

COMMONWEALTH OF VIRGINIA  
STATE AIR POLLUTION CONTROL BOARD  
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9VAC5 CHAPTER 60.  
HAZARDOUS AIR POLLUTANT SOURCES.

PART II.  
Emission Standards.

ARTICLE 2.  
Environmental Protection Agency National Emission Standards for  
Hazardous Air Pollutants for Source Categories (Rule 6-2).

9VAC5-60-90. General.

9VAC5-60-91. Repealed.

9VAC5-60-95. Authority to implement and enforce standards as authorized by  
EPA.

9VAC5-60-100. Designated emission standards.

9VAC5-60-110. Word or phrase substitutions.

9VAC5-60-90. General.

The Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants for Source Categories (Maximum Achievable Control Technologies, or MACTs) as promulgated in 40 CFR Part 63 and designated in 9VAC5-60-100 are, unless indicated otherwise, incorporated by reference into the regulations of the board as amended by the word or phrase substitutions given in 9VAC5-60-110. The complete text of the subparts in 9VAC5-60-100 incorporated herein by reference is contained in 40 CFR Part 63. The 40 CFR section numbers appearing under each subpart in 9VAC5-60-100 identify the specific provisions of the subpart incorporated by reference. The specific version of the provision adopted by reference shall be that contained in the CFR (2015) in effect July 1, 2015. In making reference to the Code of Federal Regulations, 40 CFR Part 63 means Part 63 of Title 40 of the Code of Federal Regulations; 40 CFR 63.1 means Section 63.1 in Part 63 of Title 40 of the Code of Federal Regulations.

9VAC5-60-91. Repealed.

9VAC5-60-92. Federal Hazardous Air Pollutant Program.

The Environmental Protection Agency (EPA) Hazardous Air Pollutant Program as promulgated in § 112 of the federal Clean Air Act is incorporated by reference into the regulations of the board to the extent that the provisions of 40 CFR Part 63 are incorporated by reference into this article. The following provisions govern implementation of the federal Hazardous Air Pollutant Program.

1. For the purposes of the federal Hazardous Air Pollutant Program, a hazardous air pollutant is any air pollutant listed in § 112(b) of the federal Clean Air Act, as amended by Subpart C of 40 CFR Part 63. The specific version of Subpart C adopted by reference shall be that contained in the CFR specified in 9VAC5-60-90.

2. For the purposes of the federal Hazardous Air Pollutant Program, the source category schedule for standards is the schedule issued pursuant to § 112(e) of the federal Clean Air Act for promulgating the standards issued pursuant to § 112(d) of the federal Clean Air Act and promulgated in 40 CFR Part 63. The specific schedule adopted by reference shall be that promulgated on February 12, 2002 (67 FR 6521).

9VAC5-60-95. Authority to implement and enforce standards as authorized by EPA.

A. This article provides the legally enforceable mechanism to facilitate the Commonwealth's obligation to implement and enforce the federal MACTs as state requirements.

B. The Commonwealth's delegated authority to implement and enforce the standards designated in 9VAC5-60-100 as authorized by EPA is identified in the documents specified in subdivisions 1 through 5 of this subsection. The Commonwealth's delegated authority extends only to the source categories and pollutants identified in the documents, and is subject to the provisions, conditions, and limitations set forth in the following documents:

1. Letter from W. Michael McCabe dated April 20, 1998.
2. Letter from W. Michael McCabe dated November 19, 1998.
3. Federal Register Notice dated January 26, 1999 (64 FR 3938).
4. Letter from Judith M. Katz dated May 30, 2001.
5. Federal Register Notice dated January 8, 2002 (67 FR 825).

C. In its delegation notices and letters, EPA automatically delegated to the Commonwealth the authority to implement and enforce future MACT requirements if the Commonwealth legally adopted the requirements, informed EPA that it intended to enforce the standards in accordance with the terms of the delegation, and met other conditions. The latest letter that the Commonwealth submitted to obtain authority to implement and enforce additional requirements is available for examination as provided in subsection D of this section.

D. Copies of the documents cited in subsections B and C of this section may be examined by the public at the central office of the Department of Environmental Quality, Eighth Floor, 629 East Main Street, Richmond, Virginia between 8:30 a.m. and 4:30

p.m. of each business day.

E. The documents cited in subsection B of this section establish the terms of the delegation to the Commonwealth to implement and enforce the federal MACT as authorized by EPA. As such, the documents place requirements upon the Commonwealth, not the affected facilities; thus the documents are not being incorporated by reference into the regulations of the board but are being cited for information purposes only.

9VAC5-60-100. Designated emission standards.

- Subpart A - General Provisions.  
  
40 CFR 63.1 through 40 CFR 63.11; 40 CFR 63.16  
  
(applicability, definitions, units and abbreviations, prohibited activities and circumvention, construction and reconstruction, compliance with standards and maintenance requirements, performance testing requirements, monitoring requirements, notification requirements, recordkeeping and reporting requirements, control device requirements, performance track provisions)
- Subpart B - Not applicable.
- Subpart C - List of Hazardous Air Pollutants, Petitions Process, Lesser Quantity Designations, Source Category List.  
  
40 CFR 63.60, 40 CFR 63.61, 40 CFR 63.62, and 40 CFR 63.63  
  
(deletion of caprolactam from the list of hazardous air pollutants, deletion of methyl ethyl ketone from the list of hazardous air pollutants, redefinition of glycol ethers listed as hazardous air pollutants, deletion of ethylene glycol monobutyl ether)
- Subpart D - Not applicable.
- Subpart E - Not applicable.
- Subpart F - Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.  
  
40 CFR 63.100 through 40 CFR 63.106

(chemical manufacturing process units that manufacture as a primary product one or more of a listed chemical; use as a reactant or manufacture as a product, by-product, or co-product, one or more of a listed organic hazardous air pollutant; and are located at a plant site that is a major source as defined in §112 of the federal Clean Air Act)

- Subpart G - Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

40 CFR 63.110 through 40 CFR 63.152

(all process vents, storage vessels, transfer operations, and wastewater streams within a source subject to subpart F, 40 CFR 63.100 through 40 CFR 63.106)

- Subpart H - Organic Hazardous Air Pollutants for Equipment Leaks.

40 CFR 63.160 through 40 CFR 63.182

(pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or systems that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63)

- Subpart I - Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks.

40 CFR 63.190 through 40 CFR 63.192

(emissions of designated organic hazardous air pollutants from processes specified in this subpart that are located at a plant site that is a major source as defined in §§112 of the federal Clean Air Act)

- Subpart J - Polyvinyl Chloride and Copolymers Production.

40 CFR 63.210 through 40 CFR 63.217

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into

- these regulations.)
- Subpart K - Reserved.
  - Subpart L - Coke Oven Batteries.  
40 CFR 63.300 through 40 CFR 63.313  
(existing byproduct coke oven batteries at a coke plant, and existing nonrecovery coke oven batteries located at a coke plant)
  - Subpart M - Perchloroethylene Dry Cleaning Facilities  
40 CFR 63.320 through 40 CFR 63.325  
(each dry cleaning facility that uses perchloroethylene)
  - Subpart N - Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks  
40 CFR 63.340 through 40 CFR 63.347  
(each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing)
  - Subpart O - Ethylene Oxide Commercial Sterilization and Fumigation Operations  
40 CFR 63.360 through 40 CFR 63.367  
(sterilization sources using ethylene oxide in sterilization or fumigation operations)
  - Subpart P - Reserved.
  - Subpart Q - Industrial Process Cooling Towers  
40 CFR 63.400 through 40 CFR 63.406  
(industrial process cooling towers that are operated with chromium-based water treatment chemicals)
  - Subpart R - Gasoline Distribution Facilities

- 40 CFR 63.420 through 40 CFR 63.429
- (bulk gasoline terminals and pipeline breakout stations)
- Subpart S - Pulp and Paper Industry
- 40 CFR 63.440 through 40 CFR 63.458
- (processes that produce pulp, paper, or paperboard, and use the following processes and materials: kraft, soda, sulfite, or semi-chemical pulping processes using wood; or mechanical pulping processes using wood; or any process using secondary or non-wood fibers)
- Subpart T - Halogenated Solvent Cleaning
- 40 CFR 63.460 through 40 CFR 63.469
- (each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchlorethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform)
- Subpart U - Group I Polymers and Resins
- 40 CFR 63.480 through 40 CFR 63.506
- (elastomer product process units that produce butyl rubber, halobutyl rubber, epichlorohydrin elastomers, ethylene propylene rubber, Hypalon<sup>TM</sup>, neoprene, nitrile butadiene rubber, nitrile butadiene latex, polysulfide rubber, polybutadiene rubber/styrene butadiene rubber by solution, styrene butadiene latex, and styrene butadiene rubber by emulsion)
- Subpart V - Reserved.
- Subpart W - Epoxy Resins Production and Non-Nylon Polyamides Production
- 40 CFR 63.520 through 40 CFR 63.527
- (manufacturers of basic liquid epoxy resins and wet strength resins)

- Subpart X - Secondary Lead Smelting  
40 CFR 63.541 through 40 CFR 63.552  
  
(at all secondary lead smelters: blast, reverbatory, rotary, and electric smelting furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive sources; and fugitive dust sources)
- Subpart Y - Marine Tank Vessel Tank Loading Operations  
40 CFR 63.560 through 40 CFR 63.567  
  
(marine tank vessel unloading operations at petroleum refineries)
- Subpart Z - Reserved.
- Subpart AA - Phosphoric Acid Manufacturing Plants  
40 CFR 63.600 through 40 CFR 63.610  
  
(wet-process phosphoric acid process lines, evaporative cooling towers, rock dryers, rock calciners, superphosphoric acid process lines, purified acid process lines)
- Subpart BB - Phosphate Fertilizers Production Plants  
40 CFR 63.620 through 40 CFR 63.631  
  
(diammonium and monoammonium phosphate process lines, granular triple superphosphate process lines, and granular triple superphosphate storage buildings)
- Subpart CC - Petroleum Refineries  
40 CFR 63.640 through 40 CFR 63.654  
  
(storage tanks, equipment leaks, process vents, and wastewater collection and treatment systems at petroleum refineries)
- Subpart DD - Off-Site Waste and Recovery Operations  
40 CFR 63.680 through 40 CFR 63.697

(operations that treat, store, recycle, and dispose of waste received from other operations that produce waste or recoverable materials as part of their manufacturing processes)

- Subpart EE - Magnetic Tape Manufacturing Operations  
40 CFR 63.701 through 40 CFR 63.708  
(manufacturers of magnetic tape)
- Subpart FF - Reserved.
- Subpart GG - Aerospace Manufacturing and Rework Facilities  
40 CFR 63.741 through 40 CFR 63.752  
(facilities engaged in the manufacture or rework of commercial, civil, or military aerospace vehicles or components)
- Subpart HH - Oil and Natural Gas Production Facilities  
40 CFR 63.760 through 40 CFR 63.779  
(facilities that process, upgrade, or store hydrocarbon liquids or natural gas; ancillary equipment and compressors intended to operate in volatile hazardous air pollutant service)
- Subpart II - Shipbuilding and Ship Repair (Surface Coating)  
40 CFR 63.780 through 40 CFR 63.788  
(shipbuilding and ship repair operations)
- Subpart JJ - Wood Furniture Manufacturing Operations  
40 CFR 63.800 through 40 CFR 63.819  
(finishing materials, adhesives, and strippable spray booth coatings; storage, transfer, and application of coatings and solvents)
- Subpart KK - Printing and Publishing Industry

- 40 CFR 63.820 through 40 CFR 63.831  
(publication rotogravure, product and packaging rotogravure, and wide-web printing processes)
- Subpart LL - Primary Aluminum Reduction Plants  
40 CFR 63.840 - through 40 CFR 63.859  
(each pitch storage tank, potline, paste production plant, or anode bulk furnace associated with primary aluminum production)
- Subpart MM - Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills.  
40 CFR 63.860 through 63.868  
(chemical recovery systems, direct and nondirect contact evaporator recovery furnace systems, lime kilns, sulfite combustion units, semichemical combustion units)
- Subpart NN - Reserved.
- Subpart OO - Tanks - Level 1  
40 CFR 63.900 through 40 CFR 63.907  
(for off-site waste and recovery operations, fixed-roof tanks)
- Subpart PP - Containers  
40 CFR 63.920 through 40 CFR 63.928  
(for off-site waste and recovery operations, containers)
- Subpart QQ - Surface Impoundments  
40 CFR 63.940 through 40 CFR 63.948  
(for off-site waste and recovery operations, surface impoundment covers and vents)
- Subpart RR - Individual Drain Systems  
40 CFR 63.960 through 40 CFR 63.966

(for off-site waste and recovery operations, inspection and maintenance of individual drain systems)

Subpart SS - Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process

40 CFR 63.980 through 40 CFR 63.999

(closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process, when associated with facilities subject to a referencing subpart)

Subpart TT - Equipment Leaks - Control Level 1

40 CFR 63.1000 through 40 CFR 63.1018

(control of air emissions from equipment leaks when associated with facilities subject to a referencing subpart)

Subpart UU - Equipment Leaks - Control Level 2

40 CFR 63.1019 through 40 CFR 63.1039

(control of air emissions from equipment leaks when associated with facilities subject to a referencing subpart: pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, closed vent systems and control devices)

Subpart VV - Oil-Water Separators and Organic-Water Separators

40 CFR 63.1040 through 40 CFR 63.1049

(for off-site waste and recovery operations, oil-water separators and organic-water separator roofs and vents)

Subpart WW - Storage Vessels (Tanks) - Control Level 2

40 CFR 63.1060 through 40 CFR 63.1066

(storage vessels associated with facilities subject to a referencing subpart)

Subpart XX - Ethylene Manufacturing Process Units: Heat Exchange

Systems and Waste.

40 CFR 63.1080 through 40 CFR 63.0198

(any cooling tower system or once-through cooling water system)

Subpart YY - Generic Maximum Achievable Control Technology Standards

40 CFR 63.1100 through 40 CFR 63.1113

(acetal resins production, acrylic and modacrylic fibers production, hydrogen fluoride production, polycarbonate production)

Subpart ZZ - Reserved.

Subpart AAA - Reserved.

Subpart BBB - Reserved.

Subpart CCC - Steel Pickling--Hydrogen Chloride Process Facilities and Hydrochloric Acid Regeneration Plants

40 CFR 63.1155 through 40 CFR 63.1174

(steel pickling facilities that pickle carbon steel using hydrochloric acid solution, hydrochloric acid regeneration plants)

Subpart DDD - Mineral Wool Production

40 CFR 63.1175 through 63.1199

(cupolas and curing ovens at mineral wool manufacturing facilities)

Subpart EEE - Hazardous Waste Combustors

40 CFR 63.1200 through 40 CFR 63.1221

(hazardous waste combustors)

Subpart FFF - Reserved.

- Subpart GGG - Pharmaceutical Production  
40 CFR 63.1250 through 40 CFR 63.1261  
(pharmaceutical manufacturing operations)
- Subpart HHH - Natural Gas Transmission and Storage Facilities  
40 CFR 63.1270 through 40 CFR 63.1289  
(natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user)
- Subpart III - Flexible Polyurethane Foam Production  
40 CFR 63.1290 through 40 CFR 63.1309  
(flexible polyurethane foam or rebond processes)
- Subpart JJJ - Group IV Polymers and Resins  
40 CFR 63.1310 through 40 CFR 63.1335  
(facilities which manufacture acrylonitrile butadiene styrene resin, styrene acrylonitrile resin, methyl methacrylate butadiene styrene resin, polystyrene resin, poly(ethylene terephthalate) resin, or nitrile resin)
- Subpart KKK - Reserved.
- Subpart LLL - Portland Cement Manufacturing  
40 CFR 63.1340 through 40 CFR 63.1359  
(kilns; in-line kilns/raw mills; clinker coolers; raw mills; finish mills; raw material dryers; raw material, clinker, or finished product storage bins; conveying system transfer points; bagging systems; bulk loading or unloading systems)
- Subpart MMM - Pesticide Active Ingredient Production  
40 CFR 63.1360 through 40 CFR 63.1369  
(pesticide active ingredient manufacturing process units, waste management units, heat exchange systems, and

- cooling towers)
- Subpart NNN - Wool Fiberglass Manufacturing  
40 CFR 63.1380 through 63.1399  
(glass melting furnaces, rotary spin wool fiberglass manufacturing lines producing bonded wool fiberglass building insulation or bonded heavy-density product)
- Subpart OOO - Amino/Phenolic Resins Production  
40 CFR 63.1400 through 63.1419  
(Unit operations, process vents, storage vessels, equipment subject to leak provisions)
- Subpart PPP - Polyether Polyols Production  
40 CFR 63.1420 through 40 CFR 63.1439  
(polyether polyol manufacturing process units)
- Subpart QQQ - Primary Copper Smelting.  
40 CFR 63.1440 through 63.1459  
(batch copper converters, including copper concentrate dryers, smelting furnaces, slag cleaning vessels, copper converter departments, and the entire group of fugitive emission sources)
- Subpart RRR - Secondary Aluminum Production  
40 CFR 63.1500 through 63.1520  
(scrap shredders; thermal chip dryers; scrap dryers/delacquering kilns/decoating kilns; group 2, sweat, dross-only furnaces; rotary dross coolers; processing units)
- Subpart SSS - Reserved.
- Subpart TTT - Primary Lead Smelting  
40 CFR 63.1541 through 40 CFR 63.1550

- (sinter machines, blast furnaces, dross furnaces, process fugitive sources, fugitive dust sources)
- Subpart UUU - Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units.
- 40 CFR 63.1560 through 40 CFR 63.1579
- (petroleum refineries that produce transportation and heating fuels or lubricants, separate petroleum, or separate, crack, react, or reform an intermediate petroleum stream, or recover byproducts from an intermediate petroleum stream)
- Subpart VVV - Publically Owned Treatment Works
- 40 CFR 63.1580 through 63.1595
- (intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment)
- Subpart WWW - Reserved.
- Subpart XXX - Ferroalloys Production: Ferromanganese and Silicomanganese
- 40 CFR 63.1620 through 40 CFR 63.1679
- (submerged arc furnaces, metal oxygen refining processes, crushing and screening operations, fugitive dust sources)
- Subpart YYY - Reserved.
- Subpart ZZZ - Reserved.
- Subpart AAAA - Municipal Solid Waste Landfills.
- 40 CFR 63.1930 through 40 CFR 63.1990
- (municipal solid waste landfills that have accepted waste since November 8, 1987 or has additional capacity for waste deposition)
- Subpart BBBB - Reserved.
- Subpart CCCC - Manufacturing of Nutritional Yeast.

- 40 CFR 63.2130 through 40 CFR 63.2192  
(fermentation vessels)
- Subpart DDDD - Plywood and Composite Wood Products.  
40 CFR 63.2230 through 40 CFR 63.2292  
(manufacture of plywood and composite wood products by bonding wood material or agricultural fiber with resin under heat and pressure to form a structural panel or engineered wood product)
- Subpart EEEE - Organic Liquids Distribution (Non-gasoline).  
40 CFR 63.2330 through 40 CFR 63.2406  
(transfer of non-crude oil liquids or liquid mixtures that contain organic hazardous air pollutants, or crude oils downstream of the first point of custody, via storage tanks, transfer racks, equipment leak components associated with pipelines, and transport vehicles)
- Subpart FFFF - Miscellaneous Organic Chemical Manufacturing.  
40 CFR 63.2430 through 40 CFR 63.2550  
(reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate)
- Subpart GGGG - Solvent Extraction for Vegetable Oil Production.  
40 CFR 63.2830 through 40 CFR 63.2872  
(vegetable oil production processes)
- Subpart HHHH - Wet-formed Fiberglass Mat Production.  
40 CFR 63.2980 through 63.3079  
(wet-formed fiberglass mat drying and curing ovens)
- Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks.  
40 CFR 63.3080 through 40 CFR 63.3176

(application of topcoat to new automobile or new light-duty truck bodies or body parts)

Subpart JJJJ -

Paper and Other Web Coating

40 CFR 63.3280 through 40 CFR 63.3420

(web coating lines engaged in the coating of metal webs used in flexible packaging and in the coating of fabric substrates for use in pressure-sensitive tape and abrasive materials)

Subpart KKKK -

Surface Coating of Metal Cans.

40 CFR 63.3480 through 40 CFR 63.3561

(application of coatings to a substrate using spray guns or dip tanks, including one- and two-piece draw and iron can body coating; sheetcoating; three-piece can body assembly coating; and end coating)

Subpart LLLL -

Reserved.

Subpart MMMM -

Surface Coating of Miscellaneous Metal Parts and Products.

40 CFR 63.3880 through 40 CFR 63.3981

(application of coatings to industrial, household, and consumer products)

Subpart NNNN -

Surface Coating of Large Appliances.

40 CFR 63.4080 through 40 CFR 63.4181

(surface coating of a large appliance part or product, including cooking equipment; refrigerators, freezers, and refrigerated cabinets and cases; laundry equipment; dishwashers, trash compactors, and water heaters; and HVAC units, air-conditioning, air-conditioning and heating combination units, comfort furnaces, and electric heat pumps)

Subpart OOOO -

Printing, Coating, and Dyeing of Fabrics and Other Textiles.

40 CFR 63.4280 through 40 CFR 63.4371

(printing, coating, slashing, dyeing, or finishing of fabric and other textiles)

Subpart PPPP - Surface Coating of Plastic Parts and Products.

40 CFR 63.4480 through 40 CFR 63.4581

(application of coating to a substrate using spray guns or dip tanks, including motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products)

Subpart QQQQ - Surface Coating of Wood Building Products.

40 CFR 63.4680 through 40 CFR 63.4781

(finishing or laminating of wood building products used in the construction of a residential, commercial, or institutional building)

Subpart RRRR - Surface Coating of Metal Furniture.

40 CFR 63.4880 through 40 CFR 63.4981

(application of coatings to substrate using spray guns and dip tanks)

Subpart SSSS - Surface Coating of Metal Coil.

40 CFR 63.5080 through 63.5209

(organic coating to surface of metal coil, including web unwind or feed sections, work stations, curing ovens, wet sections, and quench stations)

Subpart TTTT - Leather Finishing Operations.

40 CFR 63.5280 through 63.5460

(multistage application of finishing materials to adjust and improve the physical and aesthetic characteristics of leather surfaces)

- Subpart UUUU - Cellulose Products Manufacturing.  
40 CFR 63.5480 through 63.5610  
(cellulose food casing, rayon, cellulosic sponge, cellophane manufacturing, methyl cellulose, hydroxypropyl methyl cellulose, hydroxypropyl cellulose, hydroxyethyl cellulose, and carboxymethyl cellulose manufacturing industries)
- Subpart VVVV - Boat Manufacturing.  
40 CFR 63.5680 through 63.5779  
(resin and and gel coat operations, carpet and fabric adhesive operations, aluminum recreational boat surface coating operations)
- Subpart WWWW - Reinforced Plastic Composites Production.  
40 CFR 63.5780 through 40 CFR 63.5935  
(reinforced or nonreinforced plastic composites or plastic molding compounds using thermoset resins and gel coats that contain styrene)
- Subpart XXXX - Rubber Tire Manufacturing.  
40 CFR 63.5980 through 63.6015  
(production of rubber tires and components including rubber compounds, sidewalls, tread, tire beads, tire cord and liners)
- Subpart YYYY - Stationary Combustion Turbines.  
40 CFR 63.6080 through 40 CFR 63.6175  
(simple cycle, regenerative/recuperative cycle, cogeneration cycle, and combined cycle stationary combustion turbines)
- Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines.  
40 CFR 63.6580 through 40 CFR 63.6675  
(any stationary internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work)

(NOTE: Authority to enforce provisions related to affected facilities located at a major source as defined in 40 CFR 63.6675 is being retained by the Commonwealth. Authority to enforce the area source provisions of the above standard is being retained by EPA and are not incorporated by reference into these regulations for any source that is not (i) a major source as defined in 9VAC5-80-60 and subject to Article 1, Federal Operating Permits for Stationary Sources, or (ii) an affected source as defined in 9VAC5-80-370 and subject to Article 3, Federal Operating Permits for Acid Rain Sources, of Part II of 9VAC5-80 (Permits for Stationary Sources).)

Subpart AAAAA - Lime Manufacturing Plants.

40 CFR 63.7080 through 40 CFR 63.7143

(manufacture of lime product, including calcium oxide, calcium oxide with magnesium oxide, or dead burned dolomite, by calcination of limestone, dolomite, shells or other calcareous substances)

Subpart BBBBB - Semiconductor Manufacturing.

40 CFR 63.7180 through 63.7195

(semiconductor manufacturing process units used to manufacture p-type and n-type semiconductors and active solid-state devices from a wafer substrate)

Subpart CCCCC - Coke Ovens: Pushing, Quenching, and Battery Stacks.

40 CFR 63.7280 through 40 CFR 63.7352

(pushing, soaking, quenching, and battery stacks at coke oven batteries)

Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters.

40 CFR 63.7480 through 40 CFR 63.7575

(industrial, commercial, and institutional boilers and process heaters)

- Subpart EEEEE - Iron and Steel Foundries.  
40 CFR 63.7680 through 40 CFR 63.7765  
(metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines)
- Subpart FFFFF - Integrated Iron and Steel Manufacturing.  
40 CFR 63.7780 through 40 CFR 63.7852  
(each sinter plant, blast furnace, and basic oxygen process furnace at an integrated iron and steel manufacturing facility)
- Subpart GGGGG - Site Remediation.  
40 CFR 63.7880 through 40 CFR 63.7957  
(activities or processes used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material)
- Subpart HHHHH - Miscellaneous Coating Manufacturing.  
40 CFR 63.7980 through 40 CFR 63.8105  
(process vessels; storage tanks for feedstocks and products; pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems; wastewater tanks and transfer racks)
- Subpart IIIII - Mercury Cell Chlor-Alkali Plants.  
40 CFR 63.8180 through 40 CFR 63.8266  
(byproduct hydrogen streams, end box ventilation system vents, and fugitive emission sources associated with cell rooms, hydrogen systems, caustic systems, and storage areas for mercury-containing wastes)
- Subpart JJJJJ - Brick and Structural Clay Products Manufacturing.  
40 CFR 63.8380 through 40 CFR 63.8515

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into these regulations.)

Subpart KKKKK - Ceramics Manufacturing.

40 CFR 63.8530 through 40 CFR 63.8665

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into these regulations.)

Subpart LLLLL - Asphalt Processing and Asphalt Roof Manufacturing.

40 CFR 63.8680 through 40 CFR 63.8698

(preparation of asphalt flux at stand-alone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities)

Subpart MMMMM - Flexible Polyurethane Foam Fabrication Operations.

40 CFR 63.8780 through 40 CFR 63.8830

(flexible polyurethane foam fabrication plants using flame lamination or loop slitter adhesives)

Subpart NNNNN - Hydrochloric Acid Production.

40 CFR 63.8980 through 40 CFR 63.9075

(HCl production facilities that produce a liquid HCl product)

Subpart OOOOO - Reserved.

Subpart PPPPP - Engine Test Cells and Stands.

40 CFR Subpart 63.9280 through 40 CFR 63.9375

(any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines)

Subpart QQQQQ - Friction Materials Manufacturing Facilities.

40 CFR 63.9480 through 40 CFR 63.9579

(friction materials manufacturing facilities that use a solvent-based process)

Subpart RRRRR - Taconite Iron Ore Processing.

40 CFR 63.9580 through 40 CFR 63.9652

(ore crushing and handling, ore dryer stacks, indurating furnace stacks, finished pellet handling, and fugitive dust)

Subpart SSSSS - Refractory Products Manufacturing.

40 CFR 63.9780 through 40 CFR 63.9824

(manufacture of refractory products, including refractory bricks and shapes, monolithics, kiln furniture, crucibles, and other materials for liming furnaces and other high temperature process units)

Subpart TTTTT - Primary Magnesium Refining.

40 CFR 63.9880 through 40 CFR 63.9942

(spray dryer, magnesium chloride storage bin scrubber, melt/reactor system, and launder off-gas system stacks)

Subpart UUUUU - Coal- and Oil-fired Electric Utility Steam Generating Units.

40 CFR 63.9980 through 40 CFR 63.10042

(any furnace, boiler, or other device used for combusting fuel for the purpose of producing steam, including fossil-fuel-fired steam generators associated with integrated gasification combined cycle gas turbines and excluding nuclear steam generators, for the purpose of powering a generator to produce electricity or electricity and other thermal energy)

Subpart VVVVV - Reserved.

Subpart WWWW - Hospital Ethylene Oxide Sterilizer Area Sources.

40 CFR 63.10382 through 40 CFR 63.10448

(any enclosed vessel that is filled with ethylene oxide gas or

an ethylene oxide/inert gas mixture for the purpose of sterilization)

Subpart XXXXX - Reserved.

Subpart YYYYYY - Electric Arc Furnace Steelmaking Facility Area Sources.

40 CFR 63.10680 through 40 CFR 63.10692

(a steel plant that produces carbon, alloy, or specialty steels using an electric arc furnace)

Subpart ZZZZZ - Iron and Steel Foundries Area Sources.

40 CFR 63.10880 through 40 CFR 63.10906

(a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce)

Subpart AAAAAA - Reserved.

Subpart BBBBBB - Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, Area Sources.

40 CFR 63.11080 through 40 CFR 63.11100

(gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service)

Subpart CCCCCC - Gasoline Dispensing Facilities, Area Sources.

40 CFR 63.11110 through 40 CFR 63.11132

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into these regulations for any source that is not (i) a major source as defined in 9VAC5-80-60 and subject to Article 1, Federal Operating Permits for Stationary Sources, or (ii) an affected source as defined in 9VAC5-80-370 and subject to Article 3, Federal Operating Permits for Acid Rain Sources, of Part II of 9VAC5-80 (Permits for Stationary Sources).)

Subpart DDDDDD - Polyvinyl Chloride and Copolymers Production Area

Sources.

40 CFR 63.11140 through 40 CFR 63.11145

(plants that produce polyvinyl chloride or copolymers)

Subpart EEEEEEE - Primary Copper Smelting Area Sources.

40 CFR 63.11146 through 40 CFR 63.11152

(any installation or any intermediate process engaged in the production of copper from copper sulfide ore concentrates through the use of pyrometallurgical techniques)

Subpart FFFFFFF - Secondary Copper Smelting Area Sources.

40 CFR 63.11153 through 40 CFR 63.11159

(a facility that processes copper scrap in a blast furnace and converter or that uses another pyrometallurgical purification process to produce anode copper from copper scrap, including low-grade copper scrap)

Subpart GGGGGG - Primary Nonferrous Metals Area Sources--Zinc, Cadmium, and Beryllium.

40 CFR 63.11160 through 40 CFR 63.11168

(cadmium melting furnaces used to melt cadmium or produce cadmium oxide from the cadmium recovered in the zinc production; primary beryllium production facilities engaged in the chemical processing of beryllium ore to produce beryllium metal, alloy, or oxide, or performing any of the intermediate steps in these processes; and primary zinc production facilities engaged in the production, or any intermediate process in the production, of zinc or zinc oxide from zinc sulfide ore concentrates through the use of pyrometallurgical techniques)

Subpart HHHHHH - Paint Stripping and Miscellaneous Surface Coating Operations Area Sources.

40 CFR 63.11169 through 40 CFR 63.11180

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into

these regulations for any source that is not (i) a major source as defined in 9VAC5-80-60 and subject to Article 1, Federal Operating Permits for Stationary Sources, or (ii) an affected source as defined in 9VAC5-80-370 and subject to Article 3, Federal Operating Permits for Acid Rain Sources, of Part II of 9VAC5-80 (Permits for Stationary Sources.)

Subpart IIIIII - Reserved.

Subpart JJJJJJ - Industrial, Commercial, and Institutional Boiler Area Sources.

40 CFR 63.11193 through 40 CFR 63.11226

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into these regulations for any source that is not (i) a major source as defined in 9VAC5-80-60 and subject to Article 1, Federal Operating Permits for Stationary Sources, or (ii) an affected source as defined in 9VAC5-80-370 and subject to Article 3, Federal Operating Permits for Acid Rain Sources, of Part II of 9VAC5-80 (Permits for Stationary Sources.)

Subpart KKKKKK - Reserved.

Subpart LLLLLL - Acrylic and Modacrylic Fibers Production Area Sources.

40 CFR 63.11393 through 40 CFR 63.11399

(production of either of the following synthetic fibers composed of acrylonitrile units: acrylic fiber or modacrylic fiber)

Subpart MMMMMM - Carbon Black Production Area Sources.

40 CFR 63.11400 through 40 CFR 63.11406

(carbon black production process units including all waste management units, maintenance wastewater, and equipment components that contain or contact HAP that are associated with the carbon black production process unit)

Subpart NNNNNN - Chemical Manufacturing Area Sources: Chromium Compounds.

40 CFR 63.11407 through 40 CFR 63.11413

(any process that uses chromite ore as the basic feedstock to manufacture chromium compounds, primarily sodium dichromate, chromic acid, and chromic oxide)

Subpart OOOOOO - Flexible Polyurethane Foam Production and Fabrication Area Sources.

40 CFR 63.11414 through 40 CFR 63.11420

(a facility where pieces of flexible polyurethane foam are cut, bonded, and/or laminated together or to other substrates)

Subpart PPPPPP - Lead Acid Battery Manufacturing Area Sources.

40 CFR 63.11421 through 40 CFR 63.11427

(grid casting facilities, paste mixing facilities, three-process operation facilities, lead oxide manufacturing facilities, lead reclamation facilities, and any other lead-emitting operation that is associated with the lead acid battery manufacturing plant)

Subpart QQQQQQ - Wood Preserving Area Sources.

40 CFR 63.11428 through 40 CFR 63.11434

(pressure or thermal impregnation of chemicals into wood to provide effective long-term resistance to attack by fungi, bacteria, insects, and marine borers)

Subpart RRRRRR - Clay Ceramics Manufacturing Area Sources.

40 CFR 63.11435 through 40 CFR 63.11447

(manufacture of pressed tile, sanitaryware, dinnerware, or pottery with an atomized glaze spray booth or kiln that fires glazed ceramic ware)

Subpart SSSSSS - Glass Manufacturing Area Sources.

40 CFR 63.11448 through 40 CFR 63.11461

(manufacture of flat glass, glass containers, or pressed and blown glass by melting a mixture of raw materials to produce molten glass and form the molten glass into sheets,

containers, or other shapes)

Subpart TTTTTT - Secondary Nonferrous Metals Processing Area Sources.

40 CFR 63.11462 through 40 CFR 63.11474

(all crushing and screening operations at a secondary zinc processing facility and all furnace melting operations located at any secondary nonferrous metals processing facility)

Subpart UUUUUU - Reserved.

Subpart VVVVVV - Chemical Manufacturing Area Sources.

40 CFR 63.11494 through 40 CFR 11503

(each chemical manufacturing process unit that uses as feedstocks, generates as byproducts, or produces as products any of the following: 1,3-butadiene; 1,3-dichloropropene; acetaldehyde; chloroform; ethylene dichloride; methylene chloride; hexachlorobenzene; hydrazine; quinoline; or compounds of arsenic, cadmium, chromium, lead, manganese, or nickel)

Subpart WWWWWW - Plating and Polishing Operations, Area Sources.

40 CFR 63.11504 through 40 CFR 11513

(new and existing tanks, thermal spraying equipment, and mechanical polishing equipment used in non-chromium electroplating, electroless or non-electrolytic plating, non-electrolytic metal coating, dry mechanical polishing, electroforming, and electropolishing)

Subpart XXXXXX - Nine Metal Fabrication and Finishing Source Categories, Area Sources.

40 CFR 63.11514 through 40 CFR 63.11523

(NOTE: Authority to enforce the above standard is being retained by EPA and it is not incorporated by reference into these regulations for any source that is not (i) a major source as defined in 9VAC5-80-60 and subject to Article 1, Federal Operating Permits for Stationary Sources, or (ii) an affected source as defined in 9VAC5-80-370 and subject to Article 3, Federal Operating Permits for Acid Rain Sources, of Part II

of 9VAC5-80 (Permits for Stationary Sources).)

Subpart YYYYYY - Ferroalloys Production Facilities, Area Sources.

40 CFR 63.11524 through 40 CFR 63.11543

(manufacture of silicon metal, ferrosilicon, ferrotitanium using the aluminum reduction process, ferrovanadium, ferromolybdenum, calcium silicon, silicomanganese zirconium, ferrochrome silicon, silvery iron, high-carbon ferrochrome, charge chrome, standard ferromanganese, silicomanganese, ferromanganese silicon, calcium carbide or other ferroalloy products using electrometallurgical operations including electric arc furnaces or other reaction vessels)

Subpart ZZZZZZ - Aluminum, Copper, and Other Nonferrous Foundries, Area Sources.

40 CFR 63.11544 through 40 CFR 63.11558

(melting operations at aluminum, copper, and other nonferrous foundries, including the collection of induction, reverberatory, crucible, tower, or dry hearth furnaces used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings)

Subpart AAAAAA - Asphalt Processing and Asphalt Roofing Manufacturing Area Sources.

40 CFR 63.11559 through 40 CFR 63.11567

(asphalt processing operations that prepare asphalt flux at standalone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities that include one or more asphalt flux blowing stills; and asphalt roofing manufacturing operations that manufacture asphalt roofing products through a series of sequential process steps depending upon whether the type of substrate used is organic or inorganic)

Subpart BBBB BB - Chemical Preparations Industry Area Sources.

40 CFR 63.11579 through 40 CFR 63.11588

(any facility-wide collection of chemical preparation

operations, including the collection of mixing, blending, milling, and extruding equipment used to manufacture chemical preparations that contain metal compounds for chromium, lead, manganese, and nickel)

Subpart CCCCCC - Paints and Allied Products Manufacturing Area Sources.

40 CFR 63.11599 through 40 CFR 63.11638

(paints and allied products manufacturing processes, including, weighing, blending, mixing, grinding, tinting, dilution or other formulation, as well as cleaning operations, material storage and transfer, and piping)

Subpart DDDDDDD - Prepared Feeds Manufacturing Area Sources.

40 CFR 63.11619 through 40 CFR 63.11638

(production of animal feed from the point in the process where a material containing chromium or manganese is added, to the point where the finished product leaves the facility, including areas where materials containing chromium and manganese are stored, areas where materials containing chromium and manganese are temporarily stored prior to addition to the feed at the mixer, mixing and grinding processes, pelleting and pellet cooling processes, packing and bagging processes, crumblers and screens, bulk loading operations, and all conveyors and other equipment that transfer feed materials)

Subpart EEEEEEE - Gold Mine Ore processing and Production Area Sources

40 CFR 63.11640 through 40 CFR 63.11653

(any industrial facility engaged in the processing of gold mine ore that uses any of the following processes: roasting operations, autoclaves, carbon kilns, preg tanks, electrowinning, mercury retorts, or melt furnaces)

Subpart FFFFFFF - Reserved.

Subpart GGGGGGG - Reserved.

Subpart HHHHHHH - Polyvinyl Chloride and Copolymers Production.

40 CFR 63.11860 through 40 CFR 63.12000

(facility-wide collection of PVCPU, storage vessels, heat exchange systems, surge control vessels, wastewater and process wastewater treatment systems that are associated with producing polyvinyl chloride and copolymers)

- Appendix A - Test Methods.
- Appendix B - Sources Defined for Early Reduction Provisions.
- Appendix C - Determination of the Fraction Biodegraded ( $F_{bio}$ ) in a Biological Treatment Unit.
- Appendix D - Alternative Validation Procedure for EPA Waste and Wastewater Methods.

9VAC5-60-110. Word or phrase substitutions.

In all of the standards designated in 9 VAC 5-60-100 substitute:

- A. Board for administrator.
- B. Board for U.S. Environmental Protection Agency (except in references).

#### HISTORICAL NOTES:

Derived from: Rule 6-2 of Part VI of VR 120-01 (§ 120-06-0201 through § 120-06-0203)

Effective Date: December 1, 1995

Promulgated: December 1, 1995

Amended: May 1, 1997

Amended: April 1, 1998

Amended: April 14, 1999

Amended: May 1, 2000

Amended: June 1, 2001

Amended: February 1, 2002

Amended: February 1, 2003

Amended: June 1, 2004

Amended: September 8, 2004

Amended: January 12, 2005

Amended: December 1, 2005

Amended: June 1, 2007

Amended: December 12, 2007

Amended: March 18, 2009

Amended: January 20, 2010  
Amended: March 2, 2011  
Amended: February 15, 2012  
Amended: February 13, 2013  
Amended: July 1, 2014  
Amended: March 11, 2015  
Amended: February 10, 2016

REG\VAC\602