

REGULATION 5.14 Hazardous Air Pollutants and Source Categories

Air Pollution Control District of Jefferson County Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control

Pursuant To: KRS Chapter 77 Air Pollution Control

Necessity And Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes the hazardous air pollutants regulated by the District and the major and minor source categories of HAPs.

SECTION 1 Definitions

Terms used in this regulation that are not defined in this regulation shall have the meaning given to them in Regulation 1.02 *Definitions*.

- 1.1 "Hazardous air pollutant" (HAP) means a substance listed in Section 2 pursuant to the Act §112(b).
- 1.2 "Minor source" means a stationary source of hazardous air pollutants that is not a major source as defined in Regulation 2.16 *Title V Operating Permits, section 2.27*.
- 1.3 "Stationary source" means a building, structure, facility, or installation that emits or may emit a regulated air pollutant or any pollutant listed in Section 2.

SECTION 2 Listing of Hazardous Air Pollutants

The following chemicals are the listed HAPs pursuant to the Act §112(b):

CAS #	Chemical
75-07-0	Acetaldehyde
60-35-5	Acetamide
75-05-8	Acetonitrile
98-86-2	Acetophenone
53-96-3	2-Acetylaminofluorene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
107-05-1	Allyl chloride
92-67-1	4-Aminobiphenyl
62-53-3	Aniline

CAS #	Chemical
90-04-0	o-Anisidine
1336-36-3	Aroclors (Polychlorinated biphenyls) (PCBs)
1332-21-4	Asbestos
151-56-4	Aziridine (Ethyleneimine)
114-26-1	Baygon (Propoxur)
71-43-2	Benzene (including benzene from gasoline)
92-87-5	Benzidine
106-51-4	p-Benzoquinone (Quinone)
98-07-7	Benzotrichloride
100-44-7	Benzyl chloride
92-52-4	Biphenyl
117-81-7	Bis (2-ethylhexyl) phthalate (DEHP)
111-44-4	Bis (2-chloroethyl) ether (Dichloroethyl ether)
542-88-1	Bis (chloromethyl) ether
75-25-2	Bromoform
74-83-9	Bromomethane (Methyl bromide)
106-99-0	1,3-Butadiene
156-62-7	Calcium cyanamide
133-06-2	Captan
63-25-2	Carbaryl
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
120-80-9	Catechol
133-90-4	Chloramben
57-74-9	Chlordane
7782-50-5	Chlorine

CAS #	Chemical
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate
126-99-8	2-Chloro-1,3-butadiene (Chloroprene)
106-89-8	1-Chloro-2,3-epoxypropane (Epichlorohydrin)
67-66-3	Chloroform
8001-35-2	Chlorinated camphene (Toxaphene)
74-87-3	Chloromethane (Methyl chloride)
107-30-2	Chloromethyl methyl ether (CMME)
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)
1319-77-3	Cresol/Cresylic acid (mixed isomers)
95-48-7	o-Cresol
108-39-4	m-Cresol
106-44-5	p-Cresol
1319-77-3	Cresylic Acid/Cresol (mixed isomers)
98-82-8	Cumene
N/A	2,4-D (including salts and esters) (2,4-Dichlorophenoxyacetic acid)
72-55-9	DDE (1,1-Dichloro-2,2-bis[p-chlorophenyl] ethylene)
334-88-3	Diazomethane
132-64-9	Dibenzofuran
96-12-8	1,2-Dibromo-3-chloropropane
106-93-4	Dibromoethane (Ethylene dibromide)
84-74-2	Dibutylphthalate
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
72-55-9	1,1-Dichloro-2,2-bis(p-chlorophenyl) ethylene (DDE)

CAS #	Chemical
75-34-3	1,1-Dichloroethane (Ethylidene dichloride)
107-06-2	1,2-Dichloroethane (Ethylene dichloride)
75-35-4	1,1-Dichloroethylene (Vinylidene chloride)
111-44-4	Dichloroethyl ether (Bis[2-chloroethyl]ether)
75-09-2	Dichloromethane (Methylene chloride)
542-75-6	1,3-Dichloropropene
62-73-7	Dichlorvos
111-42-2	Diethanolamine
123-91-1	1,4-Diethyleneoxide (1,4-Dioxane)
64-67-5	Diethyl sulfate
119-90-4	3,3'-Dimethoxybenzidine
60-11-7	4-Dimethylaminoazobenzene
121-69-7	N,N-Dimethylaniline
119-93-7	3,3'-Dimethylbenzidine
79-44-7	Dimethylcarbamoyl chloride
68-12-2	N,N-Dimethylformamide (DMF)
57-14-7	1,1-Dimethylhydrazine
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
N/A	4,6-Dinitro-o-cresol (including salts)
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
123-91-1	1,4-Dioxane (1,4-Diethyleneoxide)
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106-88-7	1,2-Epoxybutane
140-88-5	Ethyl acrylate

CAS #	Chemical
100-41-4	Ethylbenzene
51-79-6	Ethyl carbamate (Urethane)
75-00-3	Ethyl chloride (Chloroethane)
106-93-4	Ethylene dibromide (Dibromoethane)
107-06-2	Ethylene dichloride (1,2-Dichloroethane)
107-21-1	Ethylene glycol
151-56-4	Ethyleneimine (Aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)
50-00-0	Formaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
N/A	1,2,3,4,5,6-Hexachlorocyclohexane (all stereo isomers, including lindane)
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
822-06-0	Hexamethylene-1,6-diisocyanate
680-31-9	Hexamethylphosphoramide
110-54-3	Hexane
108-10-1	Hexone (Methyl isobutyl ketone)
302-01-2	Hydrazine
7647-01-0	Hydrochloric acid (Hydrogen chloride [gas only])
7664-39-3	Hydrofluoric acid (Hydrogen fluoride)
7664-39-3	Hydrogen fluoride (Hydrofluoric acid)
123-31-9	Hydroquinone
74-88-4	Iodomethane (Methyl iodide)

CAS #	Chemical
78-59-1	Isophorone
N/A	Lindane (see 1,2,3,4,5,6-Hexachlorocyclohexane)
108-31-6	Maleic anhydride
67-56-1	Methanol
72-43-5	Methoxychlor
75-55-8	2-Methylaziridine (1,2-Propylenimine)
74-83-9	Methyl bromide (Bromomethane)
74-87-3	Methyl chloride (Chloromethane)
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)
60-34-4	Methylhydrazine
74-88-4	Methyl iodide (Iodomethane)
108-10-1	Methyl isobutyl ketone (Hexone)
624-83-9	Methyl isocyanate
80-62-6	Methyl methacrylate (MMA)
1634-04-4	Methyl tert-butyl ether
101-14-4	4,4'-Methylene bis(2-chloroaniline)
75-09-2	Methylene chloride (Dichloromethane)
101-68-8	4,4'-Methylenediphenyl diisocyanate (MDI)
101-77-9	4,4'-Methylenedianiline
91-20-3	Naphthalene
98-95-3	Nitrobenzene
92-93-3	4-Nitrobiphenyl
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
684-93-5	N-Nitroso-N-methylurea
62-75-9	N-Nitrosodimethylamine
59-89-2	N-Nitrosomorpholine

CAS #	Chemical
56-38-2	Parathion
127-18-4	Perchloroethylene (Tetrachloroethylene)
82-68-8	Pentachloronitrobenzene (Quintobenzene)
87-86-5	Pentachlorophenol
108-95-2	Phenol
106-50-3	p-Phenylenediamine
75-44-5	Phosgene
7803-51-2	Phosphine
N/A	Phosphorus compounds
85-44-9	Phthalic anhydride
1336-36-3	Polychlorinated biphenyls (PCB/Aroclors)
1120-71-4	1,3-Propane sultone
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur (Baygon)
78-87-5	Propylene dichloride (1,2-Dichloropropane)
75-56-9	Propylene oxide
75-55-8	1,2-Propylenimine (2-Methylaziridine)
91-22-5	Quinoline
106-51-4	Quinone (p-Benzoquinone)
82-68-8	Quintobenzene (Pentachloronitrobenzene)
100-42-5	Styrene
96-09-3	Styrene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene (Perchloroethylene)
7550-45-0	Titanium tetrachloride

CAS #	Chemical
108-88-3	Toluene
95-80-7	Toluene-2,4-diamine
584-84-9	2,4-Toluene diisocyanate (TDI)
95-53-4	o-Toluidine
8001-35-2	Toxaphene (Chlorinated camphene)
120-82-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
121-44-8	Triethylamine
1582-09-8	Trifluralin
540-84-1	2,2,4-Trimethylpentane
51-79-6	Urethane (Ethyl carbamate)
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)
1330-20-7	Xylene (mixed isomers)
95-47-6	o-Xylene
108-38-3	m-Xylene
106-42-3	p-Xylene
N/A	Antimony compounds
N/A	Arsenic compounds (inorganic including arsine)
N/A	Beryllium compounds
N/A	Cadmium compounds

CAS #	Chemical
N/A	Chromium compounds
N/A	Cobalt compounds
N/A	Coke oven emissions
N/A	Cyanide compounds ¹
N/A	Glycol ethers ²
N/A	Lead compounds (excluding elemental lead)
N/A	Manganese compounds
N/A	Mercury compounds
N/A	Fine mineral fibers ³
N/A	Nickel compounds
N/A	Polycyclic Organic Matter ⁴
N/A	Radionuclides (including radon) ⁵
N/A	Selenium compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

¹ X'CN where X = H' or any other group where a formal dissociation may occur. For example, KCN or Ca(CN)₂

² Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR'

where:

n = 1, 2, or 3;

R = alkyl C7 or less, or

R = phenyl or alkyl substituted phenyl; and

R' = H or alkyl C7 or less, or

OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate; but excludes ethylene glycol monobutyl ether (EGBE, CAS No. 111-76-2).

³ Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

⁴ Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

⁵ A type of atom which spontaneously undergoes radioactive decay.

SECTION 3 List of Categories and Subcategories of Hazardous Air Pollutant Sources

The following are the major and minor source categories and subcategories listed in 67 FR 6521 (2-12-02) pursuant to the Act §112(c)(1) and modified in 67 FR 42108 (6-20-02), 67 FR 46028 (7-11-02), 67 FR 47894 (7-22-02), and 70 FR 15994 (3-29-05):

3.1 Major source categories and subcategories:

3.1.1 Fuel Combustion:

- Combustion Turbines
- Engine Test Facilities
- Industrial Boilers
- Institutional/Commercial Boilers
- Process Heaters (Indirect-Fired only)
- Reciprocating Internal Combustion Engines
- Rocket Testing Facilities.

3.1.2 Non-Ferrous Metal Processing:

- Primary Aluminum Production
- Primary Copper Smelting
- Primary Lead Smelting
- Primary Magnesium Refining
- Secondary Aluminum Production
- Secondary Lead Smelting.

3.1.3 Ferrous Metals Processing:

- Coke Ovens: charging, top side, and door leaks
- Coke Ovens: pushing, quenching, and battery stacks
- Ferrous Alloys Production: Silicomanganese and Ferromanganese
- Integrated Iron & Steel Manufacturing
- Iron Foundries
- Steel Foundries
- Steel Pickling -- HCl Process Facilities and Hydrochloric Acid Regeneration Plants.

3.1.4 Mineral Products Processing:

- Asphalt Processing
- Asphalt Roofing Manufacturing
- Asphalt/Coal Tar Application -- Metal Pipes
- Brick and Structural Clay Products Manufacturing
- Clay Ceramics Manufacturing
- Lime Manufacturing
- Mineral Wool Production
- Portland Cement Manufacturing
- Refractory Products Manufacturing
- Taconite Iron Ore Processing
- Wool Fiberglass Manufacturing.

3.1.5 Petroleum and Natural Gas Production and Refining:

- Oil and Natural Gas Production
- Natural Gas Transmission and Storage
- Petroleum Refineries -- Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
- Petroleum Refineries -- Other sources not distinctly listed.

3.1.6 Liquids Distribution:

- Gasoline Distribution (Stage I)

- Marine Vessel Loading Operations
- Organic Liquids Distribution (non-gasoline).
- 3.1.7 Surface Coating Processes:
 - Aerospace Industries
 - Auto and Light Duty Truck (surface coating)
 - Large Appliance (surface coating)
 - Magnetic Tapes (surface coating)
 - Manufacture of Paints, Coatings and Adhesives
 - Metal Can (surface coating)
 - Metal Coil (surface coating)
 - Metal Furniture (surface coating)
 - Miscellaneous Metal Parts and Products (surface coating)
 - Paper and Other Webs (surface coating)
 - Plastic Parts and Products (surface coating)
 - Printing, Coating, and Dyeing of Fabrics and Other Textiles
 - Printing/Publishing (surface coating)
 - Shipbuilding and Ship Repair (surface coating)
 - Wood Building Products (surface coating)
 - Wood Furniture (surface coating).
- 3.1.8 Waste Treatment and Disposal:
 - Hazardous Waste Incineration
 - Municipal Solid Waste Landfills
 - Off-Site Waste and Recovery Operations
 - Publicly Owned Treatment Works (POTW)
 - Site Remediation.
- 3.1.9 Agricultural Chemicals Production:
 - Pesticide Active Ingredient Production.
- 3.1.10 Fibers Production Processes:
 - Acrylic Fibers / Modacrylic Fibers Production
 - Spandex Production.
- 3.1.11 Food and Agriculture Processes:
 - Manufacturing of Nutritional Yeast
 - Solvent Extraction for Vegetable Oil Production.
- 3.1.12 Pharmaceutical Production Processes:
 - Pharmaceuticals Production.
- 3.1.13 Polymers and Resins Production:
 - Acetal Resins Production
 - Acrylonitrile-Butadiene-Styrene Production
 - Alkyd Resins Production
 - Amino Resins Production
 - Boat Manufacturing
 - Butyl Rubber Production
 - Cellulose Ethers Production
 - Epichlorohydrin Elastomers Production
 - Epoxy Resins Production
 - Ethylene-Propylene Rubber Production
 - Flexible Polyurethane Foam Production

Hypalon_{TM} Production
Maleic Anhydride Copolymers Production
Methyl Methacrylate-Acrylonitrile-Butadiene-Styrene Production
Methyl Methacrylate-Butadiene-Styrene Terpolymers Production
Neoprene Production
Nitrile Butadiene Rubber Production
Nitrile Resins Production
Non-Nylon Polyamides Production
Phenolic Resins Production
Polybutadiene Rubber Production
Polycarbonates Production
Polyester Resins Production
Polyether Polyols Production
Polyethylene Terephthalate Production
Polymerized Vinylidene Chloride Production
Polymethyl Methacrylate Resins Production
Polystyrene Production
Polysulfide Rubber Production
Polyvinyl Acetate Emulsions Production
Polyvinyl Alcohol Production
Polyvinyl Butyral Production
Polyvinyl Chloride & Copolymers Production
Reinforced Plastic Composites Production
Styrene-Acrylonitrile Production
Styrene-Butadiene Rubber and Latex Production.

3.1.14 Production of Inorganic Chemicals:

Ammonium Sulfate Production -- Caprolactam By-Products Plants
Carbon Black Production
Chlorine Production (Mercury cell chlor-alkali plants only)
Cyanide Chemicals Manufacturing
Fumed Silica Production
Hydrochloric Acid Production
Hydrogen Fluoride Production
Phosphate Fertilizers Production
Phosphoric Acid Manufacturing

3.1.15 Production of Organic Chemicals:

Ethylene Processes
Quaternary Ammonium Compounds Production
Synthetic Organic Chemical Manufacturing.

- 3.1.16 Miscellaneous Processes:
 - Benzyltrimethylammonium Chloride Production
 - Carbonyl Sulfide Production
 - Chelating Agents Production
 - Chlorinated Paraffins Production
 - Chromic Acid Anodizing
 - Commercial Dry Cleaning (perchloroethylene) -- Transfer Machines
 - Commercial Sterilization Facilities
 - Decorative Chromium Electroplating
 - Ethylidene Norbornene Production
 - Explosives Production
 - Flexible Polyurethane Foam Fabrication Operations
 - Friction Materials Manufacturing
 - Halogenated Solvent Cleaners
 - Hard Chromium Electroplating
 - Hydrazine Production
 - Industrial Dry Cleaning (perchloroethylene) -- Dry-to-dry Machines
 - Industrial Dry Cleaning (perchloroethylene) -- Transfer Machines
 - Industrial Process Cooling Towers
 - Leather Finishing Operations
 - Miscellaneous Viscose Processes
 - OBPA/1,3-Diisocyanate Production
 - Paint Stripping Operations
 - Photographic Chemicals Production
 - Phthalate Plasticizers Production
 - Plywood and Composite Wood Products
 - Pulp and Paper Production
 - Rubber Chemicals Manufacturing
 - Rubber Tire Manufacturing
 - Semiconductor Manufacturing
 - Symmetrical Tetrachloropyridine Production
 - Wet-Formed Fiberglass Mat Production.
- 3.2 Categories of area sources:
 - 3.2.1 Chromic Acid Anodizing
 - 3.2.2 Commercial Dry Cleaning (perchloroethylene) -- Transfer Machines
 - 3.2.3 Commercial Dry Cleaning (perchloroethylene) -- Dry-to-dry machines
 - 3.2.4 Commercial Sterilization Facilities
 - 3.2.5 Decorative Chromium Electroplating
 - 3.2.6 Halogenated Solvent Cleaners
 - 3.2.7 Hard Chromium Electroplating
 - 3.2.8 Hazardous Waste Incineration
 - 3.2.9 Portland Cement Manufacturing
 - 3.2.10 Secondary Aluminum Production
 - 3.2.11 Secondary Lead Smelting.

SECTION 4 Additional List of Source Categories of Hazardous Air Pollutants

The following are the source categories listed in 63 FR 17838 (4-10-98) pursuant to the Act §112(c)(6) and modified in 67 FR 68124 (11-8-02):

- 4.1 Gasoline distribution, leaded aviation fuel.

SECTION 5 Area Source Category List

The following are the source categories listed in 64 FR 38706 (7-19-99) pursuant to the Act §112(c)(3) and §112(k)(3)(B)(ii) and modified in 66 FR 8220 (1-30-01), 67 FR 43112 (6-26-02), and 67 FR 70427 (11-22-02):

- 5.1 Cyclic Crude and Intermediate Production
- 5.2 Flexible Polyurethane Foam Fabrication Operations
- 5.3 Hospital Sterilizers
- 5.4 Industrial Inorganic Chemical Manufacturing
- 5.5 Industrial Organic Chemical Manufacturing
- 5.6 Mercury Cell Chlor-Alkali Plants
- 5.7 Gasoline Distribution Stage 1
- 5.8 Municipal Landfills
- 5.9 Oil and Natural Gas Production
- 5.10 Paint Stripping Operations
- 5.11 Plastic Materials and Resins Manufacturing
- 5.12 Publicly Owned Treatment Works
- 5.13 Synthetic Rubber Manufacturing
- 5.14 Chromic Acid Anodizing
- 5.15 Commercial Sterilization Facilities
- 5.16 Other Solid Waste Incinerators (Human/Animal Cremation)
- 5.17 Decorative Chromium Electroplating
- 5.18 Dry Cleaning Facilities
- 5.19 Halogenated Solvent Cleaners
- 5.20 Hard Chromium Electroplating
- 5.21 Hazardous Waste Combustors
- 5.22 Industrial Boilers
- 5.23 Institutional/Commercial Boilers
- 5.24 Medical Waste Incinerators
- 5.25 Municipal Waste Combustors
- 5.26 Portland Cement
- 5.27 Secondary Lead Smelting
- 5.28 Stationary Internal Combustion Engines
- 5.29 Secondary Aluminum Production
- 5.30 Acrylic Fibers/Modacrylic Fibers Production
- 5.31 Plating and Polishing
- 5.32 Agriculture Chemicals & Pesticides Manufacturing
- 5.33 Autobody Refinishing Paint Shops
- 5.34 Primary Nonferrous Metals - Zinc, Cadmium, and Beryllium
- 5.35 Flexible Polyurethane Foam Production
- 5.36 Iron Foundries
- 5.37 Lead Acid Battery Manufacturing
- 5.38 Miscellaneous Organic Chemical Manufacturing (MON)

- 5.39 Pharmaceutical Production
- 5.40 Polyvinyl Chloride & Copolymers Production
- 5.41 Pressed and Blown Glass & Glassware Manufacturing
- 5.42 Secondary Copper Smelting
- 5.43 Secondary Nonferrous Metals
- 5.44 Sewage Sludge Incineration
- 5.45 Stainless and Nonstainless Steel Manufacturing Electric Arc Furnaces (EAF)
- 5.46 Steel Foundries
- 5.47 Wood Preserving
- 5.48 Asphalt Processing and Asphalt Roofing Manufacturing
- 5.49 Brick and Structural Clay Products Manufacturing
- 5.50 Carbon Black Production
- 5.51 Chemical Manufacturing: Chromium Compounds
- 5.52 Chemical Preparations
- 5.53 Clay Ceramics Manufacturing
- 5.54 Industrial Machinery and Equipment: Finishing Operations
- 5.55 Copper Foundries
- 5.56 Electrical and Electronics Equipment: Finishing Operations
- 5.57 Ferroalloys Production: Ferromanganese and Silicomanganese
- 5.58 Fabricated Metal Products Manufacturing, not elsewhere classified (nec)
- 5.59 Fabricated Plate Work (Boiler Shops)
- 5.60 Fabricated Structural Metal Manufacturing
- 5.61 Heating Equipment Manufacturing, Except Electric
- 6.62 Inorganic Pigments Manufacturing
- 6.63 Iron and Steel Forging
- 6.64 Nonferrous Foundries, nec
- 6.65 Paints and Allied Products Manufacturing
- 6.66 Plastic Parts and Products (Surface Coating)
- 6.67 Prepared Feeds Manufacturing
- 6.68 Primary Copper Smelters
- 6.69 Primary Metal Products Manufacturing
- 6.70 Valves and Pipe Fittings Manufacturing

Adopted v1/10-20-93, effective 10-20-93; amended v2/9-16-98, v3/3-15-00, v4/6-20-01, v5/7-17-02, v6/9-26-02, v7/7-19-06.