

APPENDIX C

FACILITY GUIDELINE INDEX

(FACILITY "LOOK-UP" TABLE)

APPENDIX C - I

RESPONSIBILITIES OF ALL FACILITIES

FACILITY GUIDELINE INDEX

APPENDIX C-I
RESPONSIBILITIES OF ALL FACILITIES

NOTHING IN THIS APPENDIX SHALL BE CONSTRUED AS REQUIRING THAT SOURCE TESTING BE CONDUCTED FOR SUBSTANCES SET FORTH IN THIS APPENDIX. FURTHER, IN CASES WHERE A SUBSTANCE SET FORTH HEREIN IS NOT PRESENT AT A PARTICULAR FACILITY, THE FACILITY OPERATOR SHALL NOT ATTEMPT TO QUANTIFY THE EMISSIONS OF SUCH SUBSTANCE, BUT SHALL PROVIDE ADEQUATE DOCUMENTATION TO DEMONSTRATE TO THE DISTRICT THAT THE POSSIBLE PRESENCE OF THE SUBSTANCE AT THE FACILITY HAS BEEN ADDRESSED AND THAT THERE ARE NO EMISSIONS OF THE SUBSTANCE FOR SPECIFIED REASONS.

Notes For Appendix C-I

(1) The following substance abbreviations are used throughout the index:

BaP	= Benzo[a]Pyrene
CFC-113	= Chlorinated fluorocarbon
EDB	= Ethylene dibromide
EDC	= Ethylene dichloride
ETO	= Ethylene oxide
Perc	= Perchloroethylene, Tetrachloroethylene
PCBs	= Polychlorinated biphenyls
PAHs	= Polycyclic aromatic hydrocarbons
POM	= Polycyclic organic matter (other than PAHs)
TCA	= 1,1,1-Trichloroethane, Methyl chloroform
TCE	= Trichloroethylene

(2) PAHs are composed of the following substances:

Acenaphthene	Dibenzo[a,e]pyrene
Acenaphthylene	Dibenzo[a,h]pyrene
Anthracene	Dibenzo[a,i]pyrene
Benz[a]anthracene	Dibenzo[a,l]pyrene
Benzo[b]fluoranthene	Fluoranthene
Benzo[j]fluoranthene	Fluorene
Benzo[k]fluoranthene	Indeno[1,2,3,-cd]pyrene
Benzo[a]pyrene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Chrysene	Pyrene
Dibenzo[a,h]anthracene	

- (3) Substances emitted by a particular device or process may not be limited to those listed in this Facility Guideline Index .
ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, OR RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.
- (4) Nitrosamines refer to the following listed substances:
- Dialkylnitrosamines
 - 4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK)
 - N-Methyl N'-nitro-N-nitrosoguanidine
 - p-Nitrosodiphenylamine
 - N-Nitrosodi-n-butylamine
 - N-Nitrosodiethanolamine
 - N-Nitrosodiethylamine
 - N-Nitrosodimethylamine
 - N-Nitrosodi-n-propylamine
 - N-Nitroso-N-ethylurea
 - N-Nitrosomethylethylamine
 - N-Nitroso-N-methylurethane
 - N-Nitrosomethylvinylamine
 - N-Nitroso-N-methylurea
 - N-Nitrosornicotine
 - N-Nitrosopiperidine
 - N-Nitrosopyrrolidine
 - N-Nitrososarcosine
- (5) This Facility Guideline Index is arranged in alphabetical order. The first part of the index, Appendix C-I, lists device s common to many industries and the second part of the index, Appendix C-II, lists industry types. Extensive cross-referencing has been i ncorporated into the index, particularly in Appendix C-II, to identify industries and processes known by alternative names. It may be necessa ry to consult alternate names to locate a given industry type. Furthermore, more than one industry type may apply to a given facility.

**APPENDIX C-I
RESPONSIBILITIES OF ALL FACILITIES**

ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, OR RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.

All Facilities shall account for the following devices and emitting processes and associated emissions, and shall account for ANY OTHER PROCESS EQUIPMENT THAT MAY BE A SOURCE OF RELEASE OF ANY LISTED SUBSTANCE:

Device/Process -----	Types of Emissions -----	Specific Substances (see note 3) -----
FUEL/WASTE COMBUSTION		
Boilers, Heaters, Kilns IC Engines, Furnaces Coal-fired	Particulate metals including but not limited to: Other particulate-phase substances including but not limited to: Gaseous products including but not limited to:	Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Radionuclides, Selenium, Zinc And any other listed metals BaP & other PAHs*, Dibenzofurans, Dioxins, Phosphorus, POM Acetaldehyde, Benzene, Dichlorobenzenes, EDC, EDB, Formaldehyde, Hydrogen chloride, Hydrogen fluoride, Phenols
Oil-fired Residual Distillate	Gaseous and particulate substances including but not limited to:	Arsenic, BaP & other PAHs*, Benzene, Beryllium, Cadmium, Chromium, Copper, Dioxins, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, Radionuclides, Selenium, Zinc, Any other listed metals
Waste	Arsenic, Benzene, BaP & other PAHs*,	Beryllium, Cadmium, Chloroform, Chromium, Copper, Dibenzofurans, Dioxins, EDB, EDC, Manganese, Mercury, Methylene chloride, Nickel, Perc, PCBs, POM, Toluene, TCA, TCE, Xylenes, Any other listed metals
Natural gas-fired	Gaseous and particulate substances including but not limited to:	Acetaldehyde, Acrolein, Benzene, Formaldehyde, POM, BaP & other PAHs*, Propylene, Toluene, Xylenes, Any other listed metal (due to contamination or other means)

* See Note 2 (Notes appear at the beginning of this index.)

Device/Process -----	Types of Emissions -----	Specific Substances (see Note 3) -----
FUEL/WASTE COMBUSTION continued		
Process gas-fired	Gaseous and particulate substances including but not limited to:	Benzene, Formaldehyde, Phenol, Any other listed metal
Solid Waste-fired	Gaseous and particulate substances including but not limited to:	Formaldehyde, Manganese, Nickel, Phenol
Wood-fired	Gaseous and particulate substances including but not limited to:	Acetaldehyde, Arsenic, Benzene, BaP & other PAHs*, Chromium, Copper, Dioxins, PCBs, POM, And any pesticides used on wood
Other Liquid-fired		
Coke Ovens	From boiler corrosion inhibitor Benzene, BaP & other PAHs*, Benzyl chloride,	Nitrosomorpholine, Any other listed metals Coke oven emissions, Cresols, Dibenzofurans, Dioxins, Nitrosamines, POM
Flares	Particulate metals including but not limited to:	Arsenic, Beryllium, Chromium, Lead, Mercury, Nickel Any other listed metal
	Other particulate-phase substances including but not limited to:	BaP, Dibenzofurans, Dioxins
	Gaseous products including but not limited to:	Aldehydes, Benzene, Dichlorobenzenes, EDB, EDC
Landfill Gas Also see Boilers, Heaters, IC Engines, etc, Appendix C-I		
Incinerators - see ALL other combustion releases, but pay particular attention to the following:		
	Particulate metals including but not limited to:	Arsenic, BaP & other PAHs*, Beryllium, Cadmium, Chromium, Copper, Manganese, Mercury, Nickel, POM, Selenium, Zinc, Any other listed metal
	Other particulate-phase substances including but not limited to:	BaP & other PAHs*, Dibenzofurans, Dioxins, PCBs, POM
	Gaseous products including but not limited to:	Benzene, Dichlorobenzenes, EDB, EDC, Hydrogen chloride, Hydrogen fluoride, Vinyl chloride

Device/Process	Types of Emissions	Specific Substances (see Note 3)
Incinerators continued		
Cotton Gin Waste Hazardous Waste Hospital Waste Municipal Refuse		Arsenic Dioxins, Any other listed metals Dioxins, Radionuclides, Any listed metals BaP & other PAHs*, Beryllium, Cadmium, Chromium, Manganese, Mercury, Nickel, POM
Pathological Scrap Wood Sludge		Dioxins BaP & other PAHs*, POM Acrolein, Arsenic, Asbestos, Beryllium, Cadmium, Chromium, Dioxins, Manganese, Mercury, Nickel, POM, PAHs*, Any other listed metals
Solid/Biomass Waste Waste-To-Energy		Any listed metals Acrolein, Dibenzofurans, Dioxins, Manganese, Nickel, POM, PAHs*, Any other listed metals
SOLVENT USE		
Miscellaneous Use		Acetaldehyde, Acrolein, Benzene, Carbon tetrachloride, CFC-113, Chlorobenzene, Chloroform, Cresols, Dimethyl sulfate, Dioxane, EDC, Mercury, Methanol, Methylene chloride, Nitrobenzene, Perc, Toluene, TCA, TCE, Xylenes, Any other listed chlorinated solvents
Degreasing Operations	Gaseous and aerosol organic compounds including but not limited to:	
Cleaning & Drying Metal D'grs Oil, Wax, Fat Extracting		Benzene, Carbon tetrachloride, Chlorinated fluorocarbon, Chlorobenzene, 1,4-Dioxane, Freons, Methylene chloride, Perc, Toluene, TCA, TCE, Any other listed substances Chlorinated fluorocarbons Methylene chloride, 1,4-Dioxane, TCA, TCE
Photoresist Stripping Vapor Degreasing		Carbon tetrachloride, Dichloroethane, Methylene Chloride Glycol ethers, Methylene chloride, Xylenes Perc, TCE
Fabric Finishing (Woven)		1,4-Dichlorobenzene
Floor Wax		Carbon tetrachloride
Paint & Varnish Removal		Dioxane, Methylene chloride
Polish (Shoe, Furniture)		Carbon tetrachloride

Device/Process -----	Types of Emissions -----	Specific Substances (see Note 3) -----
SOLVENT USE continued		
Rubber Cement	Carbon tetrachloride	
Surface Coating	Gaseous and aerosol organic compounds including but not limited to:	Acetaldehyde, Benzene, Carbon tetrachloride, Chlorobenzenes, Chloroform, Cresols, Dioxane, Methanol, Methylene chloride, Michler's ketone, Nitrobenzenes, 2-Nitropropane, Perc, Phenol, Phthalic anhydride, Styrene, Toluene, TCA, TCE, Xylenes
	From adhesives	Carbon tetrachloride, Chloroform, Methylene chloride, Toluene, TCE
	From wood finishing	Dioxane, Methylene chloride, Perc, Toluene
	From metal finishing	Perc, Toluene, TCA
Resin Application		Formaldehyde
Coating Application		
Flashoff		
Baking/Curing		
Quenching		
Storage & Handling - see Liquid Storage & Transfer, Appendix C-I		
LIQUID STORAGE & TRANSFER (Fugitive Emissions)		
Pipelines		
Petroleum	Gaseous and aerosol fugitives From: joints, valves	Benzene, Gasoline vapors, Toluene, Xylenes Transported listed substances
Process Vents		
Tanks		
Petroleum Products	Gaseous and liquid petroleum products including but not limited to:	Benzene, EDC, Gasoline vapors, Toluene, Xylenes, Stored listed substances
Tank Breathing		
Tank Cars and Trucks		
Filling	Gaseous, liquid and volatile solids including but not limited to:	Each pure organic stored or transferred that is a listed substance
Tank Breathing		Each component of a mixture that is a listed substance
Fugitives		
Equipment Leaks	Gaseous and aerosol organic compounds From: vents, tanks, condensers pumps, valves, compressors	Emissions vary according to substances involved in specific process

Device/Process -----	Types of Emissions -----	Specific Substances (see Note 3) -----
OTHER PROCESSES		
Contaminated Soil/Water Remediation	Chlorinated organics including: Other organics including	Carbon tetrachloride, Chloroform, EDC, Methyl chloroform, Perc, TCA, TCE Benzene, Chlorobenzene, Toluene, Xylenes
Cooling Towers Comfort Cooling	Gaseous and aerosol releases possibly containing additives and including but not limited to: In part due to drift loss	Chloroform, Chromium, Manganese, Nickel, Any other additives
Process Cooling	Gaseous and aerosol releases possibly containing additives and including but not limited to: In part due to drift loss	Chloroform, Chromium, Manganese, Nickel, Any other additives
Drinking Water Treatment		Chloroform
Industrial Wastewater Treatment	Chlorinated organics including: Other organics including:	Carbon tetrachloride, Chloroform, EDC, Methylene chloride, Perc, TCA, TCE Benzene, Chlorobenzene, Toluene, Xylenes
On-site Fuel Dispensing	Gaseous and aerosol releases including but not limited to:	Benzene, Dibromoethane, Dichloroethane, EDB, EDC, Gasoline vapors, Toluene, Xylenes
Pesticide Use		Arsenic, Carbon tetrachloride, Dibromoethane, 1,4-Dichlorobenzene, Dioxins, EDB, EDC, Lead, Nickel titanate, Zinc oxide
Printing - see Solvent Use, Appendix C-I Also see Printing & Publishing, Appendix C-II		
Sterilizers		ETO, Formaldehyde, Lead, Toluene, Propylene oxide
Surface Coating	Pigments Polymer & Resin Precursors Residues/Impurities	Arsenic, Chromium oxide, Lead oxide, Mercury, Zinc oxide Acrylonitrile, 1,3-Butadiene, Ethyl acrylate, Formaldehyde, Phenol, Styrene, Vinyl chloride, Vinylidene chloride, Any other listed substances

Device/Process -----	Types of Emissions -----	Specific Substances (see Note 3) -----
OTHER PROCESSES, Surface Coating, continued	Additives - Curing agents, Surfactants, Defoamers, Thickeners, Film-control agents Plasticizers	Ammonia
Wastewater Treatment		Benzene, Chloroform, EDC, Methylene chloride, TCE, Vinyl chloride, Any other listed substances
CONTROL EQUIPMENT	Emission reductions must be quantified: For each listed substance & device	

APPENDIX C- II

FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES

**APPENDIX C-II
FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES**

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TCA	= 1,1,1-Trichloroethane, Methyl chloroform
TCE	= Trichloroethylene

(2) PAHs are composed of the following substances:

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Acenaphthylene	Dibenzo[a,h]pyrene
Anthracene	Dibenzo[a,i]pyrene
Benz[a]anthracene	Dibenzo[a,l]pyrene
Benzo[b]fluoranthene	Fluoranthene
Benzo[j]fluoranthene	Fluorene
Benzo[k]fluoranthene	Indeno[1,2,3,-cd]pyrene
Benzo[a]pyrene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Chrysene	Pyrene
Dibenzo[a,h]anthracene	

- (3) Substances emitted by a particular device or process may not be limited to those listed in this Facility Guideline Index .
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 - p-Nitrosodiphenylamine
 - N-Nitrosodi-n-butylamine
 - N-Nitrosodiethanolamine
 - N-Nitrosodiethylamine
 - N-Nitrosodimethylamine
 - N-Nitrosodi-n-propylamine
 - N-Nitroso-N-ethylurea
 - N-Nitrosomethylethylamine
 - N-Nitroso-N-methylurethane
 - N-Nitrosomethylvinylamine
 - N-Nitroso-N-methylurea
 - N-Nitrosornicotine
 - N-Nitrosopiperidine
 - N-Nitrosopyrrolidine
 - N-Nitrososarcosine
- (5) This Facility Guideline Index is arranged in alphabetical order. The first part of the index, Appendix C-I, lists devices common to many industries and the second part of the index, Appendix C-II, lists industry types. Extensive cross-referencing has been incorporated into the index, particularly in Appendix C-II, to identify industries and processes known by alternative names. It may be necessary to consult alternative names to locate a given industry type. Furthermore, more than one industry type may apply to a given facility.

**APPENDIX C-II
FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES**

ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, OR RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.

If a facility falls within one or more of the following specific industry types, the facility operator shall account for the following devices and emitting processes, fugitive releases, and their associated emissions, and shall account for ANY OTHER PROCESS EQUIPMENT THAT MAY BE A SOURCE OF RELEASE OF ANY LISTED SUBSTANCE:

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Specific Substances (see Note 3) -----
Adhesives Application - see Solvent Use and Other Processes, Appendix C-I		
Adhesives Mfg - see Chemical Mfg, Appendix C-II		
Aerospace Products Mfg. Research - see Chemical Mfg and Research & Development, Appendix C-II Surface Coating - see Solvent Use & Other Processes, Appendix C-I		
Agricultural Production Agricultural Chem Mfg - see Chemical Mfg, Appendix C-II Cotton Ginning - see Chemical Mfg, Appendix C-II Pesticide Use - see Other Processes, Appendix C-I Waste Burning - see Combustion, Appendix C-I		Ammonia, Chlorine, EDB, Hydrogen Sulfide, Lead, Silica, All listed metals
Aircraft Mfg - see Transportation Equipment Mfg, Appendix C-II		
Airports - see Transportation Stations, Appendix C-II		
Air Stripping - see Contaminated Soil/Water Remediation, Appendix C-I		
Almond Processing Combustion Processes - see Combustion, Appendix C-I		Arsenic
Apparel Mfg - see Textile Mill, Appendix C-II		
Arsenic Mining - see Mining Non-Metals, Appendix C-II		
Artificial Flower Mfg		Toluene
Asbestos Milling/Processing - see Clay, Glass, & Stone Prod, Appendix C-II		
Asbestos - see Mining Non-Metals, Appendix C-II		

* See Note 2 (Notes appear at the beginning of this index.)

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Asphalt Materials Mfg Asphalt Felts & Coatings - see Petroleum & Coal Products, Appendix C-II Asphaltic Concrete Prod (Including Asphalt Paving Materials Mfg) Processes Including: Batch Plants and Continuous Plants Paving Operations Combustion Processes - see Combustion, Appendix C-I Surface Coating - see Solvent Use & Other Processes, Appendix C-I Storage & Handling - see Liquid Storage & Transfer, Appendix C-I	Particulate Phases Substances	Asbestos, Benzene, Formaldehyde, Organics, POM, PAHs*, Toluene, TCA, Xylenes, All listed metals
Auto Repair, Svc's & Garages - see Transportation Equipment, Appendix C-II		
Auto Parts Mfg - see Transportation Equipment, Appendix C-II		
Battery Production - see Metal Smelters, Appendix C-II		
Beryllium Mining - see Metal Smelters, Appendix C-II		
Bicycle Mfg/Repair - see Transportation Equipment, Appendix C-II		
Boat Building/Repair - see Transportation Equipment (Ship & Boat Building), Appendix C-II		
Box Mfg (folding paperboard type) - see Wood Product Mfg, Paper, Paperboard Containers & Boxes, Appendix C-II		
Bulk Plants and Terminals	Gaseous and aerosol releases including but not limited to:	Benzene, Gasoline vapors, Specific Stored Substances listed in Appendix A-I or A-II
Barrel Breathing Barrel Filling Barrel Standing Barrel Withdraw Valves, Vapor Collect/Control	From fixed roof tanks From variable vapor space tanks From floating roof tanks From floating roof tanks From flanges, pumps, and tank trucks	
Burial Caskets Mfg		Toluene
Burning of Solid Waste (Open) - see Combustion, Appendix C-I		
Bus Mfg/Repair - see Transportation Equipment, Appendix C-II		
Button Mfg		Formaldehyde, Styrene, Toluene, TCE
Cadmium Plating - see Metal Plating, Appendix C-II		
Camper & Trailer Mfg - see Transportation Equipment, Appendix C-II		
Can Mfg - see Metal Product Fabrication, Appendix C-II		

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Canned Food Product Mfg.	Can Fabrication - see Metal Product Fabrication, Metal Cans, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Food Processing - see Food Product Mfg, Appendix C-II Paper Labeling - see Wood Product Mfg, Appendix C-II Printing - see Printing & Publishing, Appendix C-II Sterilization - see Other Processes, Appendix C-I Surface Coating - see Solvent Use And Other Processes, Appendix C-I	
Car Mfg/Repair - see Transportation Equipment, Appendix C-II		
Carbon Black & Charcoal Mfg - see Chemical Mfg, Carbon, Appendix C-II		
Cement Mfg - see Clay, Glass, & Stone Prod Mfg, Appendix C-II		
Ceramic Plants	Combustion Processes - see Combustion, Appendix C-I	Beryllium
Charcoal Mfg - see Carbon, Appendix C-II		
Chemical Mfg	Gaseous and aerosol releases including but not limited to: From process reactor vessel fugitive, storage, handling, ducted building exhaust	Any of the following types of chemicals, listed in Appendix A-I or A-II: FEEDSTOCK CHEMICAL(S) MANUFACTURED CHEMICAL(S) BY-PRODUCT CHEMICALS
Also see Combustion, Other Processes, Solvent Use, and Storage & Handling, Appendix C-I		
Miscellaneous		Ammonia, Bis(chloromethyl) ether, Carbon tetrachloride, Chlorine, Chloroform, Copper, Cresol, ETO, Formaldehyde, Hydro- gen chloride, Lead, Methylene chloride, Naphthalene, Phenol, Toluene, Toluene diisocyanate, TCA
Acids Mfg		Acetaldehyde, Acrolein, Copper, Cresols, Hydrochloric acid, Phenol, Toluene, Xylenes
Adhesives & Sealants Mfg		Ammonia, Arsenic, Asbestos, Benzene, 1,4- Dioxane, EDC, Lead, Methylene chloride, Nitrosomorpholine, Toluene, TCA, TCE, Xylenes
Aerospace Chem Mfg		Chloroform, EDC, Phosgene, Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Mfg continued
Agricultural Chem Mfg
Miscellaneous

Acetaldehyde, Acrolein, Acrylonitrile,
Ammonia, Arsenic, Benzene, 1,3-Butadiene,
Cadmium, Carbon tetrachloride, Chlorine,
Chlorobenzene, Chloroform, Copper, Cresol,
1,4-Dichlorobenzene, Dimethyl sulfate, EDC,
EDB, ETO, Formaldehyde, Hexachlorobenzene,
Hexachlorocyclopentadiene, Hydrazine,
Hydrogen chloride, Hydrogen sulfide, Lead,
Maleic anhydride, Mercury, Methyl bromide,
Methyl isocyanate, Methylene chloride,
Naphthalene, Phenol, Phosgene, Phthalic
anhydride, Vinyl chloride, Xylenes, Zinc,
Zinc oxide

Alkali Mfg - see Chemical Mfg, Industrial Inorganics, Appendix C-II
Fertilizers

Ammonia, Hydrogen sulfide, Mercury, Metal
compounds, Methanol, Phosphorus,
Sodium hydroxide
Ammonia, Cadmium, Hydrogen sulfide, Lead
Nickel
Ammonia, Arsenic, Cadmium, Hydrogen
sulfide
Ammonia
Arsenic

Nitrogenous

Phosphatic

Mixing Only
Sodium Arsenate

Aldehydes, Toluene

Aldehyde Mfg

Cresols, Hydrazine

Anti corrosives Mfg

Ammonia, Hydrazine, Sodium hydroxide

Bases Mfg

Ammonia, BaP & other PAHs*, Formaldehyde,
Hydrogen sulfide, POM
Any other listed metals

Carbon Black & Charcoal Mfg

Combustion Processes - see Combustion, Appendix C-I

Ammonia, Arsenic, Benzene, Cadmium, Chlorine,
Chromium, Copper, Formaldehyde,
Hexachlorocyclopentadiene, Hydrazine,
Hydrogen chloride, Hydrogen sulfide, Lead,
Maleic anhydride, Methyl isocyanate,
Methyl methacrylate, Perc, Radionuclides,
Styrene, Toluene, TCE, Vinyl chloride,
Xylenes, Zinc, Zinc oxide

Chemical Preparations

Chlorine (Electrolytic)
Production

From: hydrogen stream

Also see Chem Mfg, Industrial Inorganics, Alkalies & Chlorine, Appendix C-II

Mercury

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Chemical Mfg continued Drug/Pharmaceutical Mfg Miscellaneous		Acrylonitrile, Allyl chloride, Ammonia, Arsenic, Benzene, Benzyl chloride, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, 1,4-Dichlorobenzene, Dimethyl sulfate, 1,4-Dioxane, Epichlorohydrin, EDB, EDC, Formaldehyde, Hydrazine, Hydrogen chloride, Lead, Mercury, Methanol, Methyl methacrylate, Methylene chloride, Perc, Phenol, Phosgene, Styrene, Toluene, TCA, TCE, Vinylidene chloride, Xylenes, Zinc, Zinc oxide Arsenic, Benzene, EDC, Lead, TCA
Biological Products Medicinals & Botanicals		Acrylonitrile, Ammonia, Arsenic, Benzene, Carbon tetrachloride, Chloroprene, Chlorine, EDC, Formaldehyde, Hydrogen chloride, Lead, Mercury, Methyl bromide, Methyl methacrylate, Methylene chloride, Phenol, Styrene, Toluene, Vinylidene chloride
Blender Combustion Processes - see Combustion, Appendix C-I Drying Ovens Formulator Other Process Reactors Solvents - see Solvent Use, Appendix C-I Sterilizers - see Sterilizers, Appendix C-I Tanks - see Liquid Storage & Transfer, Appendix C-I		
Dyes Mfg		Benzene, Benzidine, Benzyl chloride, Chlorobenzenes, Chloroform, Cresols, Dichloromethane, Dimethyl sulfate, Dioxane, C.l. Direct Black 38, Hydrazine, POM, PAHs*, TCE, Vinyl chloride, Vinylidene chloride
Elastomer & Surfactant Mfg Batch Processes		Epichlorohydrin
Ethers Mfg	Dimethyl sulfate, Nitrobenzene, Propylene	oxide
Ethylene dichloride Pro Oxychlorination Air & Oxygen Proc	From: vents, storage	Carbon tetrachloride, Chloroform, ethylene dichloride
Explosives		Acetaldehyde, Ammonia, Arsenic, Formaldehyde, Lead, Mercury, Nitrobenzene, Phenol, Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Mfg continued

Fertilizers - see Chemical Mfg (Agricultural), Appendix C-II

Flame Retardants Mfg

Fluorocarbon Mfg
Reactor Venting
Distillation
Storage

From: vents, storage

Indust Inorg Chem Mfg
Miscellaneous

Alkalies & Chlorine

Cyclic Crudes &
Intermediates

Hexachlorocyclopentadiene

Carbon Tetrachloride, Chloroform

Acetaldehyde, Acrolein, Acrylonitrile, Allyl chloride, Ammonia, Arsenic, Asbestos, Benzene, Benzidine, Benzyl chloride, 1,3-Butadiene, Cadmium, Carbon tetrachloride, CFC 113, Chlorine, Chlorobenzene, Chloroform, Chromium, Copper, 1,4-Dichlorobenzene, Epichlorohydrin, EDB, EDC, ETO, Formaldehyde, Freon 113, Gasoline vapors, Hexachlorobenzene, Hexachloropentadiene, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Manganese, Mercury, Methyl isocyanate, Methyl methacrylate, Methylene chloride, Naphthalene, Nickel, Nitrobenzene, Nitrosomorpholine, Perc, Phenol, Phosgene, Phosphorus, Phthalic anhydride, PCBs, Propylene oxide, Radionuclides, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc, Zinc oxide
Ammonia, Arsenic, Asbestos, Benzene, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Formaldehyde, Hydrogen chloride, Mercury, Phosgene, Toluene, TCE, Vinyl chloride, Vinylidene chloride

Acetaldehyde, Acrolein, Acrylonitrile, Ammonia, Arsenic, Benzene, Benzidine, Benzyl chloride, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, Cresol, Dibenzofurans, 1,4-Dichlorobenzene, 3,3'-Dichlorobenzidine, Dimethyl sulfate, 1,4-Dioxane, EDC, Formaldehyde, Gasoline vapors, Hexachlorobenzene, Hydrazine, Hydrogen chloride, Hydrogen sulfide, Maleic anhydride, Methyl bromide, Methyl isocyanate, Methylene chloride, Naphthalene, Nitrobenzene,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Chemical Mfg, Cyclic Crudes, continued		
Gum & Wood Chemicals	Wood Chem Mfg Cresol Cresylic Acid Phenol	Nitrosomorpholine, Pentachlorophenol (Chlorophenols), Phenol, Phosgene, Phthalic anhydride, POM, PAHs*, Styrene, Toluene, Toluene diisocyanate, TCE Xylenes, Vinyl chloride Arsenic, Benzene, BaP & other PAHs*, Chromium, Formaldehyde, Naphthalene, POM, Toluene diisocyanate Cresols, Phenol, Xylenes
Industrial Gases	Pigments, Inorgan	Arsenic, Beryllium, Carbon tetrachloride, ETO, Hydrogen chloride, Mercury Ammonia, Arsenic, Cadmium, Chloroform, Chromium, Copper, Dimethyl sulfate, 1,4- dioxane, Hydrazine, Hydrogen chloride, Lead, Zinc, Zinc oxide
Inks	Miscellaneous Printing	Dioxane, Toluene Ammonia, Arsenic, Benzene, Cadmium, Copper, Formaldehyde, Lead, Perc, Toluene, Vinyl chloride, Xylenes, Zinc
Metal Chelating Agent Mfg Corrosion Inhib, Metal Treatment Chems		Cupferron, Thiourea
Methionide Analogs Prod (poultry feed supp.)		Acrolein
Methyl Chloroform Prod	From: hydrochlorinated vent condenser, steam stripper vent condenser	Ethylene dichloride
Military Chem Prod		Chloroform, EDC, Phosgene, Toluene
Monomers	Miscellaneous	Acetaldehyde, Acrylonitrile, Ammonia, Ben- zene, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorofluorocarbons, Dioxane, Epichlorohydrin, Ethyl chloride, EDB, EDC, ETO, Formaldehyde, Glycol ethers, Hydro- chloric acid, Isocyanates, Maleic anhydride, Methyl bromide, Methyl methacrylate, Methylene chloride, Naphthalene, Nitrobenzene, Perc, Phenol, Phthalic anhydride,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Chemical Mfg, Monomers, continued	From: heavy ends stream	PCBs, Propylene, Propylene oxide, Sodium hydroxide, Styrene, Toluene, TCA, TCE, Trichlorophenol, Urethane, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc EDC
Vinyl Chloride		
Nuclear Fuel Fabrication		Radionuclides
Organic Chem Mfg		Acrylamide, Acrylonitrile, Carbon tetrachloride, Chlorobenzene, Chloroform, Methylene chloride, Perc, Toluene
Paints & Allied Prod's		Acetaldehyde, Ammonia, Arsenic, Asbestos, Benzene, Butadiene, Carbon tetrachloride, Chloroform, Chlorophenols, Chromium, Copper, Cresol, 1,4-Dioxane, Epichlorohydrin, Formaldehyde, Glycol ethers, Lead, Mercury, Methyl methacrylate, Methylene chloride, Naphthalene, Nickel, Nitrobenzene, Perc, Phenol, Phthalic anhydride, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Zinc, Zinc oxide
Pigment		Benzyl chloride, Cadmium, Toluene
Perfume		Dimethyl sulfate
Pesticides, Herbicides, Fungicides Mfg		Arsenic, Benzene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chloropicrin, Cresols, 1,4-Dichlorobenzene, Dimethyl sulfate, Dioxins, EDB, Hexachlorocyclopentadiene, Hydrazine, Hydrocyanic acid, Isocyanates, Lead arsenate, Methyl bromide, Naphthalene, N-Nitrosodimethylamine, Phenol, Phosphorus
Photographic Chemicals Mfg		Methylene chloride
Pigment (metal containing) Mfg Also see Chem Mfg, Inks and Paints, Appendix C-II		Cadmium, Chromium, Copper, Lead, Nickel, Zinc
Plastics Materials & Synthetics		Acrylamide, Acrylonitrile, Acrolein, Ammonia, Arsenic, Benzene, Benzidine, Cadmium, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, Cresols, Dichloromethane, Dioxins, Formaldehyde, Hydrazine, Hydrocyanic acid, Hydrochloric acid, Hydrogen fluoride, Hydrogen sulfide, Isocyanates, Mercury, Methylene chloride, Nickel, Perc, Phenol, Phosgene, POM, PAHs*, Sodium hydroxide, Toluene, TCE, Vinyl chloride, Vinylidene chloride, Zinc

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Mfg, Plastics, continued

Cellulosic Man-Made Fibers		Ammonia, Arsenic, Benzene, Chlorine, EDC, Hydrogen chloride
Organic Fibers, noncellulosic		
Plastics/Resins		Acrylonitrile, Copper, Dimethyl sulfate, EDC, Toluene diisocyanate, Vinylidene chloride Acetaldehyde, Acrolein, Acrylonitrile, Allyl chloride, Ammonia, Arsenic, Asbestos, Benzene, 1,3-Butadiene, Cadmium, Carbon tetrachloride, Chlorine, Chloro- ethane, Cresol, Epichlorohydrin, EDC, ETO, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Mercury, Methyl methacrylate, Methylene chloride, Nitrobenzene, Perc, Phenol, Phosgene, PCB, Propylene oxide, Styrene, Toluene, Toluene diisocyanate, TCE, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc oxide
Resin Mfg.		Acrylamide, Acrylonitrile, Ammonia, Ben- zene, Bis(chloromethyl) ether, Cresols, Dioxins, Epichlorohydrin, Formaldehyde, Hexachlorocyclopentadiene, Maleic anhydride, Phenol, Vinylidene chloride, Xylenes
Rubber Production & Compounding Synthetic Monomers	Gaseous, Aerosol, & Particulate re- leases including but not limited to:	
Retardants Catalysts Solvents Miscellaneous		Acrylonitrile, 1,3-Butadiene, Chloropyrene, Epichlorohydrin, Ethyl acrylate, EDC, ETO, Propylene, Styrene n-Nitrosodiphenylamine, Phthalic anhydride Nickel Toluene Acetaldehyde, Acrylonitrile, Allyl chloride Ammonia, Benzene, Benzidine, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chloroform, Chloroprene, 3,3-Dichlorobenzidine, Epi- chlorohydrin, EDC, Hydrogen chloride, Lead, Maleic anhydride, Methylene chloride, Nitrosomorpholine, Perc, Sodium hydroxide, Styrene, Toluene, Toluene diisocyanate, Vinylidene chloride
	Also see Chem Mfg, Monomers, Appendix C-II Synthetic Fibers	Hydrogen sulfide
Polish & Wax Mfg		Chloroform, Dioxane, Nitrosomorpholine

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Chemical Mfg continued		
Preservatives, disinfectants, biocides -		Cresols, Formaldehyde, Mercury, Phenol, 2,4,5-Trichlorophenol, Zinc Oxide
Rubber, Non-Vulcanized, Mfg		Dioxins, Formaldehyde, Phenols
Rubber Compounding	Processing Aids Accelerators Age Restorers Vulcanizing Agents Accelerator Activators	Zinc Ethylene thiourea, n-Nitrosodimethylamine, Zinc Nickel, Phenol Lead, Selenium, Zinc Zinc, Lead, Ammonia
Solvents Mfg		Chloroform, Dioxins, Formaldehyde
Soap, Cleaners, & Toilet Goods		Glycol ethers, Methanol, Dioxane
Soap & Detergent Mfg Miscellaneous		Ammonia, Chlorine, Hydrogen chloride
Optical Brighteners Polishes & Sanita- tion Goods		Benzene, EDC, ETO, Formaldehyde, Hydrogen sulfide, Methyl methacrylate, Toluene Nitrosomorpholine
Surface Active Agents		Ammonia, Arsenic, Benzene, Carbon tetra- chloride, Chlorine, Chloroform, Cresol, 1,4-Dichlorobenzene, 1,4-Dioxane, Epichlorohydrin, Formaldehyde, Hydrogen chloride, Methylene chloride, Nitrobenzene, Perc, Toluene, TCA, TCE, Zinc, Zinc oxide
Toilet Preparations		Benzene, Benzyl chloride, 1,4-Dioxane, Propylene oxide, Toluene, Zinc, Zinc oxide Acetaldehyde, Acrolein, Ammonia, Arsenic, Benzene, Benzyl chloride, CFC-113, Dimethyl sulfate, 1,4-Dioxane, Formaldehyde, Methylene chloride, Perc, Toluene, TCA, TCE, Zinc, Zinc oxide
Textile Chemical Mfg		Acetamide, 2,4-Diaminoanisole, 2,4-Diamino- anisole sulfate, Urethane
Varnish Mfg		Benzene, Dioxane
(High)-Vinylidene Chloride Copolymer Fabric Process		Vinylidene Chloride
Wax Mfg - see Polish Mfg, Appendix C-II		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Clay, Glass & Stone Pro continued Concrete, Gypsum, & Plaster Products Concrete Block & Brick Concrete Products Ready-mixed Concrete Lime Cut Stone & Stone Prod Flat Glass		Chromium, Styrene Ammonia, Chromium, Gasoline vapors, Toluene, Zinc Asbestos, Hydrogen sulfide Mercury TCE Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Hydrogen, Nickel, Toluene
Gaskets, Packing, & Sealing Devices		Ammonia, Asbestos, Chlorobenzene, Gasoline vapors, Hydrogen chloride, Lead, Toluene, TCE, Zinc
Glass & Glassware, Pressed & Blown		Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Formaldehyde, Hydrogen chloride, Lead, Mercury, Methylene chloride, Nickel, Perc, Styrene, Toluene, TCA Arsenic Arsenic, Chlorine, Hydrogen chloride, Methylene chloride
Glass Container Mfg	From glass furnace	
Minerals, Ground or Treated		Chlorine, Chromium, Copper, Gasoline vapors, Hydrogen chloride Ammonia, Carbon tetrachloride, Formaldehyde, Mineral fibers, Phenol
Mineral Wool Prod		Ammonia, Beryllium, Chromium, Formaldehyde, Hydrogen chloride, Mineral fibers, Phenol, Zinc, Zinc oxide
Nonclay Refractories		Chlorine, Copper, Hydrogen chloride, Mineral fibers, Styrene, Toluene Lead, TCA
Nonmetallic Mineral Prod		
Pottery & Related Prod Vitreous Plumbing Fixtures Fine Earthen Food Utensils		Styrene, Toluene Ammonia, Beryllium, Copper, Hydrogen sulfide, Lead, Methyl bromide, Naphthalene, Perc, Toluene, TCE, Zinc Ammonia, Toluene, TCE, Xylenes
Purchased Glass Products		
Combustion Processes - see Combustion, Appendix C-I Other Processes - see Other Processes, Appendix C-I		
Coal Combustion - see Combustion, Appendix C-I		
Coal, Wholesaling		Zinc, Zinc oxide
Coke Combustion - see Combustion, Appendix C-I		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Coke Production Also see Metal Smelters, Appendix C-II		POM, PAHs*, Toluene
Colleges & Universities Miscellaneous		Benzene, Carbon tetrachloride, Chloroform, Methylene chloride, Dioxane, Formaldehyde, Mercury, Nitrobenzene, Phenol, Toluene, TCA, Xylenes, Any other listed substance
Also see Chem Mfg, Appendix C-II Combustion, Appendix C-I Research & Development, Appendix C-II Solvent Use, Appendix C-I		
Combustion Processes - see Combustion, Appendix C-I		
Commercial/Institutional Combustion - see Combustion, Appendix C-I		
Cooling Towers - see Other Processes, Appendix C-I		
Correctional Institutions - see Combustion, Appendix C-I		
Cotton Ginning - see Agricultural Prod, Appendix C-II		
Crop Production - see Agricultural Prod, Appendix C-II		
Dry Cleaning Operations		Chlorinated Fluorocarbon, EDC, Perc, Toluene, TCA, TCE
Dyeing of Textiles	Gaseous, aerosol, and particulate releases, including but not limited to: Due to toxics in the solutions Fixatives Oxidizing Agents Dyeing Aids	Dyes - Auramine, Direct Black 38, Copper, Chromium Copper, Chromium Chromium Formaldehyde, Perc, Sodium hydroxide (caustic soda)
Combustion Processes - see Combustion, Appendix C-I		
Elec. or Natural Gas Service Combustion Processes - see Combustion, Appendix C-I Cooling Towers - see Other Processes, Appendix C-I		TCA
Electrical Assembly Cleaning - see Degreasing, Appendix C-I		
Electrical & Electronic Equip Miscellaneous		Freon 113, Methylene chloride, Perc, TCA, TCE

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Electric & Electronic Equip continued Communication Equipment Radio & TV Commun- ication Equipment		Ammonia, Benzene, Chlorine, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Methylene chloride, Perc, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc
Telephone & Tele- graph Apparatus		Ammonia, Copper, Formaldehyde, Hydrogen chloride, Methylene chloride, Perc, Styrene, Toluene, TCA, TCE, Xylenes Ammonia, Naphthalene, Toluene, TCA, TCE Ammonia, Beryllium, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Perc, PCB, Toluene, TCA, TCE, Vinyl chloride, Xylenes, Zinc oxide
Electric Distrib Equip Transformers		Ammonia, Formaldehyde, Hydrogen chloride, Perc, Toluene, TCA, TCE
Switchgear & Switch- board Apparatus		Ammonia, Arsenic, BaP, Copper, Hydrogen chloride, Lead, Mercury, Perc, PCB, Toluene, TCA, TCE
Electrical Industrial Apparatus		Ammonia, Formaldehyde, Hydrogen chloride, Lead, Naphthalene, Phenol, Styrene, Toluene, TCA, TCE Ammonia, Styrene, Toluene, TCA, TCE
Motors & Generators		Nickel, Toluene
Industrial Controls Welding Apparatus, Electric Carbon & Graphite Products		BaP, Chlorine, Hydrogen chloride, Hydrogen sulfide, Styrene
Electronic Components & Accessories		Acetaldehyde, Ammonia, Arsenic, Benzene, Benzyl chloride, Beryllium, Cadmium, Chlorine, Chloroform, Chromium, Copper, Epichlorohydrin, EDC, Formaldehyde, Gaso- line vapors, Hydrazine, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Methylene chloride, Naphthalene, Nickel, Perc, Phenol, Phosgene, PCB, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc, Zinc oxide
Batteries Primary, Dry & Wet		Cadmium, Lead, Naphthalene, Nickel, Zinc, Zinc Oxide
Storage		Beryllium, Cadmium, Lead, Manganese, Nickel, TCA, Zinc, Zinc oxide
Cat'd Ray Pict'r Tubes		Beryllium, Lead

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Electric & Electronic Equipment Prod continued Electron Tubes, Transmitting		Ammonia, Benzene, Beryllium, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Nickel, Styrene, Toluene, TCE, Xylenes Allyl chloride, Chromium, Epichlorohydrin, Lead, Methylene chloride, TCA, TCE Butyl cellosolve (a Glycol ether)
Electron Capacitors		Formaldehyde, Methylene chloride
Integrated Circuit Board Mfg	From: developer, stripper screening-hardener	Acetone, Ammonia, Arsine, Arsenic, Beryllium, Chlorine, Chlorobenzene, Ethylene glycol, Hydrazine, Hydrochloric acid, Hydrogen chloride, Hydrogen fluoride, Lead, Mercury, Methanol, Methylene chloride, Nickel, Perc, Phenol, Phosphene, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc
Semiconductors & Related Devices		
	Solvent Stations - see Liquid Storage & Transfer, Appendix C-I	
	Wet Chemical Stations	
	Mfg Process Reactors (Siliconizing)	
	Chemical Vapor Deposition	
	Diffusion Furnaces - see Combustion, Appendix C-I	
	Photoresist Lines	
	Surface Coating/Cleaning - see Solvent Use, Appendix C-I	
Household Appliances		
Elec Housewares/Fans	Beryllium, Toluene	
Household Cooking Equipment		TCA, TCE
Household Laundry Equipment		Perc, Toluene
Household Refriger- ators & Freezers		
Sewing Machines		Toluene Toluene, TCA
Electric Lighting & Wiring Equipment		
Electric Lamps		Toluene, TCE
Lighting Fixtures		Ammonia, Cadmium, Mercury, Toluene, TCA, TCE
Commercial		
Residential		Toluene, TCA Ammonia, Hydrazine, Toluene, TCA, TCE
Wiring Devices		
Current-Carrying		Ammonia, Copper, Formaldehyde, Hydrogen chloride, Manganese, Methylene chloride, Nickel, Perc, Phenol, Toluene, Toluene diisocyanate, TCA, TCE, Zinc Copper, Hydrogen chloride, Styrene, Toluene, TCE, Vinyl chloride, Zinc Ammonia, Toluene, TCA, TCE, Xylenes
Noncurrent-Carry		
Radio & TV Rec'ing Sets		
Semiconductor Production - see Electric & Electronic Equip, Integrated Circuit, Appendix C-II		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Electric & Electronic Equip continued X-Ray Apparatus & Tubes		Beryllium, Hydrogen chloride, Perc, Toluene, TCA
Elec, Gas, & Sanitary Svc's Electric Services		Acetaldehyde, Arsenic, Benzene, BaP, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, PAHs*, PCBs, TCA
Gas & Other Svc's Water Supply		Hydrogen sulfide Arsenic, Chromium, Hydrogen chloride, Hydrogen sulfide, Mercury, Perc, TCA, TCE Benzene, Chloroform, EDC, Methylene chloride, Perc, TCA, TCE, Vinyl chloride
Sanitary Services		
Refuse Systems		Ammonia, Arsenic, Beryllium, Cadmium, Chlorine, Chromium, Copper, Hydrogen chloride, Lead, Manganese, Mercury, Nickel, POM, PAHs*, PCBs, Toluene, Vinyl chloride, Zinc
Sewerage Systems		Ammonia, Arsenic, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Mercury, Nickel, Zinc
Steam Supply		Benzene, Formaldehyde, Toluene
Electroplating - see Metal Plating, Appendix C-II		
Extermination - see Other Processes, Pesticide Use, Appendix C-I		
Felt Mfg		Asbestos
Fiberboard Mfg - see Wood Product Mfg, Appendix C-II		
Floor Cover Mfg, Hard Surface		Benzene
Floor Tile Mfg.		Asbestos
Food Prod Mfg		
Miscellaneous		Perc, Toluene
Bakery Products		Benzene, Formaldehyde, Toluene
Beverages		Ammonia, Formaldehyde,
Milk (Condens & Evap)		Ammonia, Benzene, Formaldehyde, Toluene
Soft Drinks		Arsenic, Toluene
Canned Foods		Arsenic, Benzene, Formaldehyde, Toluene
Fats & Oils		EDC, Methylene chloride
Shorten & Cook Oils		Nickel, Toluene
Soybean Oil Mills		EDC
Food Preparation, Misc		Acetaldehyde, Benzene, Benzidine, Carbon Tetrachloride, Chloroform, Dimethyl sul- fate, Epichlorohydrin, ETO, Formaldehyde, Maleic Anhydride

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Food Prod Mfg continued

Grain Mill Products
Prepared Feeds
Wet Corn Milling
Manufactured Ice
Meat Packing Plants
Sausages & Other
Prepared Meats

Acrolein, Methyl bromide
Chlorine, Hydrochloric Acid
Arsenic
Arsenic, Formaldehyde, Hydrochloric Acid

Roasted Coffee

Acetaldehyde, Ammonia, Arsenic, Chloroform,
Formaldehyde, Phenol, Toluene, TCA
Acetaldehyde, Acrolein, Methylene chloride,
TCE
Arsenic, Hydrogen sulfide

Seafood, Canned & Cured

Sugar & Confec Prods

Beet Sugar
Confectionery Prod

Canning - see Canned Food Prod, Appendix C-II

Combustion Processes - see Combustion, Appendix C-I

Solvents - see Solvent Use, Appendix C-I

Sterilization - see Other Processes, Appendix C-I

Beryllium
Benzene, Toluene, Formaldehyde

Food Prod Machinery Mfg

Methylene chloride, Perc, TCA, TCE

Foundries - see Metal Smelters & Foundries, Appendix C-II

Forestry Services

Also see Wood, Appendix C-II

Naphthalene

Furniture & Fixture Mfg

Miscellaneous

Methylene chloride, Perc, TCE
Methylene chloride, Phthalic anhydride,
Toluene, TCE

Draperly Hardware and

Blinds & Shades

Household Furniture

Metal

Upholstered

Wood

Benzene, TCA

Cresol, Toluene, TCE, Xylenes
Cadmium, Copper, Lead, Toluene
Ammonia, Methylene chloride, Naphthalene,
Styrene, Toluene, TCA, TCE, Xylenes
Toluene

TV & Radio Cabinets

Office Furniture

Metal

Ammonia, Formaldehyde, Methylene chloride,
Perc, Styrene, Toluene, TCA,
TCE, Xylenes, Zinc Oxide
Formaldehyde, Methylene chloride, Naphthalene,
Toluene, Toluene diisocyanate,
TCA, TCE, Xylenes

Wood

Partitions & Fixtures

Metal

Wood

Public Bldg & Related Furn

Methylene chloride, Perc, Toluene, TCA, TCE
Ammonia, Toluene, Toluene diisocyanate, TCE
Ammonia, Toluene, Xylenes

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Furniture & Fixture Mfg, continued

Combustion Process - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Metal Working - see Metal, Appendix C-II
Surface Coating - see Solvent Use and Other Processes, Appendix C-I
Upholstery Mfg - see Textiles, Appendix C-II
Wood Working - see Wood, Appendix C-II

Furniture Stores

Furniture Repair/Reupholstering

Ammonia, Methylene chloride, Toluene, TCA
Ammonia, Lead, Methylene chloride,
Toluene, Xylenes

Cleaning - see Dry Cleaning, Appendix C-II

Gas Combustion - see Combustion, Appendix C-I

Gas Stations

Benzene, EDB, EDC, Gasoline vapors,
Toluene, Xylenes

Liquid Storage & Transfer - see Liquid Storage & Transfer, Appendix C-I
Vehicle Refueling - see Other Processes, Appendix C-I

Glass Products - see Clay, Glass & Stone Products, Appendix C-II

Grain Production - see Agricultural Prod and Food Prod, Appendix C-II

Grain Wholesaling

Ammonia

Grey Iron Foundries - see Metal Smelters & Foundries, Appendix C-II

Hospitals

Gen'l Medical & Surgical

Medical Labs

ETO, Hydrogen chloride, Hydrogen sulfide,
Phenol, Styrene
ETO

Combustion Processes - see Combustion, Appendix C-I
Medical Instrument Mfg - see Instrument Mfg, Appendix C-II
Research - see Research & Development, Appendix C-II
Sterilizers - see Other Processes, Appendix C-I

Incineration - see Combustion, Appendix C-I

Industrial Combustion - see Combustion, Appendix C-I

Industrial Wastewater Treatment - see Other Processes, Appendix C-I

Inorganic Chemical Mfg - see Chemical Mfg, Inorganic, Appendix C-II

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Instruments & Related Prod's
Engineering & Science Instr

Freon 113, Toluene, TCA
Ammonia, Arsenic, Asbestos, Beryllium,
Cadmium, Chromium, Copper, Formaldehyde,
Hydrogen chloride, Lead, Methylene chloride,
Perc, Phenol, Toluene, TCA, TCE, Zinc
Ammonia, ETO, Mercury, Toluene
Beryllium, Chlorine, Hydrogen chloride,
Mercury, TCE
Beryllium, Cadmium, Hydrogen chloride,
Toluene, Zinc, Zinc oxide

Meas & Controlling Devices
Environmental Controls

Process Control Inst

Electricity Meas-
uring Instruments

Medical Instr & Supplies
Dental Equip & Supp

Beryllium, Toluene, TCA
Ammonia, Hydrogen chloride, Toluene, TCE
Ammonia, Cadmium, Chlorine, ETO,
Formaldehyde, Phenol, Toluene, TCA,
Zinc, Zinc oxide
Ammonia, TCA, TCE

Ophthalmic Goods
Photographic Equip
& Supplies

Acetaldehyde, Acrylonitrile, Ammonia,
Arsenic, Asbestos, Benzene, Benzidine,
Benzyl chloride, Bis(chloromethyl) ether,
Cadmium, Carbon tetrachloride, Chlorine,
Chlorobenzene, Chloroform, Chromium,
Dimethyl sulfate, 1,4-Dioxane, Epichloro-
hydrin, EDC, Formaldehyde, Hydrazine,
Hydrogen chloride, Lead, Mercury, Methylene
chloride, Naphthalene, Nickel, Perc, Phenol,
Phosgene, Propylene oxide, Styrene,
Toluene, Toluene diisocyanate, TCA, TCE,
Vinyl chloride, Vinylidene chloride,
Xylenes, Zinc, Zinc oxide
ETO, Formaldehyde, Perc, Toluene, TCA,
TCE, Zinc
Ammonia, Chromium, ETO, Formaldehyde,
Hydrogen chloride, Lead, Nickel,
Toluene, TCA, Vinylidene chloride
Acetaldehyde, Formaldehyde, Methylene
chloride, Toluene, TCA, TCE
Hydrogen chloride, Toluene, TCE

Surgical & Med Instr

Srg Appliances & Sup

Optical Instr & Lenses

Watches/Clocks/Watchcases

Plating - see Metal Plating, Appendix C-II

Also see - Combustion, Other Processes, and Solvent Use Appendix C-I
Metal, Plastic, and Rubber, Appendix C-II

Jewelry, Silverware, & Plated Ware
Jewelry, Costume

Ammonia, Chlorine, Hydrogen chloride,
Lead, Perc, Toluene, TCE
Ammonia, Freon 113, Hydrogen chloride,
Lead, Toluene, TCA, TCE
Ammonia, Hydrogen chloride, Lead

Jewelry, Precious Metal

Jewelers Materials & Lapidary Work

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Jewelry, Silver & Plated Ware continued
Silverware & Plated Ware

Ammonia, Beryllium, Hydrogen chloride,
Lead, TCE

Degreasing - see Solvent Use, Appendix C-I

Landfills

Gas Recovery

Benzene, Methylene chloride, Perc, TCE,
Vinyl chloride, Vinylidene chloride
Asbestos

Refuse Landfills

Combustion Processes - see Combustion, Appendix C-I

Fugitives - see Liquid Storage & Transfer, Appendix C-I

Laundry, Cleaning, & Garment Svc's - see Dry Cleaning, Appendix C-II

Leather & Leather Products

Leather Tanning &
Finishing

Arsenic, Chromium Copper, Formaldehyde,
Lead, Naphthalene, Toluene

Footwear, not rubber
Personal Leather Goods
Tanning Processes

Tanning agents

Dyes, pigments, & coloring agents

Miscellaneous

Toluene, TCE
Chromium, Cresols, Formaldehyde, Phenol
Cresols, Formaldehyde, Phenol
Cadmium, Chromium, Copper, Direct Black 38,
Lead, Nickel, Zinc compounds
Ammonia, Chlorine, Chloroform, 1,2-Dichloro-
benzene, Glycol ethers, Hydrochloric acid,
Methylene chloride, Perc, Sodium hydroxide,
Toluene, TCA, TCE, Xylenes

Combustion Processes - see Combustion, Appendix C-I

Liquid Storage and Transfer - see Liquid Storage & Transfer, Appendix C-I

Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Lumber Prod Mfg - see Wood Product Mfg, Appendix C-II

Machinery Mfg, Except Electrical

Ammonia, Formaldehyde, Freon 113,
Methylene chloride, Nickel, Phenol,
Toluene, TCA, TCE

Construction & Related

Machinery

Construction Machinery

Carbon tetrachloride, Hydrogen chloride,
Perc, Toluene

Conveyors & Conveying

Equipment

Ammonia, Toluene, TCE

Elevators & Moving

Stairways

Toluene

Hoists, Cranes, &

Monorails

Indstl Trucks/Tractors

Ammonia, Cadmium, Copper, Lead, Zinc
Perc, Toluene

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Machinery, Construction Related continued		
Oil Field Machinery Engines & Turbines Internal Combustion Engines		Chromium, Lead, Nickel, TCA, Xylenes
Farm Machinery & Equip Turbines & Turbine Generator Sets		Ammonia, Benzene, EDB, EDC, Gasoline vapors, Hydrazine, TCA Toluene
General Industrial Machinery		Ammonia, Formaldehyde, Hydrogen chloride, Maleic anhydride, Perc, Phenol, Styrene, Toluene, Toluene diisocyanate, TCA, Xylenes Ammonia, Chromium, Copper, Cresol, Epi- chlorohydrin, Formaldehyde, Hydrogen chloride, Lead, Nickel, Phenol, Toluene, TCA, TCE, Zinc oxide Copper, Naphthalene, Toluene, TCA
Bell & Roller Bearings Blowers & Fans		Copper, Gasoline vapors, Lead, Toluene, TCA, TCE Toluene
Comprsr, Air & Gas Industrial Furnaces & Ovens		Arsenic, Copper, Hydrogen chloride, Lead, Toluene, TCE, Zinc
Industrial Patterns Power Transmission Equipment		Formaldehyde, Phenol Ammonia, Copper, Hydrogen chloride
Pumps & Pumping Equipment Speed Changers, Drives & Gears		Ammonia, Formaldehyde, Hydrogen chloride, Lead, Perc, Phenol, Toluene, TCA, Xylenes Perc, Toluene, TCA
Metalworking Machinery Machine Tool Acces- sories		Arsenic, Perc
Machine Tools, Metal Cutting Types Machine Tools, Metal Forming Types		Ammonia, Beryllium, Chromium, Hydrogen chloride, Toluene, TCA, TCE
Rolling Mill Ma- chinery Special Dyes, Tools, Jigs, & Fixtures		Ammonia, Lead, Toluene, TCE
Office & Computing Ma- chines		Ammonia, Benzene, Lead, Perc, Toluene, TCA, TCE
Miscellaneous Calculating & Accounting Machines		Cadmium, Chromium, Zinc, Zinc oxide
		1,4-Dichlorobenzene, Formaldehyde, Hydrogen chloride, Methylene chloride, Naphthalene, Toluene, TCE, TCA, Zinc
		CFC-113, Hydrogen chloride, Toluene, TCA
		Arsenic, Hydrogen chloride, TCA

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Machinery, Office & Computing, continued
Electronic & Com-
puting Equipment

Also see - Electric & Electronic, Appendix C-II
Typewriters

Refrigerat'n & Svc Machin
Automatic Merchandising
Machines
Commercial Laundry
Equipment
Measur & Dispens Pumps
Refrig & Htg Equip

Misc Svc Indus Mach
Special Industry
Machinery

Food Prods Machinery
Paper Indus Machin
Printing Trades Mach

Textile Machinery
Woodworking Machin

Combustion Processes - see Combustion, Appendix C-I
Metal Forming - see Machining Mfg and Metal Forming, Appendix C-II
Surface Coating/Degreasing - see Solvent Use and Other Processes, Appendix C-I

Machining - see Metal Forming, Metal Prod Fabrication, and Metal Smelting, Appendix C-II

Magazine (Periodical) Publishing - see Printing & Publishing, Appendix C-II

Mechanical Assembly Cleaning - see Solvent Use, Degreasing, Appendix C-I

Metal Forming
Aluminum Forming
Machining
Also see - Metal Product Fab and Metal Smelters, Appendix C-II

Ammonia, Arsenic, Asbestos, Benzene,
Benzidine, BaP, Bis(chloromethyl)ether,
Chlorine, Chloroform, Chromium, Copper,
Freon 113, Hydrogen chloride, Hydrogen
sulfide, Lead, Methylene chloride,
Naphthalene, Nickel, Nitrobenzene, Perc,
Phenol, Toluene, TCA, TCE, Vinyl chloride,
Zinc

Ammonia, Benzene, Beryllium, Cadmium,
Formaldehyde, Hydrogen chloride,
Lead, Nickel, Toluene, Xylenes

Toluene

Arsenic, Perc, Toluene

Toluene

Ammonia, Copper, Formaldehyde, Freon 113,
Hydrogen sulfide, Lead, Methylene chloride,
Phthalic anhydride, Toluene, TCA,
TCE, Xylenes, Zinc

Toluene

Ammonia, Arsenic, Benzene, Chromium, Copper,
Lead, Methylene chloride, Perc,
Toluene, TCA, TCE

Arsenic

Ammonia, Perc, Toluene, TCE

Ammonia, Chromium, Lead, Methylene chloride,
Toluene, Toluene diisocyanate, TCA,
Zinc oxide

Toluene, TCE, Xylenes

Chlorine, Hydrogen chloride, Toluene

Chloroform, Methylene chloride, TCE
TCA

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Metal Furniture Mfg - see Furniture Mfg, Appendix C-II		
Metal Plating	Particulate metals including but not limited to: From electrocleaning, and plating Gaseous and aerosol releases including but not limited to: Alkaline cleaning agents Acid cleaning, pickling agents Chelating agents, solvents Plating/other process bath compon. Plating tank, Electric arc furnace	Cadmium, Chromium (VI), Nickel, TCA Sodium hydroxide Chromic acid, Hydrochloric acid Nitritotriacetic acid, Thiourea Ammonia, Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Sodium hydroxide, Zinc
Combustion Processes - see Combustion, Appendix C-I Degreasing Processes - see Solvent Use, Appendix C-I Storage and Handling - see Liquid Storage & Transfer, Appendix C-I		
Metal Product Fabrication		Acrylonitrile, Ammonia, 1,3-Butadiene, Cadmium, Chlorine, Copper, Formaldehyde, Freon 113, Hydrazine, Hydrogen chloride, Lead, Mercury, Methylene chloride, Perc, Styrene, Toluene, TCA, TCE, Zinc
Metal Cans & Shipping Containers		
Metal Cans		Benzene, Lead, Perc, Toluene, TCA, TCE, Xylenes
Metal Barrels, Drums & Pails		Ammonia, Naphthalene, Toluene, TCA
Metal Cutlery, Handtools & Hardware		
Cutlery Hand & Edge Tools		Chromium, Lead, Toluene, TCE Ammonia, Chlorine, Chromium, Hydrogen chloride, Methylene chloride, Styrene, Toluene, TCA, TCE, Zinc
Hand Saws & Saw Blades		Copper, Lead, Nickel, Toluene, TCE, Zinc Ammonia, Chlorine, Chromium, Copper, Hydro- gen chloride, Hydrogen sulfide, Lead, Methylene chloride, Naphthalene, Perc, Phenol, Toluene, TCA, TCE, Zinc, Zinc oxide
Misc Hardware		Ammonia, Copper, Hydrogen chloride, Lead, Perc, Zinc, Zinc oxide
Metal Foil & Leaf		
Metal Forgings & Stampings Iron & Steel Forgings Auto Stampings Crowns & Closures Misc Metal Stampings		Hydrogen sulfide Ammonia, Perc, Toluene Lead Copper, Perc, Toluene, TCA, TCE

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Metal Prod Fabric continued
Misc Metal Services
Plating & Polishing

Toluene
Acrolein, Ammonia, Arsenic, Benzene, Cadmium,
Chloride, Chlorine, Chloroform, Chromium,
Copper, Formaldehyde, Hydrogen chloride,
Lead, Methylene chloride, Nickel,
Nitrobenzene, Perc, Toluene,
TCA, TCE, Zinc, Zinc oxide

Metal Coating &
Allied Services

Acetaldehyde, Arsenic, Benzene, Cadmium,
Chlorine, Chromium, Copper, Formaldehyde,
Hydrogen chloride, Lead, Methylene
chloride, Nickel, Perc, Toluene,
TCA, TCE, Xylenes, Zinc, Zinc oxide

Ordnance & Accessories
Small Arms Ammunition
Ammun, exc small arms
Small Arms

Lead
Hydrogen sulfide, Toluene, TCE
Ammonia, Arsenic, Formaldehyde, Freon 113,
Hydrogen chloride, Lead, Phenol, Toluene,
Zinc oxide

Plumbing & Heating,
except electric
Metal Sanitary Ware
Plumbing Fittings &
Brass Goods

Methylene chloride, Toluene

Heating Equipment,
except electric

Ammonia, Cadmium, Formaldehyde, Hydrogen
chloride, Phenol, Toluene, TCE, Zinc oxide

Screw Machine Products,
Bolts, etc.
Screw Machine Prod
Bolts, Nuts, Rivets,
& Washers

Ammonia, Benzene, Chromium, Formaldehyde,
Perc, Phenol, Toluene

Steel Springs, exc wire
Structural Metal Product
Fabrication
Structural Metal
Fabrication
Metal Doors, Sash,
& Trim

TCA, TCE

Cadmium, Hydrogen chloride, Methylene
chloride, TCA, TCE, Zinc
Hydrogen chloride, Toluene, TCA

Fabricated Plate
Work, boiler shops

Toluene

Copper, Toluene, Xylenes, Zinc oxide

Sheet Metal Work

Ammonia, Cadmium, Formaldehyde, Perc,
Toluene, TCA, Xylenes, Zinc

Architectural Metal
Work

Copper, Gasoline vapors, Hydrogen chloride,
Lead, Perc, Styrene, Toluene, TCA, TCE
Ammonia, Perc, Toluene, Toluene
diisocyanate, TCA, TCE

Ammonia, Copper, Perc, Toluene, TCA, TCE

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Metal Prod Fabric, Structural Metal, continued
Prefabric Metal Bldgs
Misc Metal Work
Valves & Pipefittings
Wire Product Fabrication

Toluene, Xylenes
Ammonia, Benzene, Toluene
Copper, Phenol, Toluene, TCA, TCE, Zinc
Ammonia, Hydrogen chloride, Nickel, Perc,
Toluene, TCA, Vinyl chloride

Combustion Processes - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Forming - see Metal Forming and Metal Smelters, Appendix C-II
Surface Coating - see Solvent Use, Appendix C-I

Metal Smelters & Foundries - (for non-metals mining see Mining, Appendix C-II)

For any type of metal smelter - see Combustion and Liquid Storage & Transfer, Appendix C-I

For any type of metal smelter

Hydrogen sulfide, All listed metals

Primary Aluminum Pro

Gaseous, aerosol, particulate releases
including but not limited to:

Furnace Tapping
Coke Quenching
Furnace Charging
Metal Forming

From the calciner, furnace, mat'l
crusher/mill, storage & handling,
service road, prebake/reduction/
soderberg stud cell
Anode bake furnace

Benzene, Chloroform, Cresols,
Fluorides, Methylene chloride,
POM, PAHs*, TCE

Secondary Aluminum

Gaseous, aerosol, particulate releases
including but not limited to:

Furnace Tapping
Furnace Charging
Metal Casting
Metal Forming

From the furnace, and the service
road

Benzene, Cresols, POM, PAHs*

Nickel

Beryllium Alloys

Gaseous, aerosol, particulate releases
including but not limited to:

Molding

Chloroform, Methylene chloride, TCE

Beryllium

Primary Cadmium Pro

Gaseous, aerosol particulate releases
including but not limited to:

Material Prep
Metal Casting
Mining Operations

From the furnace, condenser,
material storage and handling

Cadmium

Cadmium-Nickel Battery

Gaseous, aerosol, particulate releases
including but not limited to:

Material Prep

From the sintering machine, and
material storage and handling

Cadmium, Lead, Nickel

Chromite Ore Refining

Gaseous, aerosol, particulate releases
including but not limited to:

From dryer, mill, cyclone, storage

Chromium

Metallurgical Coke

Gaseous, aerosol particulate releases
including but not limited to:

Coke Oven Charging/
Pushing From the coke oven, vessels, matr'l
Material Prep
Coke Quenching

storage and handling, and outdoor
storage pile

Acetaldehyde, Benzene, Cresols,
Formaldehyde, Phenol, Toluene, Xylenes
Ammonia, Arsenic, Beryllium, Cadmium,
Hydrogen sulfide, Lead, Manganese, Mercury,
Nickel, POM, PAHs*
POM, PAHs*, Toluene

Coke Production

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Metal Smelters & Foundries continued		
Primary Copper Smelt Converter Charging Furnace Tapping Furnace Charging Material Prep Metal Casting Slag Dumping Mining Operations Copper Forming	Gaseous, aerosol, particulate releases including but not limited to: From the converter, furnace, roaster vessel, material storage and handling, outdoor storage pile, service road	Arsenic, Cadmium, Copper, Lead, Mercury, POM, PAHs*, Selenium, Zinc
Secondary Copper Oper (Brass and Bronze Pro) Furnace Tapping Furnace Charging Metal Casting	Gaseous, aerosol, particulate releases including but not limited to: From the furnace, and service road	Arsenic, Mercury, Cadmium, Copper Perchloroethylene Cadmium, Copper, Lead, Manganese, Mercury, POM, PAHs*, Selenium, Zinc
Electrometallurgical Products		Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel
Ferroalloy Production Furnace Tapping Furnace Charging Material Prep Metal Casting Mining, except V Slag Dumping	Gaseous, aerosol, particulate releases including but not limited to: From material storage & handling, storage pile, furnace, decarbur- izing vessels	Cadmium, Chromium, Copper, Lead, Manganese, Nickel, POM, PAHs*, Zinc
Iron & Steel Foundries		Nickel
Iron and Steel Pro Coke Oven Charging/ Pushing From the coke oven, cupola, furnace, Furnace Tapping Furnace Charging Material Preparation Coke Quenching Slag Dumping Mining Operations Drying Crushing Sizing Weighing Feeding Furnace Also see Combustion (Blast Furnace), Appendix C-I	Gaseous, aerosol, particulate releases including but not limited to: From the coke oven, cupola, furnace, sintering machine, storage & handling, storage pile, service road	Ammonia, Arsenic, Benzene, Beryllium, Cad- mium, Chlorine, Chromium, Coke oven emis, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Naphthalene, Nickel, POM, PAHs*, Phenol, Toluene, TCE, Xylenes, Zinc
Gray Iron Foundries Furnace Tapping Furnace Charging Converter Charging Metal Casting Cupola	Gaseous, aerosol, partic releases including but not limited to: From the furnace, foundry mold & core decomposition, & service road	Acetaldehyde, Acrolein, Ammonia, Arsenic, Benzene, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Hydrogen sulfide, Iron, Lead, Manganese, Mercury, Naphthalene, Nickel, Phenol, POM, PAHs*, Styrene, Toluene, TCA, Xylenes, Zinc Ammonia, Formaldehyde, Zinc Cadmium, Chromium
Malleable Iron Foundries Steel Investment Fndrs		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Metal Smelters & Foundries continued		
Steel Foundries		
Converter Charging	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Beryllium, Cadmium, Chromium, Manganese, Nickel, Zinc
Furnace Tapping	From furnace, foundry mold & core	
Furnace Charging	decomposition, and service	
Metal Casting	road	
Basic Oxygen Proc	From argon oxygen decarburization vessels, coke ovens	
Miscellaneous		Ammonia, Arsenic, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Naphthalene, Nickel, Perc, Phenol, Styrene, Toluene, TCA, Xylenes, Zinc Methylene chloride, Toluene Ammonia, Perc Ammonia, Chlorine, Hydrogen chloride, Lead, PCB, Toluene, Zinc
Cold Finish Steel Shapes		
Steel Pipe & Tubes		
Steel Wire & Related		
Products		
Primary Lead Smelting		
Furnace Tapping	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Cadmium, Copper, Lead, POM, PAHs*, Mercury, Selenium
Furnace Charging	From the furnace, sintering machine,	
Material Prep	material storage and handling,	
Metal Casting	outdoor storage pile, and service	
Slag Dumping	road	
Mining Operations		
Secondary Lead Smelt		
Furnace Tapping	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Lead, Manganese, POM, PAHs*, Selenium
Furnace Charging	From the furnace, service road, and	
Metal Casting	outdoor storage pile	
Lead Acid Battery Pro		
Material Prep	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Cadmium, Lead, Manganese Mercury
Metal Casting		
Screening		
Storage & Handling		
Miscellaneous Lead Pro		
Converter Charging	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Cadmium, Lead
Material Preparation		
Metal Casting		
Manganese Production		
Furnace Charging	Gaseous, aerosol, partic releases including but not limited to:	Manganese, POM, PAHs*
Furnace Tapping	From the furnace, mat'l storage &	
Material Crusher/ Mill	handling, storage pile, slips,	
Metal Casting	casthouse, sinter discharge,	
Slagging	windbox & discharge	
Synthetic Mang Pro		
Roasting		
Drying		
Grinding		
Packaging/Handling		
Melting		
Refining		
Hot Metal Transfr		

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Metal Smelters & Foundries continued		
Dry Battery Production Material Prep Screening Storage & Handling Also see Electrical & Electronic Equipment, Appendix C-II	Particulate substance releases including but not limited to: From the material crusher/mill and material storage	Manganese, Mercury
Mercury Production Mining Prim. Ore Process Secondary Prod	Particulate releases including but not limited to: From smelter, hoeing, retort	Mercury
Nickel Production Metal Casting Mining Operations Refining Melting/Roasting Crushing Drying	Gaseous, aerosol, partic releases including but not limited to: From the calciner, furnace, material crusher/mill, roaster, material storage & handling, rotary dryers, storage pile, day bin, skip hoists	Arsenic, Cadmium, Lead, Nickel, POM, PAHs*, Selenium, Zinc
Nonferrous Metal Prod Super Alloys Permanent Magnet Alloys Electrical Alloys	Gaseous, aerosol, partic releases including but not limited to:	Nickel
Secondary Processing of Nickel Scrap	Gaseous, aerosol, partic releases including but not limited to:	Nickel
Radium, Uranium, & Vanadium Mining	Gaseous, aerosol, partic releases including but not limited to:	Ammonia, Gasoline vapors, Hydrogen Sulfide, Radionuclides
Steel Foundries - see Metal Smelters, Iron & Steel, Appendix C-II		
Uranium Prod - see Metal Smelters, Radium, Appendix C-II		
Vanadium Prod - see Metal Smelters, Radium, Appendix C-II Primary Zinc Smelting Material Prep Slag Dumping Mining Operations	Gaseous, aerosol, partic releases including but not limited to: From the condenser, furnace, roaster, retort, material storage and handling, outdoor storage pile, and service road	Arsenic, Cadmium, Copper, Mercury, POM, PAHs*, Selenium, Zinc
Secondary Zinc Process Furnace Tapping Furnace Charging Metal Casting	Gaseous, aerosol, partic releases including but not limited to: From the furnace, condenser, retort service road, and galvanizing vessel	Cadmium, Mercury, Nickel, Selenium, Zinc

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Military Bases

Chemical Prod - see Chemical Mfg, Military Chem Mfg, Appendix C-II
Combustion Process - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Research - see Research & Development, Appendix C-II
Surface Coating - see Solvent Use and Other Processes, Appendix C-I
Vehicle Refueling - see Other Processes, Appendix C-I

Millworks - see Wood Product Mfg, Appendix C-II

Mining of Non-Metals (for Metals Mining see Metal Smelters, Appendix C-II)

Arsenic Mining
Anthracite Mining
Asbestos
Clay

Coal (Bituminous) &
Lignite
Limestone
Minerals, Nonmetallic

Phosphate Rock
Sand & Gravel
Construction
Industrial

Sulfur

Gaseous and particulate releases
including but not limited to:
From: polymer and solvent storage
dope preparation (blending),
filtration, spin cell, lubrication,
drawing, finish application, and
drying

Combustion Processes - see Combustion, Appendix C-I
Storage - see Liquid Storage & Transfer, Appendix C-I
Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Motor Vehicle Production - see Transportation Equipment, Appendix C-II

Motorcycle Mfg - see Transportation Equipment, Appendix C-II

Musical Instrument Mfg

Also see - Combustion, Other Processes, and Solvent Use, Appendix C-I
Wood Product Mfg, Appendix C-II

Arsenic
Arsenic, POM, PAHs*, Toluene diisocyanate
Asbestos, Silica
Arsenic, Beryllium, Lead, Toluene
diisocyanate
Arsenic, Hydrogen sulfide, Toluene
diisocyanate
Nickel
Arsenic, Asbestos, Beryllium, Cadmium,
Chromium, Lead, Toluene diisocyanate
Radionuclides
Asbestos, Crystalline silica
Vinyl Chloride
Arsenic, Beryllium, Lead, Phenol,
Toluene diisocyanate
Arsenic, Hydrogen sulfide

Polymer constituents - Acrylonitrile,
Propylene, Vinyl chloride

Solvents/precipitants - Sodium hydroxide,
Toluene, Zinc chloride
Flame retardants - Vinyl bromide
Promoters/activators - Hydrazine
Lubricants - Ammonium salts

Lead, Toluene, TCE

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
National Defense		Carbon tetrachloride, CFC 113, Chromium, Dioxin, Hydrazine, Mercury, Methylene chloride, Perc, Phenol, PCBs, TCA, Xylenes
Also see Military Bases, Appendix C-II		
National Security		Ammonia, Benzene, Beryllium, Cadmium, Chlorinated phenols, Chromium, ETO, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Methylene chloride, Nickel, Perc, Phenol, POM, PAHs*, Radionuclides, TCA, TCE, Xylenes
Natural Gas Combustion - see Combustion, Appendix C-I		
Needle, Pin, & Fastener Mfg		Formaldehyde, Hydrogen chloride, Lead, Toluene, TCE, Zinc
Also see Metal Prod Fabrication, Appendix C-II		
Newspaper Publishing - see Printing & Publishing, Appendix C-II		
Nickel Plating - see Metal Plating, Appendix C-II		
Office Machine Mfg - see Machinery Mfg, Appendix C-II		
Office Supplies Mfg Carbon Paper & Inked Ribbons Lead Pencils & Art Goods Marking Devices Pens & Mech Pencils		Toluene Copper, Formaldehyde, Toluene Lead, Toluene, TCE, Zinc Chlorine, Methylene chloride, Perc, Toluene, TCE
Ink/Dye Mfg - see Chemical Mfg, Appendix C-II		
Oil Combustion - see Combustion, Appendix C-I		
Oil and Gas Extraction		Benzene, Phenols, POM, PAHs*, Sulfur compounds, Toluene, Xylenes Hydrogen sulfide Benzene, Carbon tetrachloride, Chlorobenzene, 1,4-Dichlorobenzene, EDC, Hydrogen sulfide, Toluene, TCA, Xylenes
Drilling Wells Exploration		
Extraction Natural Gas & Crude Petroleum Nat'l Gas Liquids		Ammonia, Formaldehyde, Gasoline vapors, Hydrogen sulfide Ammonia, Hydrogen sulfide
Field Services Gas Stripping Fugitive Losses	Gaseous and aerosol releases From field separator	Hydrogen sulfide, Gasoline vapors EDC

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Oil Production Fugitive Losses	Gaseous and aerosol releases from: sumps, wells, well heads, well cellars, pumps, fittings, oil pits, compressors, oil/ water separators,	
Tertiary Oil Production	Gaseous and aerosol releases from: steam drive wells, cyclic wells, pseudo cyclic wells	
Heavy Oil Test Stations	Gaseous and aerosol releases From test stations	
Combustion Processes - see Combustion, Appendix C-I		
Oil Storage - see Liquid Storage and Transfer, Appendix C-I		
Other Processes - see Other Processes & Fugitives, Appendix C-I		
Solvent Use - see Solvent Use, Appendix C-I		
Storage & Handling - see Liquid Storage & Transfer, Appendix C-I		
Organic Chemical Mfg - see Chemical Mfg, Appendix C-II		
Paint & Allied Products Mfg - see Chemical Mfg, Appendix C-II		
Paper & Paper Prod. Mfg/Treating - see Wood, Appendix C-II		
Pens & Pencils - see Office Supplies, Appendix C-II		
Petroleum Bulk Stations & Terminals		Benzene, Benzyl chloride, Carbon Tetrachloride Chlorine, EDB, EDC, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Methyl methacrylate, Styrene, Toluene, Xylenes
Also see - Bulk Plants & Terminals, Appendix C-II		
Petroleum & Coal Products		
Miscellaneous		
Asphalt Felts & Ctgs		Chromium, Gasoline vapors, Naphthalene Asbestos, Carbon tetrachloride, Chromium, Formaldehyde, POM, PAHs*
Lubricating Oils & Greases		Asbestos, Benzene, Epichlorohydrin, Formaldehyde, Hydrogen sulfide, Toluene, TCA, TCE, Xylenes
Paving & Roofing Mat'ls Paving Mixtures & Blocks		Ammonia, Asbestos, Benzene, BaP & other PAHs*, Chloroform, Chromium, Formaldehyde, Mercury, Methyl isocyanate, POM, Toluene, TCA
Petroleum Refineries (1)Most Refinery Operations	Gaseous, aerosol, partic releases including but not limited to: From: boiler, cat cracker, flare, incinerator, process heater	Acetaldehyde, Ammonia, Arsenic, Benzene, BaP & other PAHs*, Beryllium, Cadmium, Carbon disulfide, Chlorine, Chromium, Cresol, Dimethyl sulfate, EDB, EDC, Formal- dehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Mercury, Naphthalene, Nickel, Phenol, POM, Toluene, Xylenes, Zinc, Zinc oxide

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Petroleum & Coal continued (2)Crude Separation Gas Product'n	In addition to item (1) absorber, distillation/fractionation	In addition to item (1)-Ammonia, Chlorides, Cresols, EDC, Maleic anhydride, Michler's Ketone, Phenols, POM, PAHs*, Sulfur Cmpds, Zinc
(3)Light Hydrocarbon Processing	In addition to item (1): catalyst regeneration	In addition to item (1)-Nickel Carbonyl
(4)Middle and Heavy Distillate Process	In addition to items (1) and (2): evaporation, stripper	In addition to item (1)-Acetaldehyde, Ammonia, Copper, Cresols, Formaldehyde, Maleic anhydride, Michler's ketone, Nickel, Phenols, POM, PAHs*, Sulfur Compounds, Xylenes, Zinc, Any other listed Aromatic amine
(5)Residual Hydrocarbon Processing	In addition to items (1) and (2): visbreaker furnace, process vent,	In addition to item (1)-Acetaldehyde, Ammonia, Chromates, Cresol, Formaldehyde, Lead, stripper Maleic anhydride, Michler's Ketone, Lead, Nickel, Nickel carbonyl, Phenols, POM, PAHs*, Sulfur Cmpds, Zinc, Any other listed Aromatic amine
Also see Combustion, Liquid Storage & Transfer, and Other Processes, Appendix C-I Chemical Mfg, and Oil & Gas Extraction, Appendix C-II		
Pharmaceutical Industries - see Chemical Mfg, Drugs, Appendix C-II		
Photocopying & Blueprinting		Ammonia
Photographic Chemicals Mfg - see Chemical Mfg, Appendix C-II		
Photographic Studios		Ammonia
Photofinishing Labs		Methylene chloride, TCA
Pipelines - see Other Processes and Liquid Storage & Transfer, Appendix C-I		
Plastic & Synthetics Mfg - see Chemical Manufacturing, Appendix C-II		
Plastic Products Mfg Plastics Forming		TCA
Printing & Publishing		Toluene
Miscellaneous Blankbooks & Bookbinding Blankbooks & Loose- leaf Binders Bookbinding etc		Ammonia, Toluene, TCA, TCE Toluene
Books Printing Publishing		Lead, TCA Arsenic, Lead

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Printing & Publishing continued		
Newspapers		TCE
Printing (Commercial)		Toluene, TCA
Engraving & Plate		Benzene
Gravure		Ammonia, Benzene, Cadmium, Formaldehyde,
		Gasoline vapors, Methylene chloride,
		Nickel, Perc, Toluene, TCA, TCE, Xylenes
Letterpress		Ammonia, Benzene, Chromium, Methylene
		chloride, Naphthalene, Perc, Toluene, TCE
Lithographic		Ammonia, Benzene, Toluene, TCE
Printing Trade Svcs		
Typesetting		Ammonia
Electrotyping &		
Stereotyping		Lead
Publishing (Misc)		Toluene
Combustion Processes - see Combustion, Appendix C-I		
Ink Mfg - see Chemical Mfg, Appendix C-II		
Printing - see Solvent Use, Appendix C-I		
Surface Coating - see Solvent Use, Appendix C-I		
Process Gas Combustion - see Combustion, Appendix C-I		
Publicly Owned Treatment	Miscellaneous	
Works (POTWs)		Acrylonitrile, Benzene, Carbon tetrachloride,
		CFC-113, Chlorine, Chlorobenzene, Chloroform,
		EDC, Fluorocarbons, Hydrogen sulfide,
		Methylene chloride, Perc, Toluene, TCA, TCE,
		Vinyl chloride, Vinylidene chloride, Xylenes
	Gaseous products including but not limited to: From raw sewage offgases	
Combustion	From exhaust gases of digester gas burning engines modified to lower NOx emissions	Carbon tetrachloride, Chlorobenzene, p-Dichlorobenzene, EDC Acrolein, 1,3-Butadiene
Sludge Composting	From sawdust used as bulking agent (sawdust from lumber obtained at structural demolition projects)	Ammonia, Dimethylamine Asbestos
Sludge Dewatering		Dimethylamine
(using an aminomethyl-		
ated polyacrylamide		
having a dimethylamine		
group in the polymer)		
Sludge Treatment		Chloroform
Aeration Tanks - see Liquid Storage & Transfer, Appendix C-I		
Chlorinator Discharge		
Digesters		
Headworks		
Sludge Incinerators - see Combustion, Appendix C-I		
Water Treatment - see Other Processes, Appendix C-I		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Pulp Mills - see Wood Product Mfg, Appendix C-II		
Quarries	Particulate-phase substances including but not limited to:	Asbestos, Arsenic, Silica
Railroad Equip Mfg - see Transportation Equip, Appendix C-II		
Refractory Production		Chromium
Research & Devel. Labs		Ammonia, Cadmium, Chloride, Chromium, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Methylene chloride, Nickel, Perc, Phosgene, Phthalic anhydride, Styrene, Toluene, TCA, TCE, Zinc, Zinc oxide Epichlorohydrin, Hydrogen sulfide
Commercial Testing Labs		
Chemical Mfg - see Chemical Mfg, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Other Processes - see Other Processes, Appendix C-I Solvents - see Solvent Use, Appendix C-I Storage and Handling - see Liquid Storage & Transfer, Appendix C-I		
Roadway Surfacing		Asbestos, Benzene
Rubber Mfg - see Chemical Mfg, Appendix C-II		
Rubber & Misc Plastics Prod Fabricated Rubber Prod		Ammonia, Benzene, Chlorine, ETO, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Perc, Styrene, Toluene, Toluene diisocyanate, TCA, Vinyl chloride, Zinc, Zinc oxide Acetaldehyde, Acrylonitrile, Ammonia, Benzene, Benzyl chloride, Beryllium, Chlorine, EDC, ETO, Formaldehyde, Freon 113, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Mercury, Methyl methacrylate, Methylene chloride, Naphthalene, Phenol, Phthalic anhydride, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Vinyl chloride, Zinc oxide Benzene, Cadmium, Lead, Naphthalene, Toluene Naphthalene, Toluene, TCA Perc, Toluene Ammonia, Benzene, Methylene chloride, Styrene, Toluene, TCA, Zinc oxide
Plastics Prod, Misc		
Reclaimed Rubber Rubber & Plastic Footwear Rubber & Plastic Hose/Belting Tires & Inner Tubes		
Rubber Mfg - see Chemical Mfg, Appendix C-II Surface Coating - see Solvent Use, Appendix C-I		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Rubber Cement Application/Manufacture Application - see Solvent Use, Appendix C-I Manufacture - see Solvent Use, Appendix C-I and Chemical Mfg, Appendix C-II		
Saw Mills - see Wood Product Mfg, Appendix C-II		
Semiconductor Mfg - see Electronic Equipment Mfg, Integrated Circuits, Appendix C-II		
Sewage Plants - see Combustion (Incineration), Appendix C-I		
Shingle & Siding Mfg Also see Plastics, Appendix C-II		Asbestos
Sign & Advert. Display Mfg		Ammonia, Beryllium, Hydrogen chloride, Naphthalene, Perc, Toluene, TCA, TCE, Zinc
Smelters - see Metal Smelters, Appendix C-II		
Solvent Recycling Also see - Solvent Use, Appendix C-I		Benzene, Chlorinated organics
Space Research & Technology Combustion Processes - see Combustion, Appendix C-I Degreasing - see Solvent Use, Appendix C-I Research - see Research & Development, Appendix C-II Surface Coating - see Solvent Use and Other Processes, Appendix C-I Vehicle Refueling - see Other Processes, Appendix C-I		
Sporting & Athletic Goods Mfg Also see Combustion, Solvent Use, and Surface Coating, Appendix C-I Chemical Mfg, Metal Product Mfg, Rubber Product Mfg, and Textiles Mfg, Appendix C-II		Methylene chloride, TCA
Stone Products Mfg - see Clay, Glass & Stone Products, Appendix C-II		
Surface Coating Application/Manufacture Application - see Solvent Use and Surface Coating, Appendix C-I Manufacture - see Chemical Mfg, Appendix C-II		
Surgical & Med Supp Mfg Combustion Processes - see Combustion, Appendix C-I Degreasing - see Solvent Use, Appendix C-I Instruments - see Instrument Mfg, Appendix C-II Other Processes - see Other Processes, Appendix C-I Pharmaceuticals Mfg - see Chemical Mfg, Appendix C-II Sterilization - see Sterilizers, Appendix C-I Surface Coating - see Solvent Use, Appendix C-1		
TSDFs - see Transfer, Storage, & Disposal Facilities, Appendix C-II		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Textile Mill Product'n Mfg. Miscellaneous		Asbestos, Benzene, Benzidine, Bis(chloromethyl) ether, 1,4-Dichlorobenzene, Dichloroethane, Dioxane, Ethyleneimine, Formaldehyde, Hydrazine, Methyl Bromide, Perc, Phenol, TCE
Apparel/Other Textile Prod		Ammonia, Arsenic, Chlorine, EDC, Toluene, TCA
Fur Goods Apparel Belts		Ammonia, Perc Ammonia, Cadmium, Copper, Toluene, Zinc Toluene
House Furnishings Auto/Apparel Trimmings		Naphthalene, Toluene Ammonia, Arsenic, Benzene, Toluene, Vinyl chloride
Floor Covering Mills Miscellaneous Woven Carpets & Rugs Tufted Carpets & Rugs		Arsenic Arsenic Benzene, Formaldehyde Benzene, Benzidine
Knitting Mills Hosiery Knit Outerwear Mills		Acrylonitrile, Benzene Ammonia, Arsenic, Benzene, Perc Benzene, 1,4-Dioxane, Mineral fibers Bis(chloromethyl) ether
Narrow Fabric Mills Nonwoven Industry Textile Finishing Miscellaneous		Acrylonitrile, Benzene, Benzidine, 1,3-Butadiene, Formaldehyde, Hydrazine, Perc, Toluene, Vinyl chloride, Vinylidene chloride, Xylenes
Finish Plants Cotton Synthetic		Acrylonitrile, Benzene, Chromium, 1,4-Dichlorobenzene, Toluene Benzene, Copper, 1,4-Dioxane, Formaldehyde, Hydrazine, Perc, Xylenes
Weaving Mills Cotton		Acrylonitrile, Benzene, 1,4-Dioxane, EDC, Toluene
Synthetics		Acrylonitrile, Benzene, Chloroform, 1,4-Dioxane, EDC, Formaldehyde, Mineral fibers, Perc, Styrene, Toluene diisocyanate
Wool Woven Fabric Finishing Yarn & Thread Mills Yarn Mills, not wool Throwing & Winding Wool Yarn Mills		Benzene, 1,4-Dioxane, Formaldehyde, Perc 1,4-Dichlorobenzene
Misc Textile Goods Coated Fabrics, not rubberized		Toluene diisocyanate Ammonia, Lead, Toluene diisocyanate Arsenic
Cordage & Twine		Arsenic, Benzene, Cresol, Formaldehyde, Hydrogen chloride, Lead, Perc, Styrene, Toluene, Xylenes TCA

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Textile Mill Product'n Mfg (Misc) continued Felt goods Paddings & Upholstery Filling Processes Textile Waste Tire Cord & Fabric		Arsenic, TCA Benzene Formaldehyde Ammonia, Asbestos, Benzene, Formaldehyde, Perc
Cleaning - see Degreasing, Appendix C-I and Dry Cleaning, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Dyeing - see Chemical Mfg and Dyeing of Textiles, Appendix C-II Surface Coating/Solvent Use - see Solvent Use, Appendix C-I		
Tobacco Mfg Cigarette Mfg		Benzene, Chloroform, Formaldehyde, Methylene chloride, Perc, Toluene
Tobacco Stemming & Redrying		Benzene
Toy & Sporting Good Mfg Dolls Games, Toys, & Child- ren's Vehicles Sport & Athletic Goods Combustion Processes - see Combustion, Appendix C-I Degreasing/Surface Coating - see Solvent Use and Other Processes, Appendix C-I Labeling/Packaging - see Printing and Wood (Paper) Products, Appendix C-II Also see - Metal, Rubber, and Wood Products, Appendix C-II		Acrylonitrile, Toluene Styrene, Toluene Perc, Styrene, Toluene
Train Mfg/Rpf - see Transportation Equipment, Appendix C-II		
Transfer, Storage, & Disposal Facil's (TSDFs) Combustion Processes - see Combustion, Appendix C-I Other Processes - see Other Processes, Appendix C-I Solvent Recycling - see Solvent Use, Appendix C-I Storage - see Liquid Storage & Transfer, Appendix C-I		
Transportation Equip Mfg/Rpr		Hydrogen chloride, Methylene chloride, Perc, Toluene, TCE
Auto Repair/Auto Body Repair Gen'l Auto Repair Tire Retreading & Rpr Paint Shops Top & Body Rpr Shops Motor Vehicles & Car Bodies		Ammonia, Asbestos, Formaldehyde, Toluene, TCA Toluene Benzene, Naphthalene, Toluene, Xylenes Zinc Oxide Naphthalene, Toluene Ammonia, Cadmium, Chromium, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Phenol, Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Transportation Equip, Auto Mfg/Rpr, continued
Motor Vehicle Parts
& Accessories

Truck, Camper, Trailer,
& Bus Bodies

Auto Parts Mfg
Brake lining Mfg
Aircraft & Parts

Guided Missiles, Space
Vehicles, & Parts
Guid Mis'ls Spc Vehs

Spc Propulsion Units
& Parts
Spc Veh Equipment

Motorcycles, Bicycles &
Parts
Railroad Equipment

Ship & Boat Bld & Rpr

Combustion Processes - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Metal Forming - see Machining and Metal Smelters, Appendix C-II
Military Transport - see Military, Appendix C-II
Paint Preparation - see Chemical Mfg, Appendix C-II
Research - see Research & Development, Appendix C-II
Space Transport - see Space Research & Technology, Appendix C-II
Storage & Handling - see Liquid Storage & Transfer, Appendix C-I
Surface Coating/Touch-up - see Solvent Use and Other Processes, Appendix C-I
Upholstery Mfg - see Textile Mill Prod Mfg, Appendix C-II

Transportation Equip Sales
Boat Dealers
Used Car Dealers

Ammonia, Asbestos, Benzene, Cadmium,
Chlorine, Chloroform, Chromium, Copper,
Formaldehyde, Hydrogen chloride, Hydrogen
sulfide, Lead, Manganese, Methylene
chloride, Naphthalene, Perc, Toluene,
Toluene diisocyanate, TCA, TCE,
Zinc, Zinc oxide

Chromium, Methylene chloride, Nickel,
Styrene, Toluene

Asbestos
Ammonia, Chromium, Hydrogen chloride,
Hydrogen fluoride, Hydrogen sulfide, Lead,
Methylene chloride, Nickel, Perc, Styrene,
Toluene, TCA, TCE, Xylenes, Zinc, Zinc oxide

Formaldehyde, Hydrazine, Perc, Toluene,
TCE, Xylenes

Hydrazine, TCE
Ammonia, Hydrazine, Hydrogen chloride,
Lead, Methylene chloride, Toluene

Toluene
Ammonia, Chromium, Hydrogen chloride,
Methylene chloride, Nickel, Toluene,
Toluene diisocyanate, TCA
Asbestos, Hydrazine, Methylene chloride,
Phenol, PCBs, Styrene, TCE

Toluene
Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Transportation Ports/Stations

Airports & Flying Fields
Inspection & Weighing
Marine Cargo Handling

Benzene, Dioxins, POM, PAHs*, Radionuclides,
Toluene
EDC, Lead, Methylene chloride, Perc,
Toluene, Toluene diisocyanate,
TCA, TCE, Xylenes

Combustion Processes - see Combustion, Appendix C-I
Degreasing/Paint Stripping - see Solvent Use, Appendix C-I
Electroplating - see Metal Plating, Appendix C-II
Refueling - see Other Processes, Appendix C-I

Truck Mfg - see Transportation Equipment, Appendix C-II

Universities - see Colleges, Appendix C-II

Varnish Mfg - see Chemical Mfg, Appendix C-II

Water Treatment - see Other Processes, Appendix C-I

Wood Combustion - see Combustion, Appendix C-I

Wood Preservation

Gaseous and aerosol releases
from: wood preserving agents

Cellon Process
Chromated Copper
Arsenate Process
Dricon Process
Diluent/Creosote
Process
Oil/Penta Process

Arsenic, Benzene, Chloroform, Chromium,
Copper, Cresols, Dibenzofuran, Dioxins,
Hydrogen chloride, Phenol, Naphthalene,
Toluene, Zinc, Zinc Oxide

vapor drying agents
preserving carriers
fire retardants

various solvents
various solvents
Formaldehyde, Zinc chloride

Combustion Processes - see Combustion, Appendix C-I

Wood Chemicals Mfg - see Chemical Mfg, Appendix C-II

Wood Products Mfg.

Miscellaneous

Fiberboard Mfg.
Lumber
Millwork, Plywood, &
Structural Members
Millwork

Cresols, Formaldehyde, Dioxins, TCE
Chloroform
Cresols, Formaldehyde, Dioxins, TCE, Toluene

Wood Kitchen Cabinets

Hardwood Veneer/Plywood

Asbestos, Carbon tetrachloride,
Chlorophenols, Formaldehyde,
Methylene chloride, Toluene, Xylenes
Methylene chloride, Naphthalene, Styrene,
Toluene, TCA, Xylenes
Formaldehyde, Perc

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Wood Product Mfg continued
Paper & Allied Prod Mfg

Gaseous/aerosol/particulate releases
including but not limited to:

From: Sizing agents

Wet & dry-strength agents
Adhesives
Dyes & pigments

Binders

Pigment fillers/coatings
Humectants

Coatings

Oil-resistant additives

Machine operating aids

Retention aids

Biocides & slime cont'l

Deinking agents

Bleaching chemicals

From chemicals imported in waste
paper: ink pigments, coating
agents, binders, adhesives -

Bldg Paper & Board
Mills

Deink Fine & Tissue
Paper, Secondary
Fiber Mills
Paper Mills Misc

Paperboard Contain-
ers & Boxes Mfg
Corrug. & Solid
Fiber Box
Folding Box
Sanitary Food
Containers
Fiber Cans,
Drums, etc
Set-Up Box

Paperboard Mills
Converted Paper Prod
Die-Cut Paper &
Board
Paper Bags

Pressed & Molded
Pulp Goods
Miscellaneous

Acrylamide, Styrene
Epichlorohydrin, Formaldehyde
Acrylamide, Ammonia
Benzidine, Direct Black 38, Direct Blue 6
Lead, o-Tolidine

Styrene
Asbestos, Styrene, Zinc, Zinc Oxide
Formaldehyde
Ammonia, Sodium hydroxide
Fluorochemical chrome complex

Asbestos, Epichlorohydrin
Acrolein, TCA, Trichlorophenol
Sodium hydroxide
Ammonia, Chlorine, Chloroform, Chromic
sulfate, Methanol, Sodium hydroxide, Zinc

Chloroform, Phenol, Toluene

Ammonia, Asbestos

Chloroform
Arsenic, Cadmium, Chlorine, Chloroform,
Hydrogen sulfide, Toluene, TCE

Ammonia, TCE
Formaldehyde

Acetaldehyde, Ammonia, Toluene

Ammonia, Toluene
Toluene
Cadmium, Chloroform, Formaldehyde, Toluene

Toluene, TCE
Acetaldehyde, Ammonia, Formaldehyde,
Hydrogen chloride, Methylene chloride,
Naphthalene, Perc, Toluene, TCA

Zinc
Ammonia, Formaldehyde, Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Wood Prod Mfg continued

Pulp Mill Mfg
 Groundwood/Mechanical Pulp Mfg
 Chemical Pulp Mfg

 Dissolving Pulp
 Kraft or Sulfite
 Sulfite Papergrade Pulp
 Deink Fine & Tissue Paper
 Pressed & Molded Pulp Goods
 Miscellaneous
 Also see - Paperboard, Coarse Paper, Tissue Paper, Appendix C-II
Plywood Mfg
Presswood & Laminated Wood Products Mfg

Ammonia, Calcium, Carbon, Caustic soda,
Sodium sulfate, Sulfur dioxide

Chloroform

Chloroform

Chloroform

Zinc
Chlorine, Chloroform, Hydrogen sulfide

Cresols, Dioxins
Phenol-formaldehyde resins -
 Formaldehyde, Phenol
Melamine-formaldehyde resins - Formaldehyde
Dispersion agent (during glue formulation)
 - Sodium hydroxide
Formaldehyde scavengers - Ammonia

Acetaldehyde, Formaldehyde, Lead, POM, PAHs*,
Toluene

Toluene
Cresols, Dioxins
Toluene

Chromium, Methylene chloride, TCA

Sawmills & Planing Mills

 Hardwood Dimension & Flooring
 Softwood Veneer Mfg
 Wood Containers
 Wood Furniture Mfg
 Wood Finishing

Combustion Processes - see Combustion, Appendix C-I
Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Wool Fabric Mills - see Textile Mfg

All Other Industries

Gaseous releases from combustion,
storage, handling, process
vessels, etc

Particulate and aerosol releases
from combustion, storage,
handling, process vessels, etc

Process loss and fugitive releases
anywhere along the process train

Feedstocks that are on list of substances
or may contain listed substances as
substances.

Check all materials manufactured for
components that on listed substances