

# 2005 Annual Report on the District's Air Toxics Program

#### About this Report

This annual report was prepared by your San Joaquin Valley Unified Air Pollution Control District. The District is a public health agency committed to improving the health and quality of life for all Valley residents through effective and cooperative air quality programs. State law requires the District to prepare and distribute an annual report describing the implementation of the State Air Toxics Hot Spots Information and Assessment Act. Implementing the State Air Toxics Hot Spots Act, however, is only one part of the District's air toxics program. Therefore, in addition to describing the District's efforts and progress in implementing the State Hot Spots Act, the Annual Air Toxics Report also addresses the other District efforts aimed at reducing Valley residents' exposure to toxic air contaminants. Since the inception of this program, these efforts have resulted in significant reductions in the exposure of Valley residents to health risk from exposure to toxic air contaminants.

#### Emissions of Toxic Air Contaminants in the San Joaquin Valley

The U.S. EPA and the California Air Resources Board have identified over 800 substances that are emitted into the air that may affect human health. Some of these substances are considered to be carcinogens (cancer-causing), while others are known to have other adverse health effects. As part of ongoing efforts to identify and assess potential health risks to the public, the District has collected and compiled air toxics emissions data from industrial and commercial sources of air pollution throughout the Valley. The State has developed similar

inventories for mobile sources of air pollution. These District and State inventories have been combined into the California Toxics Inventory (CTI), which provides emissions estimates for hazardous air pollutants of concern from all sources. A summary of the CTI data for key pollutants is given in Table 1 below.

 Table 1 - San Joaquin Valley Hazardous Air Pollutant Emissions

Pollutant	Emissions (tons per year)
Diesel Particulate Matter	4,124
Formaldehyde	3,517
Benzene	1,879
Acetaldehyde	1,139
1,3-Butadiene	446
Perchloroethylene	571
Acrolein	563
Methylene Chloride	437
PAHs	418

A more detailed summary of emissions estimates for the San Joaquin Valley is provided in Table A-1 in Appendix A.

Toxic Air Contaminants are emitted from mobile sources (i.e., cars, trucks, buses, tractors, etc), which are primarily regulated by the State and U.S.EPA; area sources (i.e., consumer products, dry cleaners), which are regulated the State, U.S.EPA, and the District; and from stationary sources, which are primarily regulated by the District. Figure 1 below shows a comparison of mobile and stationary source emissions of hazardous air pollutants in the San Joaquin Valley. Approximately 60% of hazardous air pollutant emissions are from mobile sources.



Figure 1 – Comparison of Mobile, Area, and Stationary Source Emissions

#### Implementation of the State Air Toxics "Hot Spots" Act

The Air Toxics "Hot Spots" Information and Assessment Act was enacted in September 1987. Under this act, stationary sources are required to report the types and quantities of certain substances their facilities routinely release into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to require that owners of significant-risk facilities reduce their risks below the level of significance.

The District's implementation of the Air Toxics Hot Spots requirements has resulted in significant reductions in the public's exposure to toxic air contaminants. The public notification required under the Air Toxics Hot Spots program for facilities deemed to pose a significant risk to the public are one motivating factor for such reductions in risk from facilities. Of the sixteen Valley facilities that have been deemed to pose significant health risks since implementing the toxics program, fourteen have subsequently reduced those risks to a level no longer considered significant. Significant health risks that once impacted thousands of Valley residents have been eliminated. Several examples of these reductions in toxic emissions and health risk are described here.

- Carpenter Company located in Lathrop, CA was determined to pose a significant cancer risk in 1999. The facility notified approximately 300 area residents as required by the Act in 1999. During 2001, Carpenter Company submitted an application to modify their operation to stop using Methylene Chloride as the primer-blowing agent. The elimination of Methylene Chloride emissions reduced the facility health risk to a level that is no longer considered significant.
- The Owens-Brockway glass manufacturing plant of Lathrop was determined to pose a significant cancer risk in 1989. The risk was mainly due to hexavalent chromium emissions from the glass furnace. The furnace was subsequently rebuilt, eliminating the source of the hexavalent

chromium emissions. The facility notified area residents as required by the Act. Tests performed in 1994 and 1995 by Owens-Brockway indicated that this risk was reduced to a level that could no longer be considered significant.

- Pacific Wood Preserving of Bakersfield submitted a risk assessment which described toxic emissions during the 1990 calendar year. Based on the health risk assessment, the maximum offsite cancer risk was 620 in a million due to creosote emissions from this facility. The facility notified 840 area residents as required by the Act. This risk was subsequently eliminated by changes to the wood preserving process.
- Saint Agnes Hospital in Fresno was determined to pose a significant cancer risk in 1991 due to the ethylene oxide emissions resulting from the cleaning of medical instruments. The facility notified 22 area residents as required by the Act. During 1991, Saint Agnes installed ethylene oxide pollution control equipment that reduced the risk to a level that is no longer considered significant.
- The Newark Sierra Paperboard Products Corporation facility in Stockton was determined to have posed a significant cancer risk based on their 1991 toxic emission inventory reports. The risk was due to emissions of heavy metal from the combustion of residual fuel oil. The 1995 toxic emission inventory report for this facility shows that the facility health risk has been reduced to a level considered less than significant.

#### Collecting Emissions Data

The District collects and compiles toxic emissions data for industrial and commercial facilities as required by the State Air Toxics Hot Spots Information and Assessment Act. Although this process was completed for most Valley facilities during the early years of the Air Toxics Hot Spots program (1989-1991), approximately 200 of the highest emitting operations are still required to provide updates to their emissions reports every four years. In 2005, the District reviewed and approved toxic emissions inventory reports and updates for 53 Valley facilities. New data from these reports was entered into the California Emission Inventory Data and Reporting System (CEIDARS). The following table summarizes the 53 updates and reports approved by the District in 2005.

 Table II – 2005 Reports and Updates Approved

Facility Name	Location
Modesto Plating	Modesto
Sunland Refining Corporation	Bakersfield
Guardian Fabrication, Inc.	Reedley
Calmat Company, DBA Vulcan Materials	Wheeler Ridge
Kingsburg Cogen Facility	Kingsburg
Vulcan Materials Company, Western Division	Bakersfield
Delta Plating, Inc.	Stockton
Gibson Environmental	Bakersfield
General Mills Operations, Inc.	Lodi
Tricor Refining, LLC	Oildale
Tricor Refining, LLC	Bakersfield
ExxonMobil Oil Corporation	Midway Pumping Station
SFPP, L.P.	Fresno
PACTIV Corporation	Bakersfield
Owens-Brockway Glass Container	Tracy
Certainteed Corporation	Chowchilla
Safety Kleen Systems, Inc.	Reedley
Central Valley Manufacturing	Fresno

Las Palmas Oil & Dehydration	Bakersfield
Plains Exploration & Production Company	Light Oil Western
AC Plating	Bakersfield
Crimson Resource Management	Taft
Spreckels Sugar Company	Mendota
Chevron USA Inc.	Kern Pump Station
Vintage Petroleum, Inc.	Stockton
Nestle Ice Cream Company	Bakersfield
Taft Production Company	Taft
Keystone Automotive Industries, Inc.	Stockton
Saint-Gobain Containers, Inc.	Madera
Stockton Cogen Company	Stockton
Silgan Containers Manufacturing Corporation	Kingsburg
Prompt Precision Metals Inc.	Ceres
Silgan Containers Manufacturing Corporation	Stockton
Oildale Energy LLC	Oildale
Shell California Pipeline Company LLC	Kettleman City
Dairy Farmers of America	Hughson
Holz Rubber Company	Lodi
Chevron USA Inc.	Heavy Oil Central
Land O' Lakes, Inc.	Tulare
AES Delano Inc.	Delano
Sealed Air Corporation	Madera
Big West of California, LLC	Area 3, Bakersfield
Big West of California, LLC	Areas 1 & 2, Bakersfield
Chevron USA Inc. – Lost Hills GP	Lost Hills
Chevron USA Inc.	Heavy Oil Western
McFarland Energy, Inc.	Light Oil Western
California State University Fresno	Fresno
Ro-Lab Rubber Company	Tracy
Vendo Company	Fresno
Tri-Union Development Corporation	Light Oil Central
Elk Corporation of Texas	Shafter
Standing Bear Petroleum	Light Oil Central
Turlock Irrigation District	Modesto

For common types of smaller commercial facilities that may emit toxic air contaminants, the District uses Industry-wide surveys, which provide a more streamlined and cost-effective method of preparing toxics inventories. Valley gasoline dispensing facilities, dry cleaning operations, printing operations, and automotive painting facilities have been categorized as industry-wide survey facilities. The District prepared updated toxic emissions inventories for these facilities in 2003, and will update this data again in 2007.

In addition to the industry-wide surveys, the District continued to streamline the toxic emissions inventory process through the integration of the criteria emissions inventory program with the toxics program. Most sources in the Valley currently submit criteria emissions information annually, and much of this information could potentially be used for the toxics program. When fully implemented, the integration of both programs should provide the District and public with a more frequently updated toxics emissions inventory as well as streamline the toxics program process for affected sources.

#### Assessing the Risk to the Public

The State Air Toxics "Hot Spots" Act requires the District to compile an inventory of toxic emissions from Valley facilities, prioritize facilities for health risk assessment, evaluate public health risks for facilities ranked as high priority, and notify individuals who may be impacted by any significant health risks. Although the Hot Spots program is primarily a public notification program, the public awareness achieved through the Hot Spots program has led many Valley businesses to voluntarily reduce their toxic emissions to ease community concerns.

#### Prioritizing Facilities

After the approval of a facility's Toxic Emission Inventory Report, if there has been a significant increase in emissions since the facility's previous report was submitted, the District performs a prioritization and ranks the health risk posed by the facility as "low", "intermediate", or "high" priority. Facilities ranked as high priority are required to perform health risk assessments. District personnel perform the prioritizations using computerized spreadsheets and database programs. The following table summarizes the 12 prioritizations performed for Valley facilities in 2005.

Facility Name	Location	Priority
Chevron USA, Inc. – Light Oil Western	Bakersfield	Intermediate
Chevron USA, Inc. – Heavy Oil Western	Bakersfield	Intermediate
Chevron USA, Lost Hills	Bakersfield	Intermediate
Saint-Gobain Containers	Madera	Intermediate
Spreckels Sugar Company	Mendota	Intermediate
Certainteed Corporation	Chowchilla	Intermediate
Crimson Resource Management	Taft	Intermediate
Safety Kleen Systems, Inc.	Reedley	Intermediate
General Mills Operation	Lodi	Intermediate
Dairy Farmers of America	Hughson	Intermediate
Owens-Brockway Glass	Tracy	Intermediate
Prompt Precision Metals	Ceres	Intermediate

#### Table III – 2005 Prioritization Statistics

#### Health Risk Assessment

The District and State Office of Environmental Health Hazard Assessment

(OEHHA) are required by the Air Toxics "Hot Spots" Act to review each Health

Risk Assessment. Based on the results of the risk assessment, facilities may be determined to pose a significant risk.

Risk calculation involves a great deal of uncertainty. The uncertainty arises from lack of data in many areas necessitating the use of assumptions. The assumptions used are designed to err on the side of health protection in order to avoid underestimating the risk to the public. The actual risk may be much less than the calculated risk.

#### Diamond Walnut Growers

The Diamond Walnut Growers operation located in Stockton, CA submitted an updated toxic emissions inventory report for calendar year 2004 and was determined to be a high priority facility again due to their fumigation emissions. Diamond Walnut Growers is in the process of conducting a refined health risk assessment to determine the exposure to the surrounding public. In addition, Diamond Walnut Growers recently submitted an application to modify their fumigation operation to include additional control equipment that will further reduce their fumigation emissions and exposure to the public.

Diamond Walnut Growers was previously designated as a significant risk facility with a cancer risk of 13.0 in a million and performed public notification as required under State law in 2005. If still a significant risk facility, they will be required to repeat the public notifications process in 2007.

#### Kern Oil & Refining Company

Kern Oil & Refining Company was also previously designated as a significant risk facility with a cancer risk of 14.5 in a million and performed public notification as required under State law in 2005. They will be required to repeat the public notifications process in 2007. The Kern Oil & Refining Company is in the process of submitting an updated toxic emissions inventory report for calendar year 2004. Depending on the prioritization for Kern Oil & Refining Company based on the updated report, a revised health risk assessment may be required. The District did not approve any new or revised health risk assessments in 2005.

## Preventing the Creation of Future Toxics Hot Spots - Risk Management <u>Activities</u>

The goal of District risk management efforts is to ensure that new and modified sources of air pollution do not pose unacceptable health risks at nearby residences and businesses. In order to achieve this goal, the District reviews the risk associated with each proposed permitting action where there is an increase in emissions of hazardous air pollutants. This risk management review is performed by District staff as part of the engineering evaluation for these projects. Since risk management review is performed concurrently with other project review functions using streamlined procedures, the process does not extend the length of time necessary to process applications.

Under the District's risk management policy, Toxic Best Available Control Technology must be applied to all units that may pose greater than de minimus levels of risk. Projects that would pose significant health risks at nearby residences or businesses are generally not approvable. When a project is determined to not be approvable as proposed, District staff will work with the applicant to find approvable low-risk alternatives, such as installing toxic emissions control devices or limiting the operation of the proposed equipment. During 2005, District staff performed risk management reviews for over 800 projects with increases in hazardous air pollutant emissions.

#### Reducing Public Exposure to Health Risks

District activities aimed at limiting and reducing emissions of toxic air contaminants include: 1) addressing the risk due to diesel exhaust; 2) implementing federal air toxics mandates; and 3) Risk Reduction Audits and Plans performed as part of Air Toxics Hot Spots Requirements.

#### Addressing Risk Due to Diesel Exhaust

In August of 1998, following a comprehensive 10-year scientific investigation, the California Air Resources Board identified particulate matter emissions from diesel-fueled engines as a toxic air contaminant with the potential to pose a significant cancer risk to the public. In the analysis prepared for this determination, the ARB estimated the cancer risk from the exhaust of diesel

internal combustion engines to be over 500 cancer cases per million, which is far higher than the estimated cancer risk from all other sources of air pollution combined. Because of the extremely high level of risk associated with diesel exhaust, and because of the prevalence of the engines, the State chose not to address diesel exhaust using the existing risk management guidance. Instead, they chose to establish an advisory committee of interested parties, and develop a comprehensive risk management plan that would result in significant reductions in emissions of diesel particulate matter.

Although the vast majority of diesel engines are associated with mobile sources of air pollution (trucks, locomotives, tractors, etc.) regulated by the State, many industrial and commercial operations also use stationary and transportable diesel engines that are subject to District permitting requirement. Under the District's Risk Management Policy for New and Modified Sources, Toxic Best Available Control Technology (TBACT) is required for emission units that pose a "greater than "de minimus" increase in risk. However, before the requirements of this policy could be implemented for diesel engines, TBACT still had to be determined. This TBACT determination came in October of 2000, when the ARB approved the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines, which was developed by the state-wide advisory committee of interested parties. In approving the guidance, the State Board found that catalyzed diesel particulate filters, which have been used successfully for a wide variety of applications, are TBACT for stationary non-emergency

engines, and that an emission rate of 0.149 grams per Horsepower-hour or less is TBACT for emergency engines.

The District began implementing the State guidance for stationary diesel engines in March of 2001. Since that time, the District has approved several hundred proposals for new cleaner engines meeting these TBACT requirements.

In addition to the State guidance regarding TBACT for new or modified diesel engines, the State also issued an Air Toxic Control Measure on December 8, 2004 to reduce the public exposure to diesel risk from existing and new stationary diesel engines through hourly and emissions limits. Both public agencies and private businesses owning emergency or prime stationary diesel engines will be affected by this control measure. During 2005, the District began the implementation of requirements under this ATCM, which will continue on an aggressive schedule through 2006 as required by the control measure.

#### Implementation of Federal Air Toxics Mandates

Title III of the 1990 Federal Clean Air Act Amendments rewrote Section 112 of the Act requiring the EPA to embark on a ten-year effort to develop detailed technology-based standards for 189 hazardous air pollutants. These new federal Maximum Achievable Control Technology (MACT) Standards affect over 70 source categories, many of which are already subject to State regulation. Other Title III mandates may also duplicate existing State and local requirements.

Under the District's Air Toxics Program and federal regulations, there are several options for implementing new technology-based federal standards:

1) <u>Straight Delegation</u> -- Accepting delegation of the federal standard as written;

2) <u>Rule Adjustment</u> -- Proposing minor changes to the federal MACT rule that make the adjusted rule no less stringent than the federal standard;

 <u>Rule Substitution</u> -- Substituting one or more existing, new, or amended District rules for the federal standard;

4) <u>Streamlining Multiple Applicable Requirements</u> -- Minimizing duplicative requirements by placing the more stringent emission limit or workplace practice standard on the permit along with the corresponding monitoring, recordkeeping, and reporting requirements.

5) <u>Program Substitution</u> -- Using existing programs to assure compliance with the requirements of federal standards.

The District must choose the most appropriate option for implementing each federal standard. Options chosen for implementing these federal standards through past workshops are given in Appendix B.

EPA has promulgated the following standards since the last public workshops in 2004. The District will hold public workshops to obtain public input on the implementation of these additional Federal MACT standards.

Subpart DDDD Plywood and Composite Wood Products

Subpart III	Surface Coating of Automobiles and Light Duty Trucks
Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines
Subpart DDDDD	Industrial/Commercial/Institutional Boilers and Process
	Heaters
Subpart NNNNN	Hydrochloric Acid Production

#### **Risk Reduction Audits and Plans**

Facilities that pose health risks above District action levels are required to submit plans to reduce their risk. Action levels for risk were established in the District's Board-Approved Risk Reduction policy. The action level for cancer risk is 100 cases per million exposed persons, based on the maximum exposure beyond facility boundaries at a residence or business. The action level for non-cancer risk is a hazard index of five at any point beyond the facility boundary where a person could reasonably experience exposure to such a risk. There are currently no Valley facilities that have been determined to pose risks in excess of action levels.

#### Minimizing Program Costs

During 2005, District progress in making air toxics reduction efforts more cost effective continued. These further reductions were made possible by efforts to identify and exempt facilities that could not be expected to pose a health risk to the public and other program streamlining measures. These cost reductions, which were achieved in spite of increases in federal program requirements, translate directly into lower overall fees charged to Valley facilities. The following

graph shows the reduction in District air toxics program costs that have been realized in the past 12 fiscal years.



Table IV - Toxics Program Fees

The fees collected support the following activities that CARB, OEHHA, and the District must undertake to administer Air Toxics Programs:

#### Activities by California Air Resources Board Supported by Air Toxics Fees

- 1. Review potential additions to the toxics substances list;
- 2. Develop source test methods;
- 3. Assist districts in implementing the guideline regulations;
- 4. Assist facility operators in preparing protocols and risk assessments;

- 5. Assist districts in reviewing risk assessments and protocols;
- 6. Manage the statewide "Hot Spots" data.

#### District Activities Supported by Air Toxics Fees

- 1. Review of toxic emission inventory plans and reports;
- 2. Review of updates;
- 3. Rank facilities for health risk assessment;
- 4. Review and approve risk assessments;
- 5. Participate in notification process;
- 6. Perform budgeting and billing functions;
- 7. Prepare public reports;
- 8. Review of applications for new and modified sources of air toxics;
- 9. Risk Management Review;
- 10. Title III Implementation Activities

#### **OEHHA Activities Supported by Air Toxics Fees**

- 1. Assist CARB with updating and reviewing toxic substance list;
- 2. Assist CARB with implementation of Guideline Regulations;
- 3. Assist facility operators in preparing risk assessments;
- 4. Review risk assessments;
- 5. Assist districts with public notification;
- 6. Update risk assessment procedures;
- 7. Develop a health effects database;
- 8. Develop health risk values.

Pollutant	Emissions (tons per year)
Diesel Particulate Matter	4,124
Formaldehyde	3,517
Benzene	1,879
Acetaldehyde	1,139
1,3-Butadiene	446
Perchloroethylene	571
Acrolein	563
Methylene Chloride	437
PAHs	418
p-Dichlorobenzene	189
Manganese	162
Styrene	131
Nickel	40
Chromium	31
Trichloroethylene	29
Lead	25
Vinyl Chloride	8.66
Acrylonitrile	8.59
Arsenic	6
Cadmium	4
Mercury	2.42
Ethylene Oxide	2.35
Chloroform	2
Ethylene Dichloride	0.04
Beryllium	0.04
Carbon Tetrachloride	0.01
Dioxins/Benzofurans	0.01
Chromium, Hexavalent	0.007

#### Appendix A- Table A-1

<sup>1</sup> Emissions for eight counties of San Joaquin Valley from California Air Resources Board California Toxics Inventory (CTI). Data for CTI was obtained from a variety of District and State sources.

#### Appendix B - Options chosen for Implementing MACT Standards

### Straight Delegation – SD; Rule Substitution (RS); Streamlining Multiple Applicable Requirements (SMAR)

#### 40 CFR 63 Source Category Option

Subpart F-I	Synthetic Organic Chemical Mfg. (HON)	SD
Subpart L	Coke Oven Batteries	SD
Subpart M	Dry Cleaning	RS
Subpart N	Chromium Electroplating and Anodizing	RS
Subpart O	Ethylene Oxide Sterilization Facilities	SD
Subpart Q	Industrial Process Cooling Towers	SD
Subpart R	Gasoline Distribution	SMAR
Subpart S	Pulp and Paper Industry	SD
Subpart T	Halogenated Solvent Cleaning	RS
Subpart U	Group I Polymers and Resins	SD
Subpart W	Epoxy Resins and Non-Nylon Polyamides	SD
Subpart X	Secondary Lead Smelting	SD
Subpart Y	Marine Tank Vessel Loading Operations	SD
Subpart U	Group I Polymers and Resins	SD
Subpart AA	Phosphoric Acid Manufacturing Plants	SD
Subpart BB	Phosphate Fertilizer Production Plants	SD
Subpart CC	Petroleum Refineries	SMAR
Subpart DD	Off-Site Waste and Recovery Operations	SMAR
Subpart EE	Magnetic Tape Manufacturing	SD
Subpart GG	Aerospace Manufacturing and Rework	SD
Subpart HH	Oil and Natural Gas Production Facilities	SMAR
Subpart II	Shipbuilding and Repair (Surface Coating)	SD
Subpart JJ	Wood Furniture Manufacturing	SD
Subpart KK	Printing and Publishing Industry	SD
Subpart LL	Primary Aluminum Reduction Plants	SD
Subpart YY	Generic MACT	SD
Subpart CCC	Steel Pickling	SD
Subpart DDD	Mineral Wool Production	SD
Subpart GGG	Pharmaceutical Production	SD
Subpart HHH	Natural Gas Transmission and Storage	SMAR
Subpart III	Flexible Polyurethane Foam Production	SMAR
Subpart JJJ	Group IV Polymers and Resins	SD
Subpart LLL	Portland Cement Manufacturing	SD
Subpart MMM	Pesticide Active Ingredient Manufacturing	SD
Subpart NNN	Wool Fiberglass Manufacturing	SMAR
Subpart OOO	Manufacture of Amino/Phenolic Resins	SD
Subpart PPP	Polyether Polyol Production	SD
Subpart RRR	Secondary Aluminum Production	SD
Subpart TTT	Primary Lead Smelting	SD

Subpart VVV	Publicly Owned Treatment Works	SD
Subpart XXX	Ferroalloys Production	SD
Subpart J -	Polyvinyl Chloride and Copolymers	SD
Subpart MM -	Chemical Recovery Combustion	SD
Subpart QQQ -	Primary Copper Smelting	SD
Subpart UUU -	Petroleum Refineries: Catalytic, SRUs	SD
Subpart AAAA -	Municipal Solid Waste Landfills	SD
Subpart EEEE -	Organic Liquids Distribution (Non-Gasoline)	SD
Subpart CCCC -	Manufacturing of Nutritional Yeast	SD
Subpart DDDD -	Plywood and Composite Wood Products	SD
Subpart FFFF -	Miscellaneous Organic Chemical Mfg.	SD
Subpart GGGG -	Solvent Extraction for Vegetable Oil	SMAR
Subpart HHHH -	Wet-Formed Fiberglass Mat Production	SD
Subpart IIII -	Surface Coating of Autos and Lt Trucks	SD
Subpart JJJJ -	Paper and Other Web Coating	SD
Subpart KKKK -	Surface Coating of Metal Cans	SD
Subpart LLLL -	Asphalt Processing and Roofing Mfg	SD
Subpart MMMM -	Surface Coating of Metal Parts and	SD
	Products	
Subpart NNNN -	Surface Coating of Large Appliances	SD
Subpart OOOO -	Printing, Coating, and Dyeing of Textiles	SD
Subpart PPPP -	Surface Coating of Plastic Parts and Products	SD
Subpart QQQQ -	Surface Coating of Wood Building Products	SD
Subpart RRRR -	Surface Coating of Metal Furniture	SD
Subpart SSSS -	Surface Coating of Metal Coil	SD
Subpart TTTT -	Leather Finishing Operations	SD
Subpart UUUU -	Cellulose Products Manufacturing	SD
Subpart VVVV -	Boat Manufacturing	SMAR
Subpart WWWW -	Reinforced Plastic Composites	SMAR
Subpart XXXX -	Rubber Tire Manufacturing	SD
Subpart YYYY -	Stationary Combustion Turbines	SMAR
Subpart ZZZZ -	Stationary Reciprocating I.C. Engines	SMAR
Subpart AAAAA -	Lime Manufacturing Plants	SMAR
Subpart BBBBB -	Semiconductor Manufacturing	SD
Subpart CCCCC -	Coke Ovens: Pushing, Quenching, and Stacks	SD
Subpart DDDDD -	ICI Boilers and Process Heaters	SD
Subpart EEEEE -	Iron and Steel Foundries	SD
Subpart FFFFF -	Integrated Iron and Steel Manufacturing	SD
Subpart GGGGG -	Site Remediation	SD
Subpart HHHHH -	Miscellaneous Coating Manufacturing	SD
Subpart IIIII -	Mercury From Mercury Cell Chlor-Alkali	SD
Subpart JJJJJ -	Brick and Structural Clay Products Mfg	SD
Subpart KKKKK -	Clay Ceramics Manufacturing	SD
Subpart MMMMM -	Flexible Polyurethane Foam Fabrication	SD

Subpart NNNNN -	Hydrochloric Acid Production	SD
Subpart PPPPP -	Engine Test Cells/Stands	SD
Subpart QQQQQ -	Friction Materials Manufacturing Facilities	SD
Subpart RRRRR -	Taconite Iron Ore Processing	SD
Subpart SSSSS -	Refractory Products Manufacturing	SD
Subpart TTTTT -	Primary Magnesium Refining	SD