLIC HEARING MAY 17, 1971

Reapproved:

Air Pollution Control Board .....June 8, 1971

Board of Health.....June 16, 1971

Approved by:

Department of Records .....July 10, 1971

(CONTAINING AMENDMENTS AND REVISIONS THROUGH APRIL 26, 2010)

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## SECTION I. DEFINITIONS

*Architectural Coating* - Any coating used for residential, commercial or industrial buildings and their appurtenances.

*Air Flask Specialty Coating* - A special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance and that is certified safe for use with breathing air supplies.

*Air Oxidation Unit Process* - A unit process, including ammoxidation and oxychlorination unit process, that uses air, or a combination of air and oxygen, as an oxygen source in combination with one or more organic reactants to produce one or more organic compounds.

*Air Oxidation Reactor* - Any device or process vessel in which one or more organic reactants are combined with air or a combination of air and oxygen to produce one or more organic compounds. Ammoxidation and oxychlorination are included in this definition.

*Air Oxidation Reactor Recovery Train* - An individual recovery system receiving the vent stream from one or more air oxidation reactors.

*Antenna Specialty Coating* - A coating applied to equipment on a vessel through which electromagnetic signals must pass for reception or transmission.

*Antifoulant Specialty Coating* - A coating that is:

1. Applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms; and

2. Registered with the EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act. (7 U.S.C. 136 et. seq.)

*Distillation Operation* - 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.

*Distillation Unit* - 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, stream jet, etc.), plus any associated recovery system.

*Electrostatic Application* - The application of charged atomized paint droplets which are deposited by electrostatic attraction.

*Gasoline* - Any petroleum distillate or petroleum distillate/oxygenate blend having a Reid Vapor Pressure of 4.0 pounds per square inch or greater and which is used as a motor vehicle fuel.

*Gasoline Dispensing Facility* - Any facility consisting of one or more stationary gasoline storage tanks together with dispensing devices used to fill motor vehicle fuel tanks.

*General Use Coating* - For the purposes of Section XV of this Regulation, any coating that is not a specialty coating listed in Section XV.B.2.

*Gun Cleaner* - A device made specifically to clean paint from spray guns which recirculates solvent to clean the guns a succession of times, and is vapor tight when in use.

*Heat-Resistant Specialty Coating* - Any coating that during normal use must withstand a temperature of at least 204°C (400°F)

*High-Gloss Specialty Coating* - A coating that achieves at least 85 percent reflectance on a 60 degree meter when tested by ASTM Method D-523.

*High-Temperature Specialty Coating* - A coating that during normal use will withstand a temperature of at least 426 $^{o}$C (800 $^{o}$F).

*High-Volume, Low Pressure (HVLP) Spray* - Equipment used to apply coatings by means of a gun which operates between 0.1 and 10 psig air pressure.

*Inorganic Zinc (High-Build) Specialty Coating* - A coating that contains 960 grams per liter (8 pounds per gallon) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance. (These coatings are typically applied at more than two mil dry film thickness.)

*Kerosine* - Any petroleum hydrocarbon which when distilled by ASTM standard test method D 86-67 will give a temperature of 401°F or less at 10 percent point recovered.

*Light- and Medium-duty Trucks and Vans* - Any truck or van having a manufacturer's gross vehicle weight rating of 10,000 pounds or less.

*Marine Vessel Coating Operation* - The application of coatings to a ship.

*Military Exterior Specialty Coating* - An exterior topcoat applied to military or U.S. Coast Guard ships that are subject to specific chemical, biological, and radiological wash down requirements.

*Mist Specialty Coating* - A low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to coating.

*Navigational Aids Specialty Coating* - A coating applied to Coast Guard buoys or other Coast Guard waterway markers when they are recoated aboard ship at their usage site and immediately returned to the water.

*Nonskid Specialty Coating* - A coating applied to the horizontal surfaces of a marine vessel for the specific purpose of providing slip resistance for personnel, vehicles, or aircraft.

*Nuclear Specialty Coating* - A protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure (ASTM D4082-83), relatively easy to decontaminate (ASTM D4256-83), and resistant to various chemicals to which the coatings are likely to be exposed (ASTM 3912-80). (For nuclear coatings, see the general protective requirements outlined by the U.S. Atomic Energy Commission in a report entitled "U.S. Atomic Energy Commission Regulatory Guide 1.54" dated June 1973, available through the Government Printing Office at (202) 512-249 as document number A74062-00001.)

*Oil-Effluent Water Separator* - Any tank, box, sump, or other container or group of such containers in which any organic material floating on, or entrained, or contained in water entering such containers is physically separated and removed from such water prior to the exit from the container of such water.

*Opacity* - The property of a substance which renders it partially or wholly obstructive to the transmission of visible light expressed as a percentage by which the light is obstructed.

*Organic Material* - Chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides and ammonium carbonates.

*Organic Zinc Specialty Coating* - A coating derived from zinc dust incorporated into an organic binder, that:

1. Contains more than 960 grams of elemental zinc per liter (8 pounds per gallon) of coating, as applied; and

2. Is used for the express purpose of corrosion protection.

*Overspray* - That solids portion of a coating sprayed from an applicator which fails to adhere to the part being sprayed. (Applied solids plus overspray solids equal total solids delivered by the spray application system.)

*Paint Spray Booth* - Any power-ventilated, air filtered structure that is designed to enclose, control and emit through a stack the emissions from painting operations.

*Petroleum Solvents* - Organic material solvents produced by petroleum distillation, comprising a hydrocarbon range of mainly 8 to 12 carbon atoms per organic molecule, that are used as cleaning agents in the petroleum solvent dry cleaning industry .

*Petroleum Solvent Dry Cleaning* -A process for the cleaning of fabrics with a petroleum solvent by means of one or more washings in solvent, extraction of excess solvent, and drying by exposure to a heated air stream. A petroleum solvent dry cleaning facility includes, but is not limited to, washers, dryers, solvent filters and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

*Pharmaceutical Tablet Coating* - A process for the application of an essentially non-medicinal, protective coating to a pharmaceutical product.

*Photochemically Reactive Material* - A photochemically reactive material is any material which contains:

1. Any combination of hydrocarbons, alcohols, aldehydes, esters or ketones having an olefinic or cyclo-olefinic type of unsaturation comprising 5 percent or more by volume of the material, or

2. Any combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene comprising 8 percent or more by volume of the material, or

3. Any combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene, or toluene comprising 20 percent or more by volume of the material, or

4. Any combination of any of the above mentioned chemical compounds comprising 20 percent or more by volume of the material.

*Photochemically Reactive Solvent* - A Photochemically Reactive Solvent is any solvent which is a photochemically reactive material.

*Pretreatment Wash Primer Specialty Coating* - A coating that contains a minimum of 0.5 percent acid, by mass, and is applied only to bare metal to etch the surface and enhance adhesion of subsequent coatings.

*Primer* - Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and color uniformity.

*Process Unit* - Equipment that is assembled and connected by pipes or ducts to produce, as intermediates or final products, one or more compounds or chemicals listed in Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for reactor and distillation CTG (EPA-450/4-91-031, August 1993) or 40 CFR 60.617 for air oxidation unit processes. A process unit can operate independently if it is supplied with sufficient feed or raw materials and sufficient product storage facilities.

*Product* – As used only in Section XVI of this regulation, any compound or chemical listed in Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for reactor and distillation CTG (EPA-450/4-91-031, August 1993) or 40 CFR 60.617 for air oxidation unit processes that is produced as that chemical and offered for sale as a product, byproduct, coproduct, or intermediate or for use in the production of other chemicals or compounds.

*Reactor Process* - A unit operation 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.

*Recovery Device* - An individual unit of equipment, such as an adsorber, a carbon adsorber, or a condenser, capable of and used for the purpose of recovering chemicals for use, reuse, or sale.

*Recovery System* - An individual recovery device or series of such devices applied to the same vent stream.

*Refinishing Operations* - The process of coating vehicles or their parts and components, including partial body collision repairs, for the purpose of protection or beautification, that is subsequent to the original coating applied in a coating assembly line at the original equipment manufacturing plant.

*Reid Vapor Pressure Reid Vapor Pressure (RVP)* - is the absolute pressure in pounds per square inch as determined by the American Society for Testing Materials (ASTM) Annex 2 Modification of Method D-323, or by any equivalent method approved by the U.S. Environmental Protection Agency.

*Rubber Camouflage Specialty Coating* - A specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.

*Sealant for Thermal Spray Aluminum* - An epoxy coating applied to thermal spray aluminum surfaces at a maximum thickness of one dry mil.

*Ship* -

1. A marine vessel used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys and markers).

2. "Ship" includes, but is not limited to:

    i. All military and Coast Guard vessels;

    ii. Commercial cargo and passenger (cruise) ships;

    iii. Ferries;

    iv. Barges;

    v. Tankers;

    vi. Container ships;

    vii. Patrol and pilot boats; and

    viii. Dredges.

3. Pleasure craft and offshore oil and gas drilling platforms are not considered ships.

*Solvents* - A material which is liquid at standard conditions and which is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent.

*Special Marking Specialty Coating* - A coating that is used for safety or identification applications, such as ship numbers and markings on flight decks.

*Specialty Interior Coating* - A coating used on interior surfaces aboard U.S. military vessels pursuant to a coating specification that requires the coating to meet specified fire retardant and low toxicity requirements, in addition to the other applicable military physical and performance requirements.

*Spot Repairs* - Repairs to motor vehicles in which the damaged area to be repaired is limited

to only a portion of any given panel so that an entire panel need not be repaired.

*Stack or Chimney* - A flue, conduit or opening permitting particulate or gaseous emissions into the open air, or constructed or arranged for such purpose.

*Submerged Fill Pipe* - Any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank.

*Surface Preparation Product* - A product that is used to remove wax, tar, grease and silicone from a surface to be refinished.

*Synthetic Organic Chemical Manufacturing Industry* - The industry that produces, as intermediates or final products, one or more of the chemicals listed at 40 CFR 60.489 (July 1, 1992).

*Tack Specialty Coating* - A thin film epoxy coating applied at a maximum thickness of two dry mils to prepare an epoxy coating that has dried beyond the time limit specified by the manufacturer for the application of the next coat.

*Touch-up Coating* - A coating applied by brush to repair minor surface damage and imperfections.

*Transfer Efficiency* - The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids used in the application process, expressed as a percentage.

*Undersea Weapons Systems Specialty Coating* - A coating applied to any component of a weapons system intended to be launched or fired from under the sea.

*Vent Stream* - Any gas stream containing nitrogen that was introduced as air to the air oxidation reactor and released to the atmosphere directly, from an air oxidation reactor recovery train, or indirectly, after diversion through other process equipment.

*Volatile Organic Compounds (VOC)* - Any organic compound as defined in Chapter 121.1 of the Pennsylvania Air Pollution Control Regulations, 25 PA Code 121.1 et. seq.

*Weld-through Preconstruction Primer (Specialty Coating)* - A coating that:

1. Provides corrosion protection for steel during inventory;

2. Is typically applied at less than one mil dry film thickness;

3. Does not require removal prior to welding;

4. Is temperature resistant (burn back from weld is less than 1.25 centimeters (0.5 inches)); and

5. Does not normally require removal before applying film-building coatings, including inorganic zinc high-build coatings. When constructing new vessels, there may be a need to remove areas of Weld-through Preconstruction Primer due to surface damage or contamination prior to application of the film-building coatings.

## SECTION II. STORAGE TANKS

A. No person shall place or store in any stationary storage tank or container of 40,000 gallon capacity or greater, any organic material having a vapor pressure of 1.5 pounds per square inch absolute or greater at actual storage conditions unless one of the following organic material vapor control devices properly installed and well maintained is in operation:

1. A floating roof resting on the surface of the liquid contents equipped with a closure seal, or seals, to close the space between the roof edge and tank wall, and in addition, all tank gauging and sampling devices shall be gas tight except when in use, or

2. A pressure tank system maintaining a pressure at all times so as to prevent organic material loss to the atmosphere, or

3. A vapor recovery system capable of collecting the organic materials emitted from the tank and disposing of these emissions so as to prevent their emission to the atmosphere, and in addition, all tank gauging and sampling devices shall be gas-tight except when is use, or

4. Other equipment equal or greater in efficiency to those devices listed above, and approved by the Department.

B. No person shall place, or store in any stationary storage tank or container of 40,000 gallon capacity or greater, any organic material having a vapor pressure of 11.0 pounds per square inch absolute or greater at actual storage conditions unless one of the following organic material vapor control devices properly installed and well maintained, is in operation:

1. A pressure tank system maintaining a pressure at all times so as to prevent organic material loss to the atmosphere, or

2. A vapor recovery system capable of collecting the organic materials emitted from the tank and disposing of these emissions so as to prevent their emission to the atmosphere, and in addition, all tank gauging and sampling devices shall be gas-tight

except when in use, or

3. Other equipment equal or greater in efficiency to those devices listed above, and approved by the Department.

## SECTION III. OIL-EFFLUENT WATER SEPARATOR

No person shall use any compartment of any single or multiple compartment oil-effluent water separator which may receive 200 gallons a day or more of organic materials or mixture of organic materials consisting of kerosine or more volatile organic materials unless one of the following organic material vapor control devices properly installed and well maintained, is in operation:

1. A solid cover sealed and totally enclosing the liquid contents, and in addition, all gauging and sampling devices shall be gas-tight except when in use, or

2. A floating roof resting on the surface of the liquid contents equipped with a closure seal or seals to close the space between the roof edge and wall, and in addition, all tank gauging and sampling devices shall be gas-tight except when in use, or

3. A vapor recovery system capable of collecting the organic materials emitted from the separator and disposing of these emissions so as to prevent their emission to the atmosphere, and in addition, all tank gauging and sampling devices shall be gas-tight except when in use, or

4. Other equipment equal or greater in efficiency to those devices listed above, and approved by the Department.

## SECTION IV. PUMPS AND COMPRESSORS

All pumps handling organic materials having a vapor pressure of 1.5 pounds per square inch absolute or greater at ambient conditions and compressors in organic material service shall have mechanical seals, or other components of equal or greater efficiency approved by the Department.

## SECTION V. ORGANIC MATERIAL LOADING

A. No person shall load any organic material having a Reid vapor pressure of 4.0 pounds or greater into any tank truck, tank car, or trailer from any loading facility from which 20,000 gallons or more of such organic material are loaded in any one day from this facility unless this facility is equipped with a vapor recovery system properly installed, well maintained, in operation, and approved by the Department. Such a vapor recovery system shall be capable

of collecting the organic materials emitted from the filling operation and disposing of these emissions so as to prevent their release to the atmosphere. All loading connections in the system shall be equipped with fittings which shall be vapor tight and will automatically and immediately close upon disconnection so as to prevent organic material emissions from these fittings. This Section shall not apply to the loading of fuel tanks of motor vehicles as defined by the Pennsylvania Department of Transportation.

B. No person shall load or permit the loading of any organic material having a Reid vapor pressure of 4.0 pounds or greater from any tank truck, tank car, or trailer into any stationary storage container with a capacity of 250 gallons or more unless such container is equipped with a permanent submerged fill pipe and unless the organic vapors displaced during the filling of the stationary storage container are controlled by a system that prevents release to the atmosphere, at the transfer location, of at least 90 percent by weight of the displaced organic vapors. Such installations shall be made in accordance with applicable provisions of Title 5 of the Philadelphia Code. All vapor line and liquid fill line connections and fittings shall be vapor tight and positive closure devices shall be employed to prevent vapors from being emitted at ground level.

In addition to the above requirements, if the vapor control system incorporates vapor return to the delivery vessel, the following provisions shall apply:

1. The vapor return system shall consist of a vapor tight return line from the storage container to the delivery vessel and a system to ensure that the vapor return line is connected between the delivery vessel and storage container before material can be transferred to the storage container.

2. The vapor return line and associated connections shall be designed so as to be of sufficient size and sufficiently free of restrictions to allow vapor return to the delivery vessel to achieve the specified control requirement.

3. The vapor-laden delivery vessel shall be refilled only at loading facilities equipped with a vapor recovery system as prescribed in Section V.A.

All delivery vessels subject to this Section shall be so designed and maintained as to be vapor tight at all times, except during repair and maintenance. The Department may require the owner or operator of any such delivery vessel to submit records of inspection and procedures related to such maintenance, including visual inspections and leak testing.

The provisions of this Section shall not apply to any stationary storage container having a capacity of less than 2000 gallons installed underground prior to the date of adoption of this Section.

The provisions of this Section shall become effective pursuant to the Section XXIV of these Regulations and compliance shall be effected within the time and manner prescribed

thereunder.

C. No person shall load or permit the loading of gasoline into the fuel tank of any motor vehicle, as defined by the Pennsylvania Department of Transportation, at any gasoline dispensing facility unless the loading is conducted using a vapor control system, properly installed, well maintained, in operation, and approved by the Department, that prevents the release to the atmosphere of at least 90 percent by weight of the gasoline vapors displaced from the motor vehicle fuel tank during loading. Such vapor control system installation shall also be in accordance with applicable provisions of TITLE 5 of the Philadelphia Code, and the owner or operator of any affected facility shall post and maintain, in conspicuous locations in the gasoline dispensing area, clear visual instructions pertaining to the proper use of the gasoline dispensing equipment and attendant vapor control device.

The above gasoline dispensing vapor control requirements shall apply to:

1. Any existing gasoline dispensing facility with a gasoline throughput equal to or greater than 10,000 gallons per calendar month, based on gasoline throughput records for the facility for the 12-month period prior to, or for any monthly period subsequent to, the effective date of this sub-Section, as follows:

    a. Any existing gasoline dispensing facility with a gasoline throughput equal to or greater than 1,500,000 gallons per year shall comply with the vapor control requirements not later than 12 months from the effective date of this sub-Section.

    b. Any existing gasoline dispensing facility with a gasoline throughput equal to or greater than 1,000,000 gallons per year, but less than 1,500,000 gallons per year, shall comply with the vapor control requirements not later than 18 months from the effective date of this sub-Section.

    c. Any existing gasoline dispensing facility with a gasoline throughput equal to or greater than 500,000 gallons per year, but less than 1,000,000 gallons per year, shall comply with the vapor control requirements not later than 24 months from the effective date of this sub-Section.

    d. Any existing gasoline dispensing facility with a gasoline throughput of less than 500,000 gallons per year shall comply with the vapor control requirements not later than 36 months from the effective date of this sub-Section.

2. Any gasoline dispensing facility, or part thereof, regardless of gasoline throughput quantity, which is constructed, reconstructed or modified, except for minor repairs or alterations, after the effective date of this sub-Section.

D. No person shall sell, deliver for use, use, or exchange in trade for use in Philadelphia any gasoline having a Reid Vapor Pressure greater than 9.0 during the period May 1 through September 15, commencing in calendar year 1991 and continuing every year thereafter. The owner or operator of any gasoline loading, distribution, or dispensing facility which supplies gasoline for use in Philadelphia shall test and record, or otherwise document, the Reid Vapor Pressure of each gasoline shipment loaded from, distributed by, or received at the facility for use in Philadelphia during the period April 15 through September 1, commencing in calendar year 1991 and continuing every year thereafter.

The Department shall establish or approve procedures, methods and guidelines for the sampling and testing of gasoline for Reid Vapor Pressure compliance and for the maintenance of gasoline shipment and delivery records and documentation, including reporting requirements related thereto.

Records regarding gasoline shipments and deliveries shall include Reid Vapor Pressure, quantity, and date of shipment or delivery, and such other information as the Department may prescribe. Documentation may include, without limitation, bills of lading, invoice delivery tickets, and loading tickets.

Each required record or documentation shall be retained by the owner or operator of any affected facility for a period of at least two (2) years and shall be made available for inspection by the Department upon request.

Blends of gasoline and oxygenate compounds are exempt from the 9.0 Reid Vapor Pressure limitation, except that the gasoline portion of the blend, prior to blending, shall not be exempted.

## SECTION VI. SOLVENTS

A. No person shall discharge any organic material into the atmosphere or into any building or other enclosure in any one day from any machine, equipment or device in which any solvent, containing organic material, is in direct contact with a flame or is baked, heat-cured or heat polymerized in the presence of oxygen unless this discharge does not exceed 15 pounds per day or is reduced by at least 85 percent overall. This part shall not apply to any solvent which consists only of water and organic material, where the organic material comprises no more than 20 percent by volume of the solvent, and the solvent is not a photochemically reactive material as defined in Section I of this Regulation.

B. No person shall discharge any organic material into the atmosphere or into any building or other enclosure in any one day from any machine, equipment or device not specifically defined in Section VI.A. used for employing, applying, evaporating or drying any photochemically reactive solvent unless this discharge does not exceed 40 pounds per day or is reduced by at least 85 percent overall.

C. This Section shall not apply to the employment, application, evaporation or drying of saturated halogenated hydrocarbons or perchloroethylene.

D. Where incineration equipment, employing auxiliary fuel, has been installed to effect compliance with the discharge limitations of this Section, the Department may authorize discontinuation of the operation of such equipment for the purpose of fuel conservation during the months of December, January and February, provided that the operation of such equipment is not required for purposes of occupational health or safety, or for the control of toxic substances or other regulated pollutants, or for the prevention of odor nuisances.

Authorization to discontinue operation of incineration equipment may be made only after receipt of a written request from the owner or operator of an applicable facility. Authorization shall be made in writing and may be similarly revoked, at any time, at the discretion of the Department.

## SECTION VII. PROCESSING OF PHOTOCHEMICALLY REACTIVE MATERIALS

No person shall discharge any organic material into the atmosphere or into any building or other enclosure in any one day from any machine, equipment or device not specifically defined in Section VI.A. used in the processing and/or manufacturing of a photochemically reactive material unless this discharge does not exceed 40 pounds per day or is reduced by at least 85 percent overall.

## SECTION VIII. ARCHITECTURAL COATINGS

No person shall sell or offer for sale, employ, apply or evaporate in the City of Philadelphia any architectural coating purchased in a one gallon container or larger containing a photochemically reactive solvent as defined in Section I. No person shall thin or dilute any architectural coating for use in the City of Philadelphia, with a photochemically reactive solvent as defined in Section I in any quantity. All containers of architectural coatings sold, employed, applied or evaporated in the City of Philadelphia purchased in a one gallon container or larger containing any approved solvent shall be labeled to indicate compliance with this Regulation.

## SECTION IX. DISPOSAL OF SOLVENTS

No person shall during any one day dispose of a total of more than 5 gallons of any photochemically reactive solvent as defined in Section I by any means which will permit evaporation of such solvent into the atmosphere.

## SECTION X. COMPLIANCE WITH PENNSYLVANIA STANDARDS FOR VOLATILE

**ORGANIC COMPOUNDS (VOC)**

A. In addition to the requirements set forth in this Regulation, the Department shall act, pursuant to Air Management Regulation I, Section X, to enforce applicable standards for sources of volatile organic compounds (VOC) asset forth in Chapter 129 of the Pennsylvania Air Pollution Control Regulations; and the owner or operator of any affected source of VOC emission shall act to comply with the applicable limits, requirements and procedures as prescribed herein.

B. Where a source is subject to dual compliance requirements under Section VI or VII of this Regulation and Chapter 129 of the Pennsylvania Air Pollution Control Regulations, the Department may consider source compliance with the applicable Pennsylvania VOC standard as compliance with this Regulation, providing the applicable Pennsylvania VOC standard reflects reasonably available control technology (RACT) for that source category, as determined by the U.S. Environmental Protection Agency (EPA), and is approved by EPA as part of the Pennsylvania State Implementation Plan (SIP).

C. Where a source is subject to Section VI or VII of this Regulation and consists of an activity, operation, process or equipment, or category thereof, which is regulated under a Pennsylvania VOC standard, but the source is specifically exempted therefrom because of an applicability limit, the owner or operator of such source may petition the Department for waiver of the applicability limit and for application of the pertinent Pennsylvania VOC standard in lieu of this Regulation. The Department, after an evaluation, may approve source operation under the pertinent Pennsylvania VOC standard subject to the provisions in (B), above.

## SECTION XI. PETROLEUM SOLVENT DRY CLEANING

This Section applies to petroleum solvent dry cleaning facilities, as defined in Section I, that consume more than one hundred (100) gallons of petroleum solvent on a daily basis.

A. The owner or operator of any petroleum solvent dry cleaning dryer subject to this Section shall limit VOC emissions to the atmosphere to an average of 3.5 pounds of volatile organic compounds per one hundred (100) pounds dry weight of articles dry cleaned; or shall install and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of fifty (50) milliliters per minute is attained.

B. The owner or operator of any petroleum solvent filtration system subject to this Section shall reduce the volatile organic compound content in all filtration wastes to one (1) pound or less per one hundred (100) pounds dry weight of articles dry cleaned, before disposal and exposure to the atmosphere; or shall install and operate a cartridge filtration system, and drain the filter cartridges in their sealed housings for eight (8) hours or more before their

removal.

C. The owner or operator of any petroleum solvent dry cleaning facility subject to this Section shall repair all petroleum solvent vapor and liquid leaks within three (3) working days after identifying the sources of the leaks. If necessary repair parts are not in hand, the owner or operator shall order these parts within three (3) working days, and repair the leaks no later than three (3) working days following the arrival of the necessary parts.

D. The owner or operator of any petroleum solvent dry cleaning facility subject to this Section shall install, operate and maintain equipment consistent with manufacturer's specifications and recommendations in order to minimize VOC emissions. In addition, the owner or operator shall minimize fugitive VOC emissions from the storage, handling and transfer of petroleum solvent of petroleum solvent containing materials through employment of appropriate operating practice or procedures to reduce solvent loss and evaporation to the atmosphere.

E. The Department shall establish or approve procedures, methods and guidelines for petroleum solvent dry cleaning facilities to determine compliance with the requirements of this Section; and the owner or operator of any affected facility shall comply with such procedures, methods and guidelines, including requirements for inspection, testing, recordkeeping and reporting, as prescribed by the Department and consistent with current U.S. EPA guidance.

## SECTION XII. PHARMACEUTICAL TABLET COATING

This Section applies to pharmaceutical tablet coating at pharmaceutical manufacturing facilities that emit greater than fifty (50) tons of volatile organic compounds (VOC) per year.

A. The owner or operator of any pharmaceutical manufacturing facility subject to this Section shall control VOC emissions from pharmaceutical tablet coating equipment that has a potential to emit more than thirty-three (33) pounds of VOC on a daily basis. VOC emissions from such equipment shall be reduced:

1. By at least ninety (90) percent overall on a daily basis, if VOC emissions are three hundred thirty (330) pounds per day or more; or

2. To thirty-three (33) pounds per day, or less, if uncontrolled VOC emissions are less than three hundred thirty (330) pounds per day.

B. Carbon adsorption, incineration or equivalent control techniques, approved by the Department, shall be used to effect compliance with (A) above. Use of equivalent control techniques shall also be subject to review by U.S. EPA and shall provide for emissions to be reduced by an amount equivalent to or greater than that achievable by application of carbon adsorption or incineration. Control equipment shall be installed, operated and maintained

consistent with the manufacturer's specifications and recommendations.

C. The Department shall establish or approve procedures, methods and guidelines for pharmaceutical tablet coating facilities to determine compliance with the requirements of this Section; and the owner or operator of any affected facility shall comply with such procedures, methods and guidelines, including requirements for inspection, testing, recordkeeping and reporting, as prescribed by the Department and consistent with current U.S. EPA guidance.

## SECTION XIII. PROCESS EQUIPMENT LEAKS

A. No person shall cause, suffer, allow or permit volatile organic compounds (VOC) to be emitted from leaking flanges, gaskets, seals, connections, joints, fittings or other process equipment components not involving moving parts, nor shall any person cause, suffer, allow or permit VOC to be emitted from leaking valves, pumps, compressors, safety pressure relief devices or other process equipment components involving moving parts such that:

1. The VOC emission from any leaking process equipment component results in a VOC in air concentration of 10,000 parts per million by volume (ppmv), or greater, when measured by test methods approved by the Department; or

2. The VOC emission is in a liquid state at the point(s) of discharge into the atmosphere.

B. The owner or operator of any facility, or part thereof, with a design capacity to manufacture 1,100 tons per year, or more, of any one or a combination of the Synthetic Organic Chemicals as listed in 40 CFR 60.489, and/or Methyl Tert-butyl Ether, Polyethylene, Polypropylene, or Polystyrene, shall within six months of the effective date of this Section:

1. Install within the facility, or affected part thereof, a second valve, blind flange, plug, cap or other equivalent sealing device on open-ended lines, including ends of lines controlled by a single valve, except for safety pressure relief valves; and

2. Develop and implement for the facility, or affected part thereof, a VOC leak detection and repair program for such process equipment components as described in (A), above, which shall include the following requirements:

a. Quarterly testing of all pumps, valves, compressors and safety pressure relief devices for VOC leaks;

b. Weekly visual inspection of all pumps for VOC leaks;

c. Testing within 24 hours of any pump from which VOC material is leaking;

d. Testing within 24 hours of any pressure relief valve that has vented VOC to the atmosphere;

e. Testing, immediately after repair, of any process equipment component from which a VOC leak was detected;

f. Affixation of a readily visible water-proof identification tag to any leaking component. The tag shall bear an identification number and the date on which the VOC leak was detected. The tag shall remain in place until the leak is repaired;

g. Completion of repairs on any leaking component within 15 days after the leak is detected, unless the shutdown of a process unit is necessary to repair the leak. A VOC leak shall be repaired at the earliest period in which either the process is not in operation or the particular process unit is out of service, whichever occurs first;

h. Initiation and maintenance of a log of all leaking process equipment components. The log shall contain and identify at a minimum, the total number of components checked, the total number of components found leaking, the location of the leaking component, the type of component, the identification tag number, the date on which the component was discovered leaking, the date of repair, the VOC test instrument reading after repairs, a record of any component repairs requiring a shutdown, and a record of the calibration of the VOC test instrument. The logs hall be retained by the facility owner or operator for two years after the date on which an entry was made. The log shall be made available to the Department upon oral or written request; and

i. Submission of quarterly reports to the Department summarizing the VOC leak detection and repair activities undertaken pursuant to a through h, above. The report shall include identification of the process equipment components found leaking, the status of repairs for each leaking component, and the total number of components inspected during the calendar quarter. The report shall be submitted within such time and manner as prescribed by the Department.

C. Systems operating entirely under a vacuum or handling fluids that contain less than ten percent by weight of VOC or handling VOC materials with a vapor pressure less than 0.044 psia at 68 degrees Fahrenheit are exempt from the provisions of Section XIII.B.1. and 2., above.

D. The Department shall establish or approve procedures, methods and guidelines applicable to the control of VOC leaks to determine compliance with the requirements of Section XIIIA.

and B., above, and the owner or operator of any affected facility shall comply with such procedures, methods, and guidelines, including requirements for inspection, testing, record keeping and reporting, as prescribed by the Department and consistent with current United States Environmental Protection Agency guidance.

E. The owner or operator of a facility subject to Section XIII.B., above, may propose an alternative program for the control of VOC leaks. If the Department finds that the alternative program will provide VOC emission control equivalent to or greater than that which can be achieved under application of the provisions of Section XIII.B., above, and the alternative plan is as enforceable, then the Department may approve the implementation of the alternative plan. Use of an alternative VOC emission control plan shall also be subject to review by the United States Environmental Protection Agency.

F. The owner or operator of any affected facility may propose to the Department a list of equipment components the inspection of which could pose a significant element of danger to plant personnel. The Department, after a review, may exempt from the specific requirements of this Section those components for which the owner or operator has satisfactorily demonstrated that such danger cannot be reasonably eliminated and such exemption will not result in a significant reduction in the effectiveness of VOC leak control at the facility. The Department may, at its discretion, impose such alternative requirements on exempted components as it deems necessary to comply with the intent of this Section.

## SECTION XIV. AUTOMOBILE REFINISHING OPERATIONS

A. Applicability - This section applies to refinishing operations (hereafter referred to as affected facilities) for aftermarket automobiles, motorcycles, and light- and medium-duty trucks and vans. This includes dock repair of imported vehicles and dealer repair of vehicles damaged in transit. It does not apply to refinishing operations for other types of mobile equipment, such as farm machinery, construction equipment and touch-up. This section applies to automobile refinishing operations performed in the following types of shops:

1. Auto body and repair shops;

2. Production paint shops;

3. New car dealer repair and paint shops;

4. Fleet operator repair and paint shops; and

5. Any other facility which coats vehicles under the Standard Industrial Classification Code 7532 (Top, Body, and Upholstery Repair Shops and Paint Shops).

B. Operating Standards - (This section is reserved pending establishment of specific VOC

content or emission limits for coatings used in the automobile refinishing industry.)

C. Operating Practices - The owner or operator must ensure that the following operating practices are in effect at all times.

1. Spray guns must be cleaned with a device that:

a. recirculates solvent during the cleaning process so that the solvent is used to clean a number of guns before being disposed;

b. collects spent solvent for proper disposal; and

c. prevents the emission of vapors during and between cleaning operations within safe and practical limits.

2. Fresh and spent solvent must be stored in containers with gasket sealed, spring loaded covers, or equivalent.

3. Waste paint, spent solvent, and sludge from gun cleaners or in-house distillation units must be stored in gasket sealed containers until properly disposed. Proper disposal includes releasing wastes to a licensed reclaiming or hazardous waste management facility, or recycling with an in-house distillation unit.

4. All sanding operations are to be done by using sanders with built-in ventilation provided by a central vacuum system or equivalent filtered system.

5. a. All doors and windows which lead to the outdoors from any area used to spray, coat and/or brush on paints or from any area where surface preparation, including sanding or grinding takes place kept closed to the maximum extent possible which will allow sufficient ventilation for the facility's exhaust systems at any time when said work is being performed unless exempted by the Department. The maximum allowable opening shall be no greater than the sum of the areas of the exhaust outlets unless required by the equipment manufacturer and approved by AMS. Provisions for establishing the maximum allowable opening are:

1. The facility shall notify AMS in writing of the procedures to be employed to ensure that the maximum opening is not exceeded.

2. The procedure designed by the facility will be incorporated into the permit conditions.

b. Facilities exempted from paragraph C.5.a. by the Department must display, in a prominent visible location on the exterior of the building, an exemption

sticker provided by the Department. The Department may exempt a facility from the requirements of paragraph C.5.a. provided the following conditions are met.

1. The facility must be in compliance with all other applicable provisions of this regulation.

2. The facility must at all times demonstrate compliance with all applicable AMS regulations and other State and Federal Laws and Regulations.

3. The facility must demonstrate the ability to conduct said operations without causing air pollution nuisance or noise violations beyond the property boundary. [Noise and Excessive Vibration Regulations]

4. The facility is not located within 200 feet of a school, nursing home, hospital or residence.

6. All applicable sections of Fire Code, Chapter 5-1700, must be met.

7. All refinishing operations shall be conducted indoors.

D. Recordkeeping Requirements - The owner or operator of an affected facility must record the following types of information. The information must be retained for a period of two years and be readily available to the Department upon request.

1. Number of partial and full refinishing jobs completed on a daily basis.

2. The VOC content, less water, of surface preparation products used.

3. The volume and/or weight of surface preparation products used on a daily basis.

4. For each type of primer, topcoat, and specialty coating used, daily records must be kept of:

a. volume of coating, catalyst, and reducer used;

b. mix ratio of components in the coating;

c. VOC content of coating, less water, as applied.

5. For each gun cleaner a log must be kept of:

a. the quantity of replacement solvent added to the gun cleaner on a monthly

basis;

b. the number of gun cleanings performed on a daily basis;

c. the amount of waste solvent removed from the gun cleaner on a monthly basis. This must include documentation of the amount released to a licensed reclaiming or hazardous waste management facility; and

d. the dates and times of routine inspections and maintenance and repair activities.

E. Toxic Air Contaminants - The owner and/or operator of any affected facility shall ensure that potential and/or actual emissions of toxic air contaminants comply with Air Management Regulation VI "Control of Emissions of Toxic Air Contaminants" and Guidelines adopted thereunder, as well as any requirements under applicable Federal Laws, statutes and regulations including, but not limited to Title III of the Federal Clean Air Act, as amended.

F. Odor Emissions - No person shall permit, cause, suffer, or allow an emission of odor from an affected facility beyond the perimeter of the facility.

G. Equipment Standards -

1. A person shall not apply coatings subject to the provisions of this rule except by the use of one of the following methods:

a. electrostatic application, or

b. high-volume, low pressure (HVLP) spray or

c. other equivalent or better methods of spray equipment provided the technology has clearly demonstrated the same or better transfer efficiency.

2. A person shall not apply coatings by either of the methods listed in subparagraph G.1. unless the coating is applied with properly operating and maintained equipment, operated according to procedures recommended by the manufacturer.

3. The owner and/or operator of any affected facility shall spray all coatings inside an enclosed paint spray booth which operates according to design and specifications of the manufacturer.

a. All the air flow carrying paint fumes must pass through a filter system to a properly designed stack and not by-pass the filter system duel to gaps in the filter frames structure.

1) The filters must include a final bank of fiberglass or similar filters but may include prefiltration with other types of filters.

2) The filters must be changed on a regular basis, consistent with the paint usage schedule, to provide proper filtration and to allow manufacturer's specifications for air flow to be met at all times.

4. The Department may require modeling to verify that the stack height and diameter is designed so that the affected facility will not have adverse impacts beyond the property line.

5. Rain protection for the stack shall be designed consistent with good ventilation practice and not include stack caps which may prevent good dispersion.

J. Visible Emissions - No person shall permit, cause, suffer and/or allow from any finishing operation any visible emissions or fallout of paint material from any stack, vent or other opening.

K. Inspection

1. The owner and/or operator of any affected facility shall, on a weekly schedule:

a. inspect equipment, frames, filters and stacks.

b. Inspect the roof while paint spraying is in process for paint deposits or visible emissions, coming from the stack.

## SECTION XV. CONTROL OF VOLATILE ORGANIC COMPOUNDS (VOC) FROM MARINE VESSEL COATING OPERATIONS

A. Applicability - This Section applies to marine vessel coating operations at a facility at which:

1. the total potential VOC emissions equal or exceed 25 tons (22.75 metric tons) per year; or

2. the actual VOC emissions from all marine vessel coating operations exceed 15 pounds (7 kilograms) per day or 2.7 tons (2,455 kilograms) per year.

3. Marine vessel coating operations at a facility with potential VOC emissions not meeting the level in A.1 and actual VOC emissions not meeting the level in A.2 must comply with the record keeping requirements of Section XV.F.3 but not any other requirements of Section XV.

B. Coating Requirements.

1. Beginning two (2) years after the effective date of this Section, no person who owns or operates a marine vessel coating operation subject to this Section shall apply a coating that exceeds the standards in B.2., 3., and/or 4. of this Section.

2. Coating Standards:

| **Coating category** | **VOC** [a,b,e] | | |
|---|---|---|---|
| | **Grams/liter coating (minus water and exempt compound)** | **Grams/liter solids** [c] | |
| | | **April 1st through October 31st** | **November 1st through March 31st** [d] |
| **General use** | 340 | 571 | 728 |
| **Specialty:** | | | |
| Air flask | 340 | 571 | 728 |
| Antenna | 530 | 1,439 | 1,439 |
| Antifoulant | 400 | 765 | 971 |
| Heat resistant | 420 | 841 | 1,069 |
| High-gloss | 420 | 841 | 1,069 |
| High-temperature | 500 | 1,237 | 1,597 |
| Inorganic zinc high-build | 340 | 571 | 728 |
| Military Exterior | 340 | 571 | 728 |
| Mist | 610 | 2,235 | 2,235 |
| Navigational Aids | 550 | 1597 | 1597 |
| Nonskid | 340 | 571 | 728 |
| Nuclear | 420 | 841 | 1,069 |
| Organic zinc | 360 | 630 | 802 |
| Pretreatment wash primer | 780 | 11,095 | 11,095 |
| Repair and maintenance of thermoplastics | 550 | 1,597 | 1,597 |
| Rubber camouflage | 340 | 571 | 728 |
| Sealant for thermal spray | 610 | 2,235 | 2,235 |
| Special marking | 490 | 1,178 | 1,178 |
| Specialty interior | 340 | 571 | 728 |
| Tack coat | 610 | 2,235 | 2,235 |
| Under sea weapons systems | 340 | 571 | 728 |
| Weld-through preconstruction primer. | 650 | 2,885 | 2,885 |

[a] The above VOC limits are expressed in two sets of equivalent units, grams/liter coating (minus water and exempt compounds) or grams/liter solids.

[b] To convert from g/L to lb/gal, multiply by (3.785 L/gal)(1/453.6 lb/g) or 1/120. For compliance purposes metric units define the standards.

[c] VOC limits expressed in units of mass of VOC per volume of solids were derived from VOC limits expressed in units of mass of VOC per volume of coating assuming the coating contains no water or exempt compounds and that the volumes of all components within a coating are additive.

[d] These limits apply during the period November 1st through March 31st . During this period of time, allowances are not given to coating in categories that permit less than 40 percent volume solids (nonvolatiles). Such coatings are subject to the same limits regardless of weather conditions.

[e] VOC limits from Ship Building Control Technique Guidance (CTG), Federal Register Vol. 61, No. 167, Tuesday August 27, 1996.

3. If a coating satisfies the definition of more than one category of coating listed in B.2. of this Section, then the coating shall be subject to the maximum VOC content permitted for any of the applicable categories.

4. Any other coating not listed in B.2. of this Section and used in a marine vessel coating operation may not exceed a VOC content of 340 grams per liter coating (minus water and exempt solvents) or 571 grams per liter solids as applied.

C. Cleanup requirements - Beginning two (2) years after the effective date of this Section, a person who owns or operates a marine vessel coating operation subject to this Section shall take reasonable precautions to minimize the release of VOC into the atmosphere, including:

1. Storing all waste materials containing VOC, including cloth and paper, in closed containers;

2. Maintaining lids on any VOC-bearing materials when not in use; and

3. Using enclosed containers or VOC recycling equipment to clean spray gun equipment.

D. Method of Compliance

1. Unless otherwise stated, compliance with the applicable emission standards established in this Section is based on evaluation of the VOC content of each coating or adhesive, as applied.

2. A person subject to this Section shall comply with the emission standards in this Section by using any combination of the following methods:

a. Applying low VOC-content coatings or adhesives that meet applicable standards.

b. Reducing the overall weight of VOC emissions into the atmosphere through the use of vapor recovery or incineration or another method which is acceptable under this Section, provided:

1. The overall efficiency of the control system shall be no less than the equivalent overall efficiency calculated by the following equation:

   O = (1 - E/V) x 100

   Where:

   V = The VOC content of the as applied coating, in grams VOC/liter of coating solids

   E = Table I limit in lb VOC/gal of coating solids or lb VOC/lb of coating solids

   O = Overall control efficiency; and

2. The overall efficiency of the control system shall be determined by the test methods and procedures specified in E of this Section.

c. For sources subject to VOC limits in coatings or inks or other similar products, reducing emissions by using water-based coatings, resins, inks, or similar products that contain less than 25 percent VOC by volume of the volatile portion of the product.

d. Using an alternative method of achieving compliance if:

1. The alternative method is approved by the Department;

2. The resulting emissions are equal to or less than the emissions that would have been discharged by complying with emission standards;

3. The compliance is determined on the basis of equal volumes of solids to the low VOC coatings that meet the applicable emission limits in B.2.;

4. Capture efficiency testing and emissions testing are conducted in accordance with methods approved by the EPA;

5. Adequate records are maintained to ensure enforceability; and

6. The alternative compliance method is approved by the EPA as a revision to the State Implementation Plan.

E. Test Methods.

1. The VOC content for any coating or adhesive used pursuant to the requirements of this Section shall be determined by the methods and procedures in 25 Pa Code Section 139.

F. Record Keeping.

1. A person who owns or operates a marine vessel coating operation subject to this Section shall maintain the following records:

   a. The name, category, total volume and VOC content (as applied) of each coating and coating solvent used each month; and

   b. The name, total volume and VOC content of each cleanup solvent used each month.

2. Records shall be retained for 5 years and be made available to the Department on request.

3. An owner or operator of an installation or source for which a standard has been established in this Section and which has VOC emissions below the applicable Section threshold need only maintain records pertaining to the quality and quantity of VOC materials used that are adequate to demonstrate that emissions are below the applicable threshold at all times.

G. Reporting Requirements.

1. An owner or operator of an installation or source for which a standard has been established in this Section shall submit his or her chosen Method of Compliance from D.2. of this Section to the Department within 90 days of the effective date of the Section.

## SECTION XVI. SYNTHETIC ORGANIC MANUFACTURING INDUSTRY (SOCMI) AIR OXIDATION, DISTILLATION, AND REACTOR PROCESSES

A. Applicability.

1. This section applies to any vent stream originating from a process unit in which an air oxidation unit process, distillation operation or reactor process produces one (1) or more of the chemicals listed as a product, coproduct, byproduct, or intermediate in:

   a. Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Reactor and Distillation CTG (EPA-450/4-91-031, August 1993) for Reactor Processes and Distillation Operations: or

   b. 40 CFR 60.617 for Air Oxidation Unit Processes.

2. For purposes of this Section, reference to total organic compounds or TOC in 40 CFR 60, Subpart III, 40 CFR 60, Subpart NNN or 40 CFR 60, Subpart RRR shall be considered equivalent to VOC as defined in 25 Pa Code 121.1.

B. Standards.

1. For process vents that are subject to equivalent VOC control provisions under an existing 40 CFR Part 60 or 63 standard, compliance with the requirements of the existing 40 CFR Part 60 or 63 standard shall constitute compliance with the provisions of this section.

2. Air Oxidation Unit Processes.

   a. The owner or operator of a source with an Air Oxidation Unit Process meeting the applicability criteria in Section XVI.A shall comply with the requirements of 40 CFR 60, Subpart III.

   b. The exemption listed in 40 CFR 60.610(c) shall apply to an owner or operator otherwise subject to this Section.

   c. Notwithstanding 40 CFR 60.610, for purposes of this Section:

1. An affected source shall be one that is described by the criteria in 40 CFR 60.610(a) regardless of the specific date of construction, modification, or reconstruction of the source; and

2. The owner or operator of an affected source shall comply with this Section no later than two (2) years after the effective date of this Section.

d. Notwithstanding 40 CFR 60.615(a), each owner or operator subject to this Section shall notify the Department, no later than ninety (90) days after the effective date of this Section, of the method by which the affected source will comply with the specific provisions of 40 CFR 60.612.

e. For the purposes of this Section, 40 CFR 60.616 and 40 CFR 60.618 are not applicable.

f. Notwithstanding 40 CFR 60.610(d)(4), 60.614(g), 60.615(c), 60.615(g) [but not 60.615(g)(1) or 60.615(g)(4)], and 60.615(j) reference to the Administrator shall mean the Department.

g. Notwithstanding 40 CFR 60.614(c), the Department also reserves the option to require testing at such other times as may be required, as provided for by Air Management Regulation I, Section III.B..

3. Distillation Operations.

a. The owner or operator of a source with a Distillation Operation meeting the applicability criteria in Section XVI.A. of this Section shall comply with the requirements of 40 CFR 60, Subpart NNN.

b. The following exemptions apply:

1. The exemptions listed in 40 CFR 60.660(c);

2. Any Vent Stream for a Distillation Operation with a total VOC concentration of less than five hundred (500) parts per million by volume is subject only to the test method and procedure and the record keeping and reporting requirements specified in 40 CFR 60.660(c)(6), and not to other requirements of this Section.

c. Notwithstanding 40 CFR 60.660, for purposes of this Section:

1. an affected source shall be one that is described by the criteria in 40 CFR 60.660(a), regardless of the specific date of construction, modification, or reconstruction of the source;

2. an applicable chemical shall be one described in Section XVI.A.1.a of this Section, rather than in 40 CFR 60.667; and

3. the owner or operator of an affected source shall comply with this Section no later than two (2) years after the effective date of this Section.

d. Notwithstanding 40 CFR 60.665(a), each owner or operator subject to this Section shall notify the Department no later than ninety (90) days after the effective date of this Section of the method by which the affected source will comply with the specific provisions of 40 CFR 60.662.

e. For the purposes of this Section, 40 CFR 60.666 and 40 CFR 60.668 are not applicable.

f. Notwithstanding 40 CFR 60.660(d)(4), 60.664(g)(1), 60.665(c), 60.665(g) [but not 60.665(g)(1)(ii)], 60.665(l), 60.665(n) and 60.665(o) reference to the Administrator shall mean the Department.

g. Notwithstanding 40 CFR 60.664(c), the Department also reserves the option to require testing at such other times as may be required, as provided for by Air Management Regulation I, Section III.B.

4. Reactor Processes.

a. The owner or operator of a source with a Reactor Process meeting the applicability criteria in Section XVI.A of this Section shall comply with the requirements of 40 CFR 60, Subpart RRR.

b. The following exemptions apply:

1. Exemptions listed in 40 CFR 60.700(c), except that the cutoff for the Vent Stream flow rate shall be eighty-five ten-thousandths (0.0085) standard cubic meter per minute (scm/min), not eleven-thousandths (0.011) scm/min as specified in 40 CFR 60.700(c)(4).

2. Any vent stream for a reactor operation with a total VOC concentration of less than five hundred (500) parts per million by volume is subject only to the test method and procedure and the

record keeping and reporting requirements specified in 40 CFR 60.700(c)(8), and not to the other requirements of this Section.

c. Notwithstanding 40 CFR 60.700, for purposes of this Section:

1. an affected source shall be one that is described by the criteria in 40 CFR 60.700(a), regardless of the specific date of construction, modification, or reconstruction of the source;

2. an applicable chemical shall be one described in Section XVI.A.1.a. of this Section, rather than in 40 CFR 60.707; and

3. the owner or operator of an affected source shall comply with this Section no later than two (2) years after the effective date of this Section.

d. Notwithstanding 40 CFR 60.705(a), each owner or operator subject to this Section shall notify the Department no later than ninety (90) days after the effective date of this Section of the method by which the affected source will comply with the specific provisions of 40 CFR 60.702.

e. For the purposes of this Section, 40 CFR 60.706 and 40 CFR 60.708 are not applicable.

f. Notwithstanding 40 CFR 60.700(d)(4), 60.704(f)(1), 60.705(c), 60.705(f) [but not 60.705(f)(1)], 60.705(l), 60.6705(n), 60.705(o), 60.705(p) and 60.705(r) reference to the Administrator shall mean the Department.

g. Notwithstanding 40 CFR 60.704(b)(5)(iii), the Department also reserves the option to require testing at such other times as may be required, as provided for by Air Management Regulation I, Section III.B.

## SECTION XVII. to XIX. (RESERVED)

## SECTION XX. ODORS

Where organic materials referred to in this Regulation are odorous, the emissions of such materials shall be in compliance with this Regulation and, in addition, shall be controlled as required to prevent any odor nuisance they might create.

## SECTION XXI. RADIOACTIVE AND TOXIC ORGANIC MATERIALS

Where organic materials referred to in this Regulation are radioactive or toxic in nature, additional requirements may be imposed by the Department to reduce continuous and periodic emissions to levels necessary to prevent a health hazard, and to prevent the accidental release of such materials into the atmosphere.

## SECTION XXII. CIRCUMVENTION

No person shall build, erect, install or use any article, machine, equipment or other contrivance, the sole purpose of which is to dilute or conceal an emission without resulting in a reduction in the total release of air contaminants to the atmosphere.

## SECTION XXIII. SEVERABILITY

The provisions of this Regulation are severable and if any provision, sentence, clause, section or part thereof shall be held illegal, invalid, unconstitutional or inapplicable to any person or circumstance: such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of the ordinance or their application to him or to other persons and circumstances. It is hereby declared to be the legislative intent that these Regulations would have been adopted if such illegal, invalid, or unconstitutional provision, sentence, clause or part had not been included therein, and if the person or circumstances to which the ordinance or any part thereof is applicable had not specifically been exempted therefrom.

## SECTION XXIV. EFFECTIVE DATE

Except as otherwise provided, these Regulations shall become effective upon adoption. The owner of any source of emission, in existence or under construction at the time of adoption, shall notify the Department within six months from the effective date, by an approved compliance schedule filed, of his intent to discontinue any operations or activities which cause any emissions that result in an emission in violation of these Regulations or to control such emission to the extent required by these Regulations, or that the emission is in compliance. Within a period of eighteen months from the effective date, compliance shall be obtained at all sources of emission within the scope of this Regulation.