Multi- Sector General Permit for Storm Water Discharges Associated with Industrial Activity

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OBJECTIVES OF THIS TRAINING

- ▶ Determine Facility Eligibility for MSGP Coverage
- Obtaining MSGP Coverage
- Required Controls
- ► Non-numeric Technology-Based Effluent Limits
- Sector Specific Additional Technology-Based Effluents
- Inspections
- Additional Sector Specific Inspection Requirements
- Water Quality Monitoring
- Sector Specific Benchmark Parameters
- Sector Specific Effluent Limitations
- Corrective Actions
- Reporting & Record Keeping
- ► Terminating Coverage

Introduction to the Multi Sector General Permit for Discharges Associated with Industrial Activity

Runoff from rainfall or snowmelt that encounters material handling and storage, equipment maintenance and cleaning, and other activities at industrial facilities can pick up pollutants, and transport them directly to a Water of the United States



Introduction to the Multi Sector General Permit for Storm Water Discharges Associated with Industrial Activity

Between 1952 and 1968 the Cuyahoga River in Ohio caught fire 13 times and was biologically dead from Akron to Cleveland, some 50 river miles, toxic and anaerobic, and unable to support life. It was more a gutter than a river.

Federal Water Pollution Prevention Act amended in 1972 and became the "Clean Water Act".



Bickering Won't Clean Water

Bickering between Cleveland and the state over who bears responsibility for the condition of the Cuyahoga River, a stream so polluted it catches fire from time to time, will not improve the quality of this filthy stream.

Cleveland justifiably criticizes the state for permitting industries to pour wastes into

Ohio is right in rapping the city for delays in improving its sewage plants and for the poor condition of a big interceptor sewer which has broken down three times in the last three years, allowing raw sewage to flow into the river.

An oil slick which caught fire recently, causing \$50,000 damage, occasioned the re-criminations. Cleveland blamed the state

for permitting oily wastes to enter the stream. Ohio responded that the city's sewer system is the major source of oily wastes.

The truth lies someplace between. Both city and state must share blame for the poor quality of river water. Instead of fighting with each other, they should work together to clean up the river.

Cleveland has a broad plan for improving the sewer system. It has money to get started. It has a high-powered Clean Water Task Force to oversee the work. It should get on with the job.

Ohio has the power to end both industrial and municipal pollution. It has money to help municipalities with the task. It has a high-powered water development authority to assist both industries and cities in controlling pollution. It should get moving, too.

City Investigating Cause of River Fire

River Sunday which caused pany. \$45,000 damage is under in- "IT PROBABLY had to vestigation by the city's Bu- be some kind of gasoline or fanski II said yesterday.

what type of combustible susbstance was dumped into Stefanski and Mayor Carl "WE HAVE no jurisdic- complaint to the state.

inflamable in the water." in the river.

A fire on the Cuyahoga the river and by what com
B. Stokes yesterday toured the site of the fire which dethe site of the fire which dethe site of the fire which destroyed two railroad tres-

A formal complaint to the reau of Industrial Waste, kerosene," Stefanski said. state government will be Utilities Director Ben S. Ste- "The oil that usually gets filed by the mayor, Stefan-Utilities Director Ben S. Ste into the river by dumping or ski said, because of state li-Stefanski II said investiga-listo the river by dumping or ski said, because of state li-discharge from boats, is of censing for industries along tors are attempting to learn low grade and would be non-

industries and gives them legal authority to dump in the river. Actually, the state gives them a license to pol-

Stefanski said his department is compiling a list of industrial offenders along the river to include in the



Introduction to the Multi Sector General Permit for Storm Water Discharges Associated with Industrial Activity

The EPA 1990 storm water regulations established National Pollutant Discharge Elimination System (NPDES) permit requirements for industrial storm water discharges.

EPA issued the first Multi-Sector General Permit (MSGP) for those facilities in 1995. The current MSGP went into effect on April 1, 2020.

Federal regulations at 40 CFR 122.26(b)(14)(i)-(xi) require stormwater discharges associated with specific categories of industrial activity to be covered under NPDES permits (unless otherwise excluded).

11 CATEGORIES OF REGULATED INDUSTRIAL ACTIVITIES

- Category One (i): Facilities subject to federal stormwater effluent discharge standards at 40 CFR Parts 405-471
- ► Category Two (ii): Heavy manufacturing
- Category Three (iii): Coal and mineral mining and oil and gas exploration and processing
- Category Four (iv): Hazardous waste treatment, storage, and disposal facilities
- Category Five (v): Landfills, land application sites, and open dumps with industrial wastes
- Category Six (vi): Metal scrapyards, salvage yards, automobile junkyards, and battery reclaimers
- Category Seven (vii): Steam electric power generating plants
- ► Category Eight (viii): Transportation facilities that have vehicle maintenance, equipment cleaning, or airport deicing operations
- Category Nine (ix): Treatment works treating domestic sewage with a design flow of 1 million gallons a day or more
- ► Category Ten (x): Construction sites that disturb 5 acres or more
- ► Category Eleven (xi): Light Manufacturing

Introduction to the Multi Sector General Permit for Storm Water Discharges Associated with Industrial Activity

State of Alaska, Department of Environmental Conservation (DEC) has <u>Primacy</u> for NPDES in Alaska

DEC issued the 2020 Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (2020 MSGP, AKR060000).

§ 1.1 The Alaska Pollutant Discharge Elimination System (APDES) MSGP covers waters of the United States (U.S.) located in the State of Alaska, except the Indian Reservation of Metlakatla and the Denali National Park and Preserve On April 1, 2020.



29 Industrial Sectors

This Training will Cover:

- Determining MSGP Eligibility;
- 2. How to obtain Permit Coverage;
- 3. Storm Water Pollution Prevention Plan;
- 4. Inspections;
- 5. Records and Reporting;
- 6. MSGP Construction Related Sectors (Sectors D and E);
- MSGP Mining Sector Specific Training (Sectors G, H, and I);
- 8. MSGP Transportation Sectors Specific Training (Sectors P, Q, and S).

MSGP PERMIT ELIGIBILITY



APDES MSGP ELIGIBILITY REQUIREMENTS

- Determine whether the facility discharges to a Municipal Separate Storm Sewer System (MS4) or to Waters of the United States.
- 2. Determine if the facility's industrial activities are listed among the eleven Categories of Industrial Activities, provided in the federal regulations at 40 CFR 122.26(b)(14) or if the facility's SIC code falls within one of the sector/subsectors identified in Appendix D of the 2020-MSGP.
- 3. Determine if the listed facility or site may qualify for the "no exposure" exclusion under the federal regulations at 40 CFR 122.26(g).

Does My Facility Discharge to an MS4 or Water of the United States?

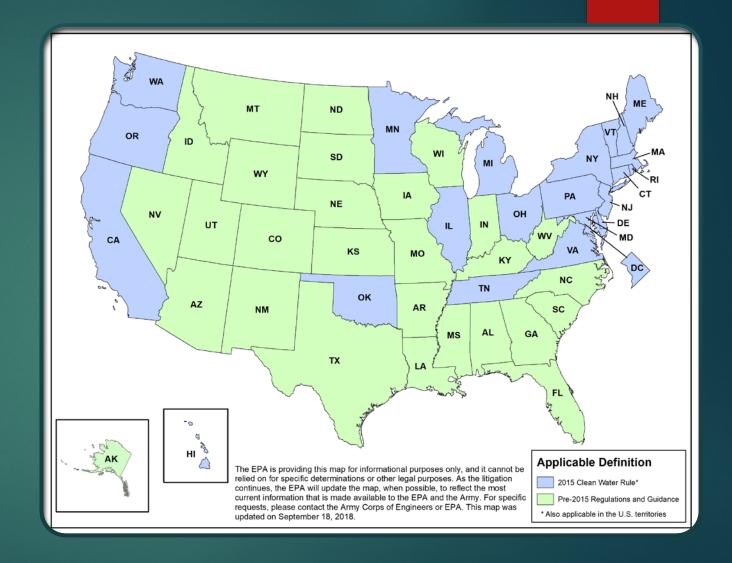
Water of the United States???

MS4???



Waters of United States

Pre-2015 Definition applies in Alaska!



40 CFR 230.3(s) The term waters of the United States means:

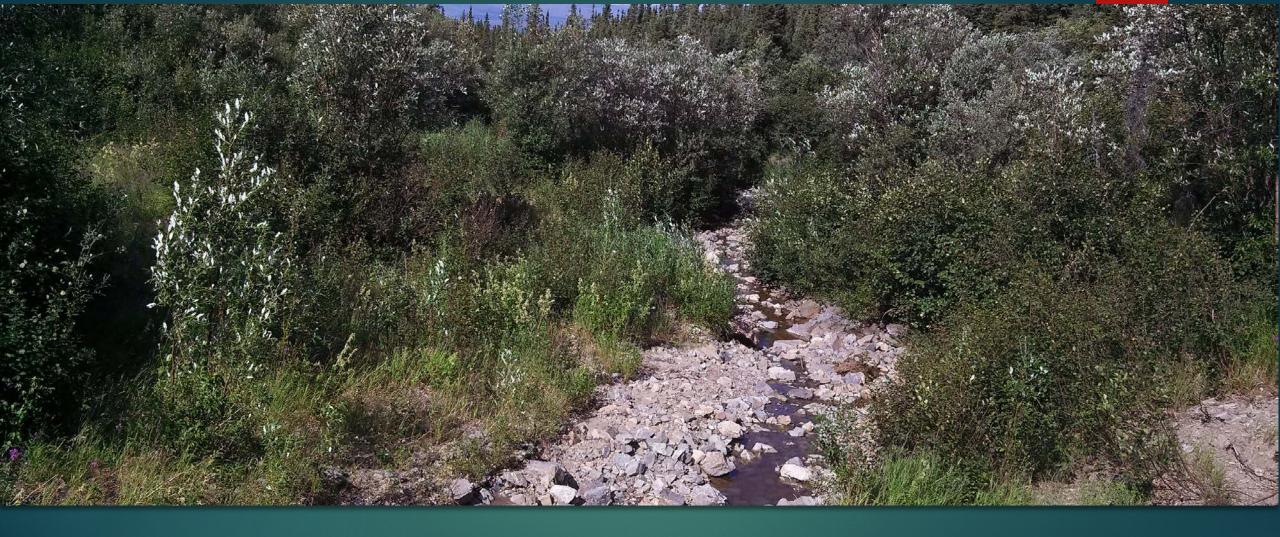
- 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2. All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - b. (From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
- 4. All impoundments of waters otherwise defined as waters of the United States under this definition;
- 5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;
- 6. The territorial sea:
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.
- Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Pre-2015 Waters of the United States (WOTUS) Definition

Common Waters of the United States in Alaska

TRADITIONALLY NAVIGABLE WATERS





Common WOTUS in Alaska

RELATIVELY PERMANENT TRIBUTARIES TO TRADITIONALLY NAVIGABLE WATERS

Common WOTUS in Alaska

WETLANDS SUBJECT TO THE PROVISIONS OF THE CLEAN WATER ACT



Municipal Separate Storm Sewers Systems

- ▶ Fairbanks Urbanized Core
- ▶City of North Pole
- ► Fairbanks North Star Borough Road Service Areas
- ► University of Alaska Fairbanks
- ▶Fort Wainwright
- ▶DOT&PF
- ► Municipality of Anchorage
- **▶**JBER
- ▶Port of Anchorage





Is My Facility
Required to
Obtain MSGP
Coverage?

IF YOUR SIC CODE IS NOT LISTED IN APPENDIX D YOU ARE NOT REQUIRED TO OBTAIN COVERAGE!

APDES 29 REGULATED INDUSTRIAL SECTORS

- ► Sector A: Timber Products
- Sector B: Paper and Allied Products
- Sector C: Chemical and Allied Products Manufacturing, and Refining
- Sector D: Asphalt Paving and Roofing Materials and Lubricant Mfg.
- Sector E: Glass, Clay, Cement, Concrete, and Gypsum Products
- ► Sector F: Primary Metals
- Sector G: Metal Mining
- Sector H: Coal Mines and Coal Mining-Related Facilities
- Sector I: Oil and Gas Extraction
- Sector J: Non-Metallic Mineral Mining and Dressing
- ▶ Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities
- Sector L: Landfills, Land Application Sites, and Open Dumps
- ► Sector M: Automobile Salvage Yards
- Sector N: Scrap Recycling and Waste Recycling Facilities
- Sector O: Steam Electric Generating Facilities

APDES 29 REGULATED INDUSTRIAL SECTORS

- Sector P: Land Transportation and Warehousing
- Sector Q: Water Transportation
- ► Sector R: Ship and Boat Building and Repair Yards
- Sector S: Air Transportation
- Sector T: Treatment Works
- Sector U: Food and Kindred Products
- ► Sector V: Textile Mills, Apparel, and Other Fabric Products
- Sector W: Furniture and Fixtures
- Sector X: Printing and Publishing
- Sector Y: Rubber, Misc. Plastic Products, and Misc. Manufacturing
- Sector Z: Leather Tanning and Finishing
- Sector AA: Fabricated Metal Products
- Sector AB: Transportation Equip., Industrial or Commercial Machinery
- Sector AC: Electronic and Electrical Equip. and Components, Photographic and Optical Goods
- Sector AD: Discharges Designated by the Director as Requiring Permits

Sector A - Timber Products

General sawmills and planing mills Subsector A1:

Subsector A2: Wood preserving

Log storage and handling Subsector A3:

Hardwood dimension & flooring mills Subsector A4:

Special product sawmills not elsewhere

classified

Millwork, veneer, plywood, structural wood

Wood pallets and skidsSector A – Timber

Products

Wood buildings and mobile homes

Reconstituted wood products

Wood products not elsewhere classified

Nailed and lock corner wood boxes and Subsector A5:

shook







Sector B Paper And Allied Products

Paperboard mills Subsector B1:

Subsector B2: Pulp mills

Paper mills

Paperboard containers and boxes

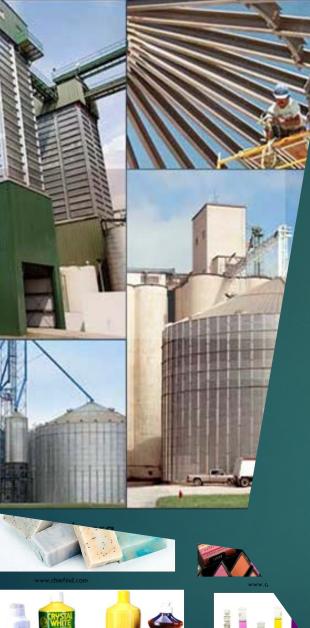
Converted paper and paperboards except containers and boxes



www.prattplus.com







Sector C Chemicals and Allied Products

Subsector C1: Agricultural Products.

Subsector C2: Industrial Inorganic Chemicals.

Subsector C3: Soaps, Detergents, and Cleaning Preparations.

Perfumes, Cosmetics, and Other Toilet Preparations.





Sector C Chemicals and Allied Products

MSGP App. D

Subsector C5: Medicinal chemicals and botanical products

Pharmaceutical preparations

In-vitro and in-vivo diagnostic substances

Biological products, except diagnostic substances

Paints, varnishes lacquers, enamels, and allied products

Industrial organic chemicals

Miscellaneous chemical products

Inks and paints

Petroleum refining



http://uncyclopedia.wikia.com/wiki/File:Mad_scie ntist.gif



Sector D Asphalt Paving and Roofing Materials and Lubricant Manufacturing

Subsector D1: Asphalt paving and roofing materials.

Subsector D2: Miscellaneous products of petroleum and coal.



Sector E Glass, Clay, Cement, Concrete and Gypsum Products

Subsector E1: Structural clay products

Pottery and related products

Subsector E2: Concrete, gypsum, and plaster products

Subsector E3: Flat glass

Glass and glassware, pressed or blown

Glass products made of purchased glass

Hydraulic cement

Cut stone and stone products

Abrasive, asbestos, and misc. non metallic minerals products





http://www.wisegeek.com/what-is-a-glass-urnace.htm

Sector F Primary Metals

Subsector F1: Steel works, blast furnaces and rolling and finishing mills

Subsector F2: Iron and steel foundries

Subsector F3: Rolling, drawing and extruding of nonferrous metals

Subsector F4: Nonferrous foundries (casting)

Subsector F5: Primary smelting and refining of nonferrous metals

Secondary smelting and refining of nonferrous metals

Misc. primary metals products



http://malcolm.thedaddy.org/TerminatorThumb.jpg

Sector G - Metal Mining

Subsector G1: Copper ore and mining dressing facilities

Subsector G2: Iron ores

Copper ores

Lead and zinc ores

Gold and silver ores

Ferroalloy ores, except vanadium

Metal mining services

Miscellaneous metal ores



http://ztopics.com/Copper%20ore/



http://boutonrougedesigns.com/wp-content/uploads/raw-silver-ore.jpg



MSGP App. D

http://www.bhagyalaxmigro up.in/iron-ore-lumps.htm

Sector H Coal Mines and Coal Mining Related Facilities

Subsector H1: Coal mines and coal mining-related facilities

MSGP App. D



http://www.groundtruthtrekking.org/static/uploads/photos/active-coal-mining-at-two-bull-ridge_3.jpg

http://coaldiver.org/coal-diver/Alaska



Sector J Mineral Mining and Dressing

Subsector J1: Construction sand and gravel

Industrial sand

Subsector J2: Dimension stone

Crushed and broken stone, including rip rap

Nonmetallic minerals services, except fuels

Miscellaneous nonmetallic minerals, except fuels

Subsector J3: Clay, ceramic, and refractory materials

Chemical and fertilizer mineral mining



Sector K Hazardous Waster Treatment, Storage, or Disposal Facilities

Subsector K1: Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA



http://blog.lib.umn.edu/victor/hereandthere/Images/20120127Hazardous%20Was te025.jpg



http://www.dep.wv.gov/WWE/ee/hw/Pages/default.aspx



Subsector L1: All Landfill, Land Application Sites and Open Dumps

Subsector L2: All Landfill, Land Application Sites and Open Dumps, except

Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60

Sector M Automobile Salvage Yards

Subsector M1: Automobile Salvage Yards



Sector N Scrap Recycling and Waste Recycling Facilities

MSGP App. D

Subsector N1: Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling

Subsector N2: Source-separated Recycling Facility



http://media.philly.com/images/600*450/he1recycle12_zz.jpghttp://www.asyousow.org/wp-content/uploads/2012/10/Sims-Recycling-Solutions-02-537x357.jpg

Sector O Steam Electric Generating Facilities

Subsector O1: Steam Electric Generating Facilities,

including coal handling sites.



Sector P Land Transportation and Warehousing

MSGP App. D

Subsector P1: Railroad Transportation

Local and Highway Passenger Transportation

Motor Freight Transportation and Warehousing

United States Postal Service

Petroleum Bulk Stations and Terminals



http://www.wildnatureimages.com/images%204/090325-019..jpg

https://encryptedtbn1.gstatic.com/images?q=tbn:ANd9GcSL MOSY_MXwB9gV9Z48s6oKXzATev43m1jglHrp7F79e6obClF

http://3.bp.blogspot.com/hWFQkXk1mjA/T7OgdZV76o I/AAAAAAAAAAMs/5WBfZwuqbXM/s1600/220003.JP

Sector Q Water Transportation

Subsector Q1: Water Transportation Facilities



Sector R Ship and Boat Building and Repair Yards

Subsector R1: Ship and Boat Building or Repairing Yards



Sector S Air Transportation Facilities

Subsector S1: Air Transportation Facilities



Photo: Erik Nordberg, ADOT&PF

Sector T Treatment Works

Subsector T1: Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm ands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA.



Subsector U1: Grain Mill Products

Subsector U2: Fats and Oils Products

Subsector U3: Meat Products

Dairy Products

Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties

Bakery Products

Sugar and Confectionery Products

Beverages

Miscellaneous Food Preparations and Kindred Products

Tobacco Products

Sector V Textile Mills, Apparel, and Other Fabric Products

Subsector V1: Textile Mill Products

Apparel and Other Finished Products Made from Fabrics and Similar Materials

Leather and Leather Products (note: see Sector Z1 for Leather tanning and Finishing)



http://fiberandtextiles.com/images/tooplate_image_01.jpg

Sector W Furniture and Fixtures

Subsector W1: Wood Kitchen Cabinets

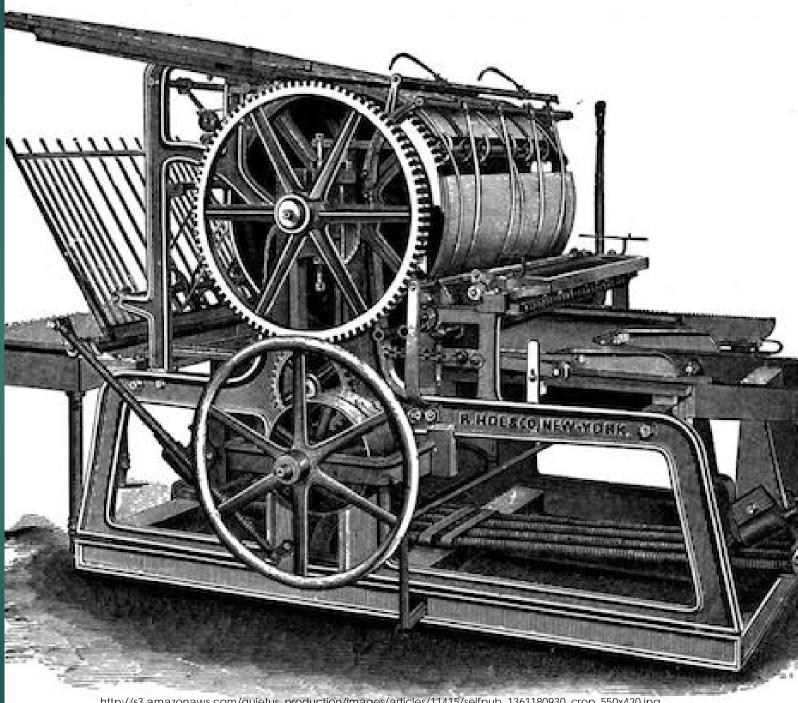
Furniture and Fixtures



http://image.pbs.org/video-assets/pbs/woodwrights-shop/86460/images/Mezzanine_932.jpg

Sector X Printing and Publishing

Printing, Publishing, Subsector X1: and Allied Industries



http://s3.amazonaws.com/quietus_production/images/articles/11415/selfpub_1361180930_crop_550x420.jpg

Sector Y Rubber, Misc. Plastic Products and Misc. Manufacturing

Subsector Y1: Tires and Inner Tubes

Rubber and Plastics Footwear

Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting

Fabricated Rubber Products, Not Elsewhere Classified

Subsector Y2: Miscellaneous Plastics Products

Musical Instruments

Dolls, Toys, Games, and Sporting and Athletic Goods

Pens, Pencils, and Other Artists' Materials

Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal

Miscellaneous Manufacturing Industries



http://img.directindustry.com/images_di/pho o-g/rubber-profile-open-cell-sponge-11627-2697905.jpg



http://i.telegraph.co.uk/multimedia/archive/02079/toys_2079 235b.jpg



http://www.brushresearch.com/images/industries/musical-instruments.jpg

Sector Z Leather Tanning and Finishing

Subsector Z1: Leather Tanning and Finishing



Sector AA Fabricated Metal Products

Subsector AA1: Fabricated Metal Products, Except

Machinery and Transportation Equipment

Jewelry, Silverware, and Plated Ware

Subsector AA2: Fabricated Metal Coating and Engraving and

Allied Services

Sector AB Transportation Equipment, Industrial or Commercial Machinery Facilities

Subsector AB1:

Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC) Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R)



http://cb-trucking.com/wp-content/uploads/2012/10/CB-Trucking-shipping.jpg

Sector AC Electronic, Photographic, and Optical Goods

Subsector AC1: Computer and Office Equipment

Measuring, Analyzing, and Controlling Instruments, Photographic and Optical Goods, Watches, and Clocks

Electronic and Electrical Equipment and Components, Except

Computer Equipment

Sector AD Discharges Designated by the Director as Requiring Permits

Facilities that do not fall into any of the other 29 categories may seek coverage through the ADEC under this Sector.

The Director must approve the industrial activity prior to seeking permit coverage.



