

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:

	= Benzo[a]Pyrene
CFC-113	= Chlorinated fluorocarbon
EDB	= Ethylene dibromide
BaP	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:

Acenaphthylene	Dibenzo[a,e]pyrene
Acenaphthene	Dibenzo[a,h]pyrene
Benzo[a]anthracene	Dibenzo[a,i]pyrene
Benzo[b]fluoranthene	Dibenzo[a,l]pyrene
Anthracene	Fluoranthene
	Fluorene
	Indeno[1,2,3,-cd]pyrene
Benzo[a]pyrene	Naphthalene
Benzo[b]fluoranthene	Phenanthrene
Benzo[k]fluoranthene	Pyrene
Chrysene	
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-Nitrosodiethylamine
N-Nitrosodimethylamine
N-Nitrosodiethanolamine
N-Nitrosodi-n-propylamine
N-Nitroso-N-ethylurea
N-Nitrosomethylethylamine
N-Nitroso-N-methylurethane
N-Nitrosomethylvinylamine
N-Nitroso-N-methylurea
N-Nitrosomorpholine
N-Nitrosornicotine

N-Nitrosopyrrolidine

N-Nitrosopiperidine

(5) The 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 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:	Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Radionuclides, Selenium, Zinc, And any other listed metals
	Other particulate-phase substances including but not limited to:	BaP & other PAHs, Dibenzofurans,
Dioxins, Phosphorus, POM	Gaseous products including but not limited to:	Acetaldehyde, Benzene, Dichlorobenzenes, EDC, EDB, Formaldehyde, Hydrogen chloride, Hydrogen fluoride, Phenols
Oil-fired Residual or Distillate	Gaseous and particulate substances including but not limited to:	Arsenic, BaP & other PAHs, Benzene, Beryllium, Cadmium, Chromium, Copper, <u>Diesel PM</u> , Dioxins, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, Radionuclides, Selenium, Zinc, Any other listed metals
Waste	<u>Arsenic, Benzene, BaP & other PAH (see Note 2)</u>	<u>Arsenic, Benzene, BaP & other PAH (see Note 2)</u> 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	From boiler corrosion inhibitor	Nitrosomorpholine, Any other listed metals Benzene, BaP & other PAHs, Benzyl chloride, Coke oven emissions, Cresols, Dibenzofurans, Dioxins, Nitrosamines, POM
Coke Ovens		
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: Gaseous products including but not limited to:	BaP, Dibenzofurans, Dioxins Aldehydes, Benzene, Dichlorobenzenes, EDB, EDC
Landfill Gas Also see Boilers, Heaters, IC Engines, etc, Appendix C-1		
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 Dioxins BaP & other PAHs, POM Acrolein, Arsenic, Asbestos, Beryllium, Cadmium, Chromium, Dioxins, Manganese, Mercury, Nickel, POM, PAHs, Any other
Pathological Scrap Wood Sludge		listed metals Any listed metals Acrolein, Dibenzofurans, Dioxins, Manganese, Nickel, POM, PAHs, Any other listed metals
Solid/Biomass Waste Waste-To-Energy		
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 Carbon tetrachloride, Dichloroethane, Methylene Chloride Glycol ethers, Methylene chloride, Xylenes Perc, TCE
Photoresist Stripping Vapor Degreasing		
Fabric Finishing (Woven)		1,4-Dichlorobenzene
Floor Wax		Carbon tetrachloride Specific Substances

Device/Process -----	Types of Emissions -----	(see Note 3) -----
SOLVENT USE continued		
Paint & Varnish Removal		Dioxane, Methylene chloride
Polish (Shoe, Furniture)		Carbon tetrachloride
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	Benzene, Gasoline vapors, Toluene, Xylenes
	From: joints, valves	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		

Device/Process -----	Types of Emissions -----	Specific Substances (see Note 3) -----
LIQUID STORAGE & TRANSFER, Fugitive Emissions, continued		
Tank Cars and Trucks Filling and Tank Breathing	Gaseous, liquid and volatile solids including but not limited to:	Each pure organic stored or transferred that is a listed substance 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
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
		Specific Substances

Device/Process -----	Types of Emissions -----	(see Note 3) -----
OTHER PROCESSES continued		
Pesticide Use		Acrolein, 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 Additives - Curing agents, Surfactants, Defoamers, Thickeners, Film-control agents Plasticizers	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 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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Notes For APPENDIX C-II

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

		= Benzo[a]Pyrene
		= Chlorinated fluorocarbon
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BaP	EDC	= Ethylene dichloride
CFC-112	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:

Acenaphthylene	Dibenzo[a,e]pyrene
Acenaphthene	Dibenzo[a,h]pyrene
Benzo[a]anthracene	Dibenzo[a,i]pyrene
Benzo[b]fluoranthene	Dibenzo[a,l]pyrene
Anthracene	Fluoranthene
	Fluorene
Benzo[a]pyrene	Indeno[1,2,3,-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[k]fluoranthene	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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(4) Nitrosamines refer to the following listed substances:

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4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK)
N-Methyl N'-nitro-N-nitrosoguanidine
p-Nitrosodiphenylamine
N-Nitrosodi-n-butylamine

N-Nitrosodiethylamine
N-Nitrosodimethylamine
N-Nitrosodipropylamine
N-Nitrosodipropylamine
N-Nitroso-N-ethylurea
N-Nitrosomethylethylamine
N-Nitroso-N-methylurethane
N-Nitrosomethylvinylamine
N-Nitroso-N-methylurea

N-Nitrosomorpholine

N-Nitrosomorpholine
N-Nitrosopyrrolidine

N-Nitrosopiperidine

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 alternate 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 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 Ammonia, Arsenic
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		

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	Asbestos, Benzene, Formaldehyde, Organics, POM, PAHs, Toluene, TCA, Xylenes, All listed metals
Asphaltic Concrete Prod (Including Asphalt Paving	Materials Mfg) Processes Including: Batch Plants and Particulate Phases Substances	
Materials Mfg)	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		
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	Benzene, Gasoline vapors, Specific Stored Substances listed in Appendix A-I or A-II
Barrel Breathing	From fixed roof tanks	
Barrel Filling	From variable vapor space tanks	
Barrel Standing	From floating roof tanks	
Barrel Withdraw	From floating roof tanks	
Valves, Vapor Collect/Control	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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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		
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		Beryllium
Combustion Processes - see Combustion, Appendix C-I		
Charcoal Mfg - see Carbon, Appendix C-II		
Chemical Mfg	Gaseous and aerosol releases From process reactor vessel	Any of the following types of chemicals, listed in Appendix A-I or A-II: FEEDSTOCK CHEMICAL(S) MANUFACTURED CHEMICAL(S) BY-PRODUCT CHEMICALS
	fugitive, storage, handling, ducted building exhaust	
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 Acetaldehyde, Acrolein, Copper, Cresols, Hydrochloric acid, Phenol, Toluene, Xylenes
Acids Mfg		

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

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

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

Nitrogenous

Phosphatic

Mixing Only

Nickel
Ammonia, Arsenic, Cadmium, Hydrogen

sulfide
Ammonia

Sodium Arsenate

Arsenic

Aldehyde Mfg

Aldehydes, Toluene

Anti corrosives Mfg

Cresols, Hydrazine

Bases Mfg

Ammonia, Hydrazine, Sodium hydroxide

Carbon Black & Charcoal Mfg

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

Combustion Processes - see Combustion, Appendix C-I

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Preparations

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

Chlorine (Electrolytic)

Production

From: hydrogen stream

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

Mercury

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, Epichloro-
hydrin, 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

Biological Products

Medicinals & Botanicals

Arsenic, Benzene, EDC, Lead, TCA
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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Chemical Mfg continued		
Dyes Mfg		Benzene, Benzidine, Benzyl chloride, Chlorobenzenes, Chloroform, Cresols, Dichloromethane, Dimethyl sulfate, Dioxane, C.I. 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 Production Oxychlorination Air & Oxygen Proc	From: vents, storage	Carbon tetrachloride, Chloroform, EDC
Explosives		
Fertilizers - see Chemical Mfg (Agricultural), Appendix C-II		
Flame Retardants Mfg		Hexachlorocyclopentadiene
Fluorocarbon Mfg Reactor Venting Distillation Storage	From: vents, storage	Carbon Tetrachloride, Chloroform
Indust Inorg Chem Mfg Miscellaneous		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, Hexachloro- benzene, Hexachloropentadiene, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Manganese, Mercury, Methyl isocyanate, Methyl methacrylate, Methylene chloride, Naphthalene, Nickel, Nitro- benzene, Nitrosomorpholine, Perc, Phenol,

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Alkalies & Chlorine

Phosgene, Phosphorus, Phthalic anhydride,
PCBs, Propylene oxide, Radionuclides,
Styrene, Toluene, Toluene diisocyanate,
TCA, TCE, Vinyl chloride, Vinylidene
chloride, Xylenes, Zinc, Zinc oxide

Cyclic Crudes &
Intermediates

Ammonia, Arsenic, Asbestos, Benzene, 1,3-
Butadiene, Carbon tetrachloride, Chlorine,
Chlorobenzene, Chloroform, Formaldehyde,
Hydrogen chloride, Mercury, Phosgene,
Toluene, TCE, Vinyl chloride, Vinylidene
chloride

Gum & Wood Chemicals

Wood Chem Mfg
Cresol
Cresylic Acid
Phenol

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'-Dichloro-
benzidine, Dimethyl sulfate, 1,4-Dioxane,
EDC, Formaldehyde, Gasoline vapors, Hexa-
chlorobenzene, Hydrazine, Hydrogen chloride,
Hydrogen sulfide, Maleic anhydride, Methyl
bromide, Methyl isocyanate, Methylene
chloride, Naphthalene, Nitrobenzene,
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

Arsenic, Beryllium, Carbon tetrachloride,
ETO, Hydrogen chloride, Mercury

Pigments, Inorgan

Ammonia, Arsenic, Cadmium, Chloroform,
Chromium, Copper, Dimethyl sulfate, 1,4-
dioxane, Hydrazine, Hydrogen chloride,
Lead, Zinc, Zinc oxide

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Inks Miscellaneous Printing		Dioxane, Toluene Ammonia, Arsenic, Benzene, Cadmium, Copper, Formaldehyde, Lead, Perc, Toluene, Vinyl chloride, Xylenes, Zinc Cupferron, Thiourea
Metal Chelating Agent Mfg Corrosion Inhib, Metal Treatment Chems		
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, Benzene, 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, PCBs, Propylene, Propylene oxide, Sodium hydroxide, Styrene, Toluene, TCA, TCE, Trichlorophenol, Urethane, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc EDC
Vinyl Chloride	From: heavy ends stream	
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, Cop- per, Cresol, 1,4-Dioxane, Epichlorohydrin,

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Mfg, Paints and Allied Proofs, continued

Pigment

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
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, Car-
bon tetrachloride, Chlorine, Chlorobenzene,
Chloroform, Chromium, Cresols, Dichloro-
methane, Dioxins, Formaldehyde, Hydrazine,
Hydrocyanic acid, Hydrochloric acid,
Hydrogen fluoride, Hydrogen sulfide, Iso-
cyanates, Mercury, Methylene chloride,
Nickel, Perc, Phenol, Phosgene, POM, PAHs,
Sodium hydroxide, Toluene, TCE, Vinyl
chloride, Vinylidene chloride, Zinc

Cellulosic Man-Made Fibers

Ammonia, Arsenic, Benzene, Chlorine,
EDC, Hydrogen chloride

Organic Fibers,
noncellulosic

Acrylonitrile, Copper, Dimethyl sulfate, EDC,
Toluene diisocyanate, Vinylidene chloride

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Chemical Mfg, Plastics, continued

Plastics/Resins

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, Benzene,
Bis(chloromethyl) ether, Cresols, Dioxins,
Epichlorohydrin, Formaldehyde,
Hexachlorocyclopentadiene, Maleic anhydride,
Phenol, Vinylidene chloride, Xylenes

Rubber Production & Compounding

Gaseous, Aerosol, & Particulate releases

Synthetic
Monomers

Acrylonitrile, 1,3-Butadiene, Chloropyrene,
Epichlorohydrin, Ethyl acrylate, EDC,
ETO, Propylene, Styrene

Retardants
Catalysts
Solvents
Miscellaneous

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) -----
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	Zinc Ethylene thiourea, n-Nitrosodimethylamine,
	Age Restorers Vulcanizing Agents Accelerator Activators	Zinc Nickel, Phenol Lead, Selenium, Zinc Ammonia, Lead, Zinc
Solvents Mfg		Chloroform, Dioxins, Formaldehyde
Soap, Cleaners, &		Dioxane, Glycol ethers, Methanol
Toilet Goods		Ammonia, Chlorine, Hydrogen chloride
Soap & Detergent Mfg		Benzene, EDC, ETO, Formaldehyde, Hydrogen sulfide, Methyl methacrylate, Toluene Nitrosomorpholine
Miscellaneous		
Optical Brighteners Polishes & Sanita- tion Goods		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 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
Surface Active Agents		
Toilet Preparations		
Textile Chemical Mfg		Acetamide, 2,4-Diaminoanisole, 2,4-Diamino- anisole sulfate, Urethane
Varnish Mfg		Benzene, Dioxane

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
(High)-Vinylidene Chloride Copolymer	Fabric Process	Vinylidene Chloride
Wax Mfg - see Polish Mfg, Appendix C-II		
Wood Chem Mfg - see Chem Mfg, Indus Inorgan, Gum & Wood, Appendix C-II		
Chemicals, Sales		Ammonia, Benzene, 1,3-Butadiene, Hydrogen chloride, Methylene chloride, Styrene, Toluene, TCA, Vinyl chloride
Storage & Handling - see Liquid Storage & Transfer, Appendix C-I		
Chrome Plating - see Metal Plating, Appendix C-II		
Clay, Glass & Stone Pro		
Miscellaneous		Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Hydrogen chloride, Lead, Mercury, Nickel, Silica, Toluene, TCA, TCE
Abrasive Products		Ammonia, Cadmium, Chlorine, Chromium, Formaldehyde, Hydrogen chloride, Lead, Manganese, Methylene chloride, Perc, Phenol, Styrene, Toluene, TCA, Xylenes, Zinc
Asbestos Mill/Processing		Asbestos, Benzene, Chromium, Copper, Nickel, Silica Formaldehyde, Hydrogen sulfide, Naphthalene, TCA, Xylenes
Cement Products Floor Tile Friction Material Textiles		
Cement Mfg	Particulate, Gaseous, Aero Emis	
	including but not limited to: From stacks, feed to mill & air separator, kiln, dryers, grinders	Asbestos, BaP, Benzene, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Hydrogen chloride, Lead, Manganese, Nickel, PCBs, POM, PAHs, Zinc, All listed metals
Clinker Cooler Combustion Processes		Benzene, Formaldehyde, Hydrogen chloride, PCBs, POM, PAHs, All listed metals
Also see Combustion, Appendix C-I Dry processes		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Hydraulic		Arsenic, Cadmium, Chlorine, Chromium, Copper, Hydrogen chloride, Lead, Mercury, Nickel, Toluene, Zinc
Wet Process Clay Products, Structural Brick & Structural Clay Tile Ceramic Wall & Floor Tile Clay Refractories		Arsenic, Beryllium, Lead Arsenic, Beryllium, Lead Beryllium, Chromium, Mineral fibers
Clay, Glass & Stone Pro continued Concrete, Gypsum, &		
Plaster Products Concrete Block & Brick Concrete Products		Chromium, Styrene Ammonia, Chromium, Gasoline vapors, Toluene, Zinc Asbestos, Hydrogen sulfide Mercury
Ready-mixed Concrete Lime		TCE Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Hydrogen, Nickel, Toluene
Cut Stone & Stone Prod Flat Glass		Ammonia, Asbestos, Chlorobenzene, Gasoline vapors, Hydrogen chloride, Lead, Toluene, TCE, Zinc
Gaskets, Packing, & Sealing Devices		Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Formaldehyde, Hydrogen chloride, Lead, Mercury, Methylene chloride, Nickel, Perc, Styrene, Toluene, TCA
Glass & Glassware, Pressed & Blown		Arsenic Arsenic, Chlorine, Hydrogen chloride, Methylene chloride
Glass Container Mfg	From glass furnace	Chlorine, Chromium, Copper, Gasoline vapors, Hydrogen chloride Ammonia, Carbon tetrachloride, Formaldehyde, Mineral fibers, Phenol
Minerals, Ground or Treated		Hydrogen chloride, Mineral fibers, Phenol, Zinc, Zinc oxide
Mineral Wool Prod		
Nonclay Refractories	Ammonia, Beryllium, Chromium, Formaldehyde,	

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Nonmetallic Mineral Prod		Chlorine, Copper, Hydrogen chloride, Mineral fibers, Styrene, Toluene Lead, TCA
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		
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		

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
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		TCA
Combustion Processes - see Combustion, Appendix C-I		
Cooling Towers - see Other Processes, Appendix C-I		
Electrical Assembly Cleaning - see Degreasing, Appendix C-I		
Electrical & Electronic Equip		
Miscellaneous		Freon 113, Methylene chloride, Perc, TCA, TCE
Electric & Electronic Equip continued		
Communication Equipment		
Radio & TV Communication Equipment		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
Electric Distrib Equip		Ammonia, Naphthalene, Toluene, TCA, TCE
Transformers		Ammonia, Beryllium, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Perc, PCB, Toluene, TCA, TCE, Vinyl chloride, Xylenes, Zinc oxide
Switchgear & Switchboard Apparatus		Ammonia, Formaldehyde, Hydrogen chloride, Perc, Toluene, TCA, TCE
Electrical Industrial		
Apparatus		Ammonia, Arsenic, BaP, Copper, Hydrogen chloride, Lead, Mercury, Perc, PCB, Toluene, TCA, TCE
Motors & Generators		Ammonia, Formaldehyde, Hydrogen chloride, Lead, Naphthalene, Phenol, Styrene,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
<p>Industrial Controls Welding Apparatus,</p> <p>Electric Carbon & Graphite Products</p>		<p>Toluene, TCA, TCE Ammonia, Styrene, Toluene, TCA, TCE</p> <p>Nickel, Toluene BaP, Chlorine, Hydrogen chloride, Hydrogen sulfide, Styrene</p>
<p>Electronic Components & Accessories</p> <p>Batteries Primary, Dry & Wet</p> <p>Storage Cat'd Ray Pict'r Tubes</p>		<p>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</p> <p>Cadmium, Lead, Naphthalene, Nickel, Zinc, Zinc Oxide</p> <p>Beryllium, Cadmium, Lead, Manganese, Nickel, TCA, Zinc, Zinc oxide</p> <p>Beryllium, Lead</p>
<p>Electric & Electronic Equipment Prod continued Electron Tubes, Transmitting</p> <p>Electron Capacitors</p>		<p>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)</p>
<p>Integrated Circuit</p> <p>Board Mfg</p>	<p>From: developer, stripper</p>	
<p>Semiconductors & Related Devices</p>	<p>screening-hardener</p>	<p>Formaldehyde, Methylene chloride 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</p>
<p>Solvent Stations - see Liquid Storage & Transfer, Appendix C-I</p>		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> Elec Housewares/Fans Household Cooking 		Beryllium, Toluene
<ul style="list-style-type: none"> Equipment Household Laundry Equipment Household Refriger- 		TCA, TCE Perc, Toluene
<ul style="list-style-type: none"> ators & Freezers Sewing Machines 		Toluene Toluene, TCA
Electric Lighting &		
<ul style="list-style-type: none"> Wiring Equipment Electric Lamps Lighting Fixtures 		Toluene, TCE Ammonia, Cadmium, Mercury, Toluene, TCA, TCE
<ul style="list-style-type: none"> Commercial Residential Wiring Devices Current-Carrying 		Toluene, TCA Ammonia, Hydrazine, Toluene, TCA, TCE
<ul style="list-style-type: none"> Noncurrent-Carry Radio & TV Rec'ving Sets Semiconductor Production - see Electric & Electronic Equip, Integrated Circuit, Appendix C-II 		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
<ul style="list-style-type: none"> Electric & Electronic Equip continued X-Ray Apparatus & Tubes 		Beryllium, Hydrogen chloride, Perc, Toluene, TCA
<ul style="list-style-type: none"> Elec, Gas, & Sanitary Svc's Electric Services 		Acetaldehyde, Arsenic, Benzene, BaP, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, PAHs, PCBs, TCA
<ul style="list-style-type: none"> Gas & Other Svc's Water Supply 		Hydrogen sulfide Arsenic, Chromium, Hydrogen chloride, Hydrogen sulfide, Mercury, Perc, TCA, TCE
Sanitary Services		Benzene, Chloroform, EDC, Methylene chloride,

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Refuse Systems		Perc, TCA, TCE, Vinyl chloride 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		
Bakery Products		Perc, Toluene Benzene, Formaldehyde, Toluene Ammonia, Formaldehyde, Ammonia, Benzene, Formaldehyde, Toluene Arsenic, Toluene Arsenic, Benzene, Formaldehyde, Toluene EDC, Methylene chloride Nickel, Toluene EDC Acetaldehyde, Benzene, Benzidine, Carbon Tetrachloride, Chloroform, Dimethyl sul- fate, Epichlorohydrin, ETO, Formaldehyde, Maleic Anhydride
Beverages		
Milk (Condens & Evap)		
Soft Drinks		
Canned Foods		
Fats & Oils		
Shorten & Cook Oils		
Soybean Oil Mills		
Food Preparation, Misc		
Grain Mill Products		
Prepared Feeds		Acrolein, Methyl bromide
Wet Corn Milling		Chlorine, Hydrochloric Acid
Manufactured Ice		Arsenic
Meat Packing Plants		Arsenic, Formaldehyde, Hydrochloric Acid
Sausages & Other		
Prepared Meats		Acetaldehyde, Ammonia, Arsenic, Chloroform,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Food Prod Mfg continued		
Roasted Coffee		Formaldehyde, Phenol, Toluene, TCA Acetaldehyde, Acrolein, Methylene chloride,
Seafood, Canned & Cured Sugar & Confec Prods		TCE Arsenic, Hydrogen sulfide
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	Methylene chloride, Perc, TCE	
Miscellaneous		
Drapery Hardware and		Methylene chloride, Phthalic anhydride, Toluene, TCE
Blinds & Shades Household Furniture		Benzene, TCA
Metal Upholstered Wood		Cresol, Toluene, TCE, Xylenes Cadmium, Copper, Lead, Toluene Ammonia, Methylene chloride, Naphthalene, Styrene, Toluene, TCA, TCE, Xylenes Toluene
Office Furniture TV & Radio Cabinets 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		Methylene chloride, Perc, Toluene, TCA, TCE Ammonia, Toluene, Toluene diisocyanate, TCE Ammonia, Toluene, Xylenes
Public Bldg & Related Furn		
Combustion Process - see Combustion, Appendix C-I		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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		

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

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

Instruments & Related Prod's
Engineering & Science Instr

Meas & Controlling Devices
Environmental Controls

Process Control Inst

Electricity Measuring Instruments

Medical Instr & Supplies
Dental Equip & Supp

Ophthalmic Goods
Photographic Equip & Supplies

Surgical & Medical Instrumnets

Surgical Appliances & Supplies

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

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
Beryllium, Toluene, TCA
Ammonia, Hydrogen chloride, Toluene, TCE
Ammonia, Cadmium, Chlorine, ETO, Formaldehyde,
Phenol, Toluene, TCA, Zinc, Zinc oxide
Ammonia, TCA, TCE
Acetaldehyde, Acrylonitrile, Ammonia, Arsenic,
Asbestos, Benzene, Benzidine, Benzyl chloride,
Bis(chloromethyl) ether, Cadmium, Carbon tetrachloride,
Chlorine, Chlorobenzene, Chloroform, Chromium,
Dimethyl sulfate, 1,4-Dioxane, Epichlorohydrin,
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

Ammonia, Chlorine, Hydrogen chloride,
Lead, Perc, Toluene, TCE

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Jewelry, Precious Metal		Ammonia, Freon 113, Hydrogen chloride, Lead, Toluene, TCA, TCE
Jewelers Materials & Lapidary Work		Ammonia, Hydrogen chloride, Lead
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
Refuse Landfills		Asbestos
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	Toluene	
Personal Leather Goods		
Tanning Processes	Tanning agents Dyes, pigments, & coloring agents	Toluene, TCE Chromium, 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
	Miscellaneous	
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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Conveyors & Conveying Equipment Elevators & Moving Stairways Hoists, Cranes, & Monorails Indstl Trucks/Tractors		Ammonia, Toluene, TCE Toluene Ammonia, Cadmium, Copper, Lead, Zinc Perc, Toluene
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 Comprsr, Air & Gas Industrial Furnaces & Ovens Industrial Patterns Power Transmission		Copper, Gasoline vapors, Lead, Toluene, TCA, TCE Toluene Arsenic, Copper, Hydrogen chloride, Lead, Toluene, TCE, Zinc Formaldehyde, Phenol Ammonia, Copper, Hydrogen chloride
Equipment Pumps & Pumping Equipment Speed Changers,		Ammonia, Formaldehyde, Hydrogen chloride, Lead, Perc, Phenol, Toluene, TCA, Xylenes Perc, Toluene, TCA
Metalworking Machinery Machine Tool Accessories		Arsenic, Perc Ammonia, Beryllium, Chromium, Hydrogen chloride, Toluene, TCA, TCE Ammonia, Lead, Toluene, TCE Ammonia, Benzene, Lead, Perc, Toluene, TCA, TCE
Machine Tools, Metal Cutting Types Machine Tools, Metal Forming Types		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Rolling Mill Machinery Special Dyes, Tools, Jigs, & Fixtures		Cadmium, Chromium, Zinc, Zinc oxide 1,4-Dichlorobenzene, Formaldehyde, Hydrogen chloride, Methylene chloride, Naphthalene, Toluene, TCE, TCA, Zinc
Office & Computing Machines Miscellaneous Calculating & Accounting Machines		CFC-113, Hydrogen chloride, Toluene, TCA Arsenic, Hydrogen chloride, TCA
Machinery, Office & Computing, continued Electronic & Computing Equipment		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
Also see - Electric & Electronic, Appendix C-II Typewriters		Ammonia, Benzene, Beryllium, Cadmium, Formaldehyde, Hydrogen chloride, Lead, Nickel, Toluene, Xylenes
Refrigerat'n & Svc Machin Automatic Merchandising Machines Commercial Laundry Equipment Measur & Dispens Pumps Refrig & Htg Equip		Toluene Arsenic, Perc, Toluene Toluene Ammonia, Copper, Formaldehyde, Freon 113, Hydrogen sulfide, Lead, Methylene chloride, Phthalic anhydride, Toluene, TCA, TCE, Xylenes, Zinc Toluene
Misc Svc Indus Mach Special Industry Machinery Food Prods Machinery Paper Indus Machin Printing Trades Mach		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
Textile Machinery Woodworking Machin		
Combustion Processes - see Combustion, Appendix C-I Metal Forming - see Machining Mfg and Metal Forming, Appendix C-II		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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		Chloroform, Methylene chloride, TCE TCA
Metal Furniture Mfg - see Furniture Mfg, Appendix C-II		
Metal Plating	Particulate metals including but not limited to: From electrocleaning, <u>metal spraying</u> , and plating Gaseous and aerosol releases	Cadmium, Chromium (VI), Nickel, TCA
Electrocleaning Cleaning/Pickling Cleaning/Plating Storage/Handling	including but not limited to: Alkaline cleaning agents Acid cleaning, pickling agents Chelating agents, solvents Plating/other process bath compon. and Plating tank, Electric arc furnace	Sodium hydroxide Chromic acid, Hydrochloric acid Nitrilotriacetic 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 Metal Barrels, Drums & Pails Metal Cutlery, Handtools & Hardware Cutlery Hand & Edge Tools		Benzene, Lead, Perc, Toluene, TCA, TCE, Xylenes Ammonia, Naphthalene, Toluene, TCA Chromium, Lead, Toluene, TCE Ammonia, Chlorine, Chromium, Hydrogen chloride, Methylene chloride,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Hand Saws & Saw Blades Misc Hardware		Styrene, Toluene, TCA, TCE, Zinc 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 Ammonia, Copper, Hydrogen chloride, Lead, Perc, Zinc, Zinc oxide
Metal Foil & Leaf		Hydrogen sulfide Ammonia, Perc, Toluene Lead Copper, Perc, Toluene, TCA, TCE
Metal Forgings & Stampings Iron & Steel Forgings Auto Stampings Crowns & Closures Misc Metal Stampings		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 Acetaldehyde, Arsenic, Benzene, Cadmium, Chlorine, Chromium, Copper, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Nickel, Perc, Toluene, TCA, TCE, Xylenes, Zinc, Zinc oxide
Metal Prod Fabric continued Misc Metal Services Plating & Polishing		Lead Hydrogen sulfide, Toluene, TCE Ammonia, Arsenic, Formaldehyde, Freon 113, Hydrogen chloride, Lead, Phenol, Toluene, Zinc oxide
Metal Coating & Allied Services		Methylene chloride, Toluene Ammonia, Cadmium, Formaldehyde, Hydrogen chloride, Phenol, Toluene, TCE, Zinc oxide Ammonia, Benzene, Chromium, Formaldehyde, Perc, Phenol, Toluene
Ordnance & Accessories Small Arms Ammunition Ammun, exc small arms Small Arms		TCA, TCE Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc
Plumbing & Heating, except electric Metal Sanitary Ware Plumbing Fittings & Brass Goods		TCA, TCE Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc
Heating Equipment, except electric		TCA, TCE Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc
Screw Machine Products,		TCA, TCE Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc
Bolts, etc Screw Machine Prod Bolts, Nuts, Rivets, & Washers		TCA, TCE Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Steel Springs, exc wire Structural Metal Product		Hydrogen chloride, Toluene, TCA
Fabrication Structural Metal		Toluene
Fabrication Metal Doors, Sash & Trim		Copper, Toluene, Xylenes, Zinc oxide Ammonia, Cadmium, Formaldehyde, Perc, Toluene, TCA, Xylenes, Zinc
Fabricated Plate Work, boiler shops		Copper, Gasoline vapors, Hydrogen chloride, Lead, Perc, Styrene, Toluene, TCA, TCE Ammonia, Perc, Toluene, Toluene diisocyanate, TCA, TCE
Sheet Metal Work		Ammonia, Copper, Perc, Toluene, TCA, TCE
Architectural Metal Work		Toluene, Xylenes
Prefabric Metal Bldgs Misc Metal Work		Ammonia, Benzene, Toluene
Valves & Pipefittings		Copper, Phenol, Toluene, TCA, TCE, Zinc
Wire Product Fabrication		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		
Primary Aluminum Pro	Gaseous, aerosol, particulate releases including but not limited to: From the calciner, furnace, mat'l crusher/mill, storage & handling, service road, prebake/reduction/ soderberg stud cell	Benzene, Chloroform, Cresols, Fluorides, Methylene chloride, POM, PAHs, TCE
Secondary Aluminum	Gaseous, aerosol, particulate releases including but not limited to: From the furnace, and the service road	Benzene, Cresols, POM, PAHs
Furnace Tapping Furnace Charging Metal Casting Metal Forming		Nickel
Beryllium Alloys	Gaseous, aerosol, particulate releases including but not limited to:	Chloroform, Methylene chloride, TCE
Molding		Beryllium
Primary Cadmium Production Material Preparation	Gaseous, aerosol particulate releases including but not limited to:	Cadmium

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Metal Casting Mining Operations	From the furnace, condenser, material storage and handling	
Cadmium-Nickel Battery Material Prep	Gaseous, aerosol, particulate releases including but not limited to:	Cadmium, Lead, Nickel
Chromite Ore Refining	From the sintering machine and material storage and handling Gaseous, aerosol, particulate releases including but not limited to: From dryer, mill, cyclone, storage	Chromium
Metallurgical Coke Coke Oven Charging/	Gaseous, aerosol particulate releases including but not limited to: From the coke oven, vessels, material 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
Pushing Material Prep Coke Quenching		
Coke Production		
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	Cadmium, Copper, Lead, Manganese, Mercury, POM, PAHs, Selenium, Zinc
Electrometallurgical Products		
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, decarburizing vessels	Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel
Iron & Steel Foundries		Cadmium, Chromium, Copper, Lead, Manganese, Nickel, POM, PAHs, Zinc
		Nickel

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Iron and Steel Production Coke Oven Charging/	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, Cadmium, Chlorine, Chromium, Coke oven emis, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Naphthalene, Nickel, POM, PAHs, Phenol, Toluene, TCE, Xylenes, Zinc
Pushing 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, 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
Gray Iron Foundries Furnace Tapping Furnace Charging Converter Charging Metal Casting Cupola	Gaseous, aerosol, particulate releases including but not limited to: From furnace, foundry mold & core decomposition, and service road From argon oxygen decarburization vessels, coke ovens	Arsenic, Beryllium, Cadmium, Chromium, Manganese, Nickel, Zinc
Malleable Iron Foundries Steel Investment Foundries		
Steel Foundries Converter Charging Furnace Tapping Furnace Charging Metal Casting Basic Oxygen Proc Miscellaneous		Ammonia, Arsenic, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Naphthalene, Nickel, Perc, Phenol, Styrene, Toluene, TCA, Xylenes, Zinc Methylene chloride, Toluene Ammonia, Perc
Cold Finish Steel Shapes Steel Pipe & Tubes Steel Wire & Related Products	Ammonia, Chlorine, Hydrogen chloride,	Lead, PCB, Toluene, Zinc

Industry/ Emitting Process	Type(s) of Emissions/ Emitting Process Points	Some Specific Substances (Including, but not limited to)
Primary Lead Smelting	Gaseous, aerosol, partic releases including but not limited to: Furnace Tapping Furnace Charging Material Prep Metal Casting Slag Dumping Mining Operations	Arsenic, Cadmium, Copper, Lead, POM, PAHs, Mercury, Selenium
Secondary Lead Smelt	Gaseous, aerosol, partic releases including but not limited to: Furnace Tapping Furnace Charging Metal Casting	Arsenic, Lead, Manganese, POM, PAHs, Selenium
Lead Acid Battery Pro	Gaseous, aerosol, partic releases including but not limited to:	Arsenic, Cadmium, Lead, Manganese, Mercury
Miscellaneous Lead Pro	Gaseous, aerosol, partic releases including but not limited to: Converter Charging Material Preparation Metal Casting	Arsenic, Cadmium, Lead
Manganese Production	Gaseous, aerosol, partic releases including but not limited to: Furnace Charging Furnace Tapping Material Crusher/ Mill Metal Casting Slagging Synthetic Mang Pro Roasting Drying Grinding Packaging/Handling Melting Refining Hot Metal Transfr	Manganese, POM, PAHs

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Dry Battery Production	Particulate substance releases including but not limited to:	Manganese, Mercury
Material Prep		
Screening From the material crusher/mill and		
Storage & Handling		
Also see Electrical & Electronic Equipment, Appendix C-I		
Mercury Production	Particulate releases	Mercury
Mining	including but not limited to:	
Prim. Ore Process	From smelter, hoeing, retort	
Secondary Prod		
Nickel Production	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
Metal Casting		
Mining Operations		
Refining		
Melting/Roasting		
Crushing		
Drying		
Nonferrous Metal Prod	Gaseous, aerosol, partic releases including but not limited to:	Nickel
Super Alloys		
Permanent Magnet		
Alloys		
Electrical Alloys		
Secondary Processing	Gaseous, aerosol, partic releases including but not limited to:	Nickel
of Nickel Scrap		
Radium, Uranium, &	Gaseous, aerosol, partic releases	
Vanadium Mining	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	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
Material Prep		
Slag Dumping		
Mining Operations		
Secondary Zinc Process	Gaseous, aerosol, partic releases including but not limited to: From the furnace, condenser, retort service road, and galvanizing vessel	Cadmium, Mercury, Nickel, Selenium, Zinc
Furnace Tapping		
Furnace Charging		
Metal Casting		

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

Monofilament Fiber Mfg

Wet Spin
Dry Spin
Filter-tow Dry Spin
Filament Yarn Dry Spin

Gaseous and particulate releases
including but not limited to:
From: polymer and solvent storage
ope 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

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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Musical Instrument Mfg Also see - Combustion, Other Processes, and Solvent Use, Appendix C-I Wood Product Mfg, Appendix C-II		Lead, Toluene, TCE
National Defense Also see Military Bases, Appendix C-II		Carbon tetrachloride, CFC 113, Chromium, Dioxin, Hydrazine, Mercury, Methylene chloride, Perc, Phenol, PCBs, TCA, Xylenes
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 Also see Metal Prod Fabrication, Appendix C-II		Formaldehyde, Hydrogen chloride, Lead, Toluene, TCE, Zinc
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,
Drilling Wells		
Exploration		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Extraction Natural Gas & Crude Petroleum	Gaseous and aerosol releases From field separator	1,4-Dichlorobenzene, EDC, Hydrogen sulfide, Toluene, TCA, Xylenes
Nat'l Gas Liquids		Ammonia, Formaldehyde, Gasoline vapors, Hydrogen sulfide Ammonia, Hydrogen sulfide Hydrogen sulfide, Gasoline vapors
Field Services		
Gas Stripping		
Fugitive Losses		EDC
Oil Production	Gaseous and aerosol releases from: sumps, wells, well heads, well cellars, pumps, fittings, oil pits, compressors, oil/water separators,	
Fugitive Losses		
Tertiary Oil	Gaseous and aerosol releases from: steam drive wells, cyclic wells, pseudo cyclic wells	
Production		
Heavy Oil Test	Gaseous and aerosol releases From test stations	
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		Chromium, Gasoline vapors, Naphthalene Asbestos, Carbon tetrachloride, Chromium, Formaldehyde, POM, PAHs
Asphalt Pits & Ctgs		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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
(2)Crude Separation In addition to item (1) absorber, Gas Product'n	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 In addition to items (1) and (2): Distillate Process	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, stripper	In addition to item (1)-Acetaldehyde, Ammonia, Chromates, Cresol, Formaldehyde, Lead, 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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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		
Miscellaneous		
Blankbooks & Bookbinding Blankbooks & Loose leaf Binders Bookbinding etc		Toluene Ammonia, Toluene, TCA, TCE Toluene
Books Printing Publishing		Lead, TCA Arsenic, Lead
Newspapers Printing (Commercial) Engraving & Plate Gravure		TCE Toluene, TCA Benzene Ammonia, Benzene, Cadmium, Formaldehyde, Gasoline vapors, Methylene chloride, Nickel, Perc, Toluene, TCA, TCE, Xylenes Ammonia, Benzene, Chromium, Methylene chloride, Naphthalene, Perc, Toluene, TCE Ammonia, Benzene, Toluene, TCE
Letterpress		
Lithographic		
Printing Trade Svcs Typesetting Electrotyping & Stereotyping		Ammonia Lead Toluene
Publishing (Misc) 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 Works (POTWs)	Miscellaneous	Acrylonitrile, Benzene, Carbon tetrachloride, CFC-113, Chlorine, Chlorobenzene, Chloroform,

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
	Gaseous products including but not limited to: From raw sewage offgases	EDC, Fluorocarbons, Hydrogen sulfide, Methylene chloride, Perc, Toluene, TCA, TCE, Vinyl chloride, Vinylidene chloride, Xylenes
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 (using an aminomethyl- ated polyacrylamide having a dimethylamine group in the polymer) Sludge Treatment		Dimethylamine
Aeration Tanks - see Liquid Storage & Transfer, Appendix C-I Chlorinator Discharge		Chloroform
Digesters Headworks Sludge Incinerators - see Combustion, Appendix C-I Water Treatment - see Other Processes, Appendix C-I		
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
Commercial Testing Labs		Epichlorohydrin, Hydrogen sulfide

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

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

Rubber Mfg - see Chemical Mfg, Appendix C-II

Rubber & Misc Plastics Prod
Fabricated Rubber Prod

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

Asbestos, Benzene

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

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		Methylene chloride, TCA
Stone Product Mfg - see Clay, Glass & Stone Products, Appendix C-I		
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		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Sterilization - see Sterilizers, Appendix C-I Surface Coating - see Solvent Use, Appendix C-1		
TSDFs - see Transfer, Storage, & Disposal Facilities, Appendix C-II		
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 Ammonia, Perc Ammonia, Cadmium, Copper, Toluene, Zinc Naphthalene, Toluene Ammonia, Arsenic, Benzene, Toluene, Vinyl chloride
Fur Goods Apparel Belts House Furnishings Auto/Apparel Trimmings		
Floor Covering Mills Miscellaneous Woven Carpets & Rugs Tufted Carpets & Rugs		Arsenic Arsenic Benzene, Formaldehyde Benzene, Benzidine Acrylonitrile, Benzene Ammonia, Arsenic, Benzene, Perc Benzene, 1,4-Dioxane, Mineral fibers Bis(chloromethyl) ether
Knitting Mills Hosiery Knit Outerwear Mills		
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,
Synthetics		Toluene Acrylonitrile, Benzene, Chloroform, 1,4- Dioxane, EDC, Formaldehyde, Mineral fibers, Perc, Styrene, Toluene diisocyanate
Wool		Benzene, 1,4-Dioxane, Formaldehyde, Perc 1,4-Dichlorobenzene
Woven Fabric Finishing		

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Yarn & Thread Mills	Yarn Mills,not wool Throwing & Winding Wool Yarn Mills	Toluene diisocyanate Ammonia, Lead, Toluene diisocyanate Arsenic
Misc Textile Goods	Coated Fabrics, not rubberized	Arsenic, Benzene, Cresol, Formaldehyde, Hydrogen chloride, Lead, Perc, Styrene, Toluene, Xylenes
	Cordage & Twine	TCA
	Felt goods Paddings & Upholstery Filling Processes Textile	Arsenic, TCA Benzene
	Waste Tire Cord & Fabric	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, & Children'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	

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

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

Motor Vehicle Parts & Accessories

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

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

Truck, Camper, Trailer & Bus Bodies

Asbestos

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

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

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

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

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
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		Toluene Toluene
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	Arsenic, Benzene, Chloroform, Chromium, Copper, Cresols, Dibenzofuran, Dioxins, Hydrogen chloride, Phenol, Naphthalene, Toluene, Zinc, Zinc Oxide
Cellon Process Chromated Copper Arsenate Process Dricon Process Diluent/Creosote Process		
Oil/Penta Process	vapor drying agents preserving carriers fire retardants	various solvents various solvents Formaldehyde, Zinc chloride

Industry/ Emitting Process -----	Type(s) of Emissions/ Emitting Process Points -----	Some Specific Substances (Including, but not limited to) -----
Combustion Processes - see Combustion, Appendix C-I		
Wood Chemicals Mfg - see Chemical Mfg, Appendix C-II		
Wood Products Mfg. Fiberboard Mfg. Lumber Millwork, Plywood, & Structural Members Millwork	Miscellaneous	Cresols, Formaldehyde, Dioxins, TCE Chloroform Cresols, Formaldehyde, Dioxins, TCE, Toluene
Wood Kitchen Cabinets		Asbestos, Carbon tetrachloride, Chlorophenols, Formaldehyde, Methylene chloride, Toluene, Xylenes Methylene chloride, Naphthalene, Styrene, Toluene, TCA, Xylenes Formaldehyde, Perc
Hardwood Veneer/Plywood		
Paper & Allied Prod Mfg	Gaseous/aerosol/particulate releases	
	including but not limited to: From: Sizing agents Wet & dry-strength agents	Acrylamide, Styrene Epichlorohydrin, Formaldehyde Acrylamide, Ammonia Benzidine, Direct Black 38, Direct Blue 6, Lead, o-Tolidine
	Dyes & pigments	
	Adhesives	
	Pigment fillers/coatings	Styrene Asbestos, Styrene, Zinc, Zinc Oxide Formaldehyde Ammonia, Sodium hydroxide Fluorochemical chrome complex
	Binders	
	Humectants Oil resistant additives	
	Machine operating aids Biocides & slime cont'l Retention aids	Asbestos, Epichlorohydrin Acrolein, TCA, Trichlorophenol Sodium hydroxide Ammonia, Chlorine, Chloroform, Chromic sulfate, Methanol, Sodium hydroxide, Zinc
	Deinking agents Bleaching chemicals From chemicals imported in waste	
	ink pigments, coating paper: agents, binders, adhesives -	Chloroform, Phenol, Toluene
Bldg Paper & Board		
Mills Deink Fine & Tissue		Ammonia, Asbestos
Paper, Secondary Fiber Mills		
Paper Mills Misc		Chloroform Arsenic, Cadmium, Chlorine, Chloroform,

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Paperboard Containers & Boxes Mfg Corrug. & Solid Fiber Box Folding Box Sanitary Food Containers Fiber Cans, Drums, etc Set-Up Box		Hydrogen sulfide, Toluene, TCE
Paperboard Mills Converted Paper Prod Die-Cut Paper & Board		Ammonia, TCE Formaldehyde Acetaldehyde, Ammonia, Toluene
Paper Bags		Ammonia, Toluene Toluene Cadmium, Chloroform, Formaldehyde, Toluene
Pressed & Molded Pulp Goods Miscellaneous		Toluene, TCE Acetaldehyde, Ammonia, Formaldehyde, Hydrogen chloride, Methylene chloride, Naphthalene, Perc, Toluene, TCA Zinc Ammonia, Formaldehyde, Toluene
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		Ammonia, Calcium, Carbon, Caustic soda, Sodium sulfate, Sulfur dioxide
Plywood Mfg Presswood & Laminated Wood Products Mfg		Chloroform Chloroform Chloroform Zinc Chlorine, Chloroform, Hydrogen sulfide Cresols, Dioxins Phenol-formaldehyde resins - Formaldehyde, Phenol
Sawmills & Planing Mills Hardwood Dimension & Flooring		Melamine-formaldehyde resins - Formaldehyde Dispersion agent (during glue formulation) - Sodium hydroxide Formaldehyde scavengers - Ammonia Acetaldehyde, Formaldehyde, Lead, POM, PAHs, Toluene Toluene

Industry/
Emitting Process

Type(s) of Emissions/
Emitting Process Points

Some Specific Substances
(Including, but not limited to)

Softwood Veneer Mfg
Wood Containers
Wood Furniture Mfg
 Wood Finishing

Cresols, Dioxins
Toluene

Chromium, Methylene chloride, TCA

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 are on listed substances

Check all materials manufactured for
components that are on listed substances