San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

2007 Annual Report on the District's Air Toxics Program

Executive Summary

This 2007 Annual Report on the District's Air Toxics Program was prepared by your San Joaquin Valley Air Pollution Control District. The District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies. 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 efforts aimed at reducing Valley residents' exposure to toxic air contaminants.

This report describes notable efforts made by the District, state, and federal agencies that have resulted in significant reductions in toxic air contaminant emissions. Two such examples are the implementation of District Rule 4702 in 2007, which has substantially reduced the amount of toxic air contaminants from diesel-fired engines, and the adoption by the State Air Resources Board (ARB) in 2007 of the In-Use Off Road Regulation, arguably one of the largest rules adopted by the State in terms of emissions reductions. As the District, state, and federal agencies move forward with aggressive regulations to address a wide range of air quality issues, including toxic air contaminants, future years should continue to produce even further reductions in risk to Valley residents.

This report may be found on the District's website at http://www.valleyair.org/busind/pto/air_toxics_annual_reports.htm.

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Summary of Toxic Air Contaminants (TAC) in the San Joaquin Valley

The U.S. EPA and the California Air Resources Board (ARB) 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 TACs of concern from all sources. For future updates, the California Toxics Inventory will be updated annually at the same time that the California Almanac of Emissions and Air Quality is published. A summary of San Joaquin Valley data for key toxic pollutants is given in Table 1 below.

Table 1 - San Joaquin Valley Hazardous Air Pollutant Emissions

Toxic Pollutant	Emissions (tons per year)
Diesel Particulate Matter	7,695
Formaldehyde	4,396
Benzene	1,789
Acetaldehyde	1,761
Perchloroethylene	588
1,3-Butadiene	503
Methylene Chloride	429
Para-DiChlorobenzene	147
Chromium (Hexavalent)	0.23

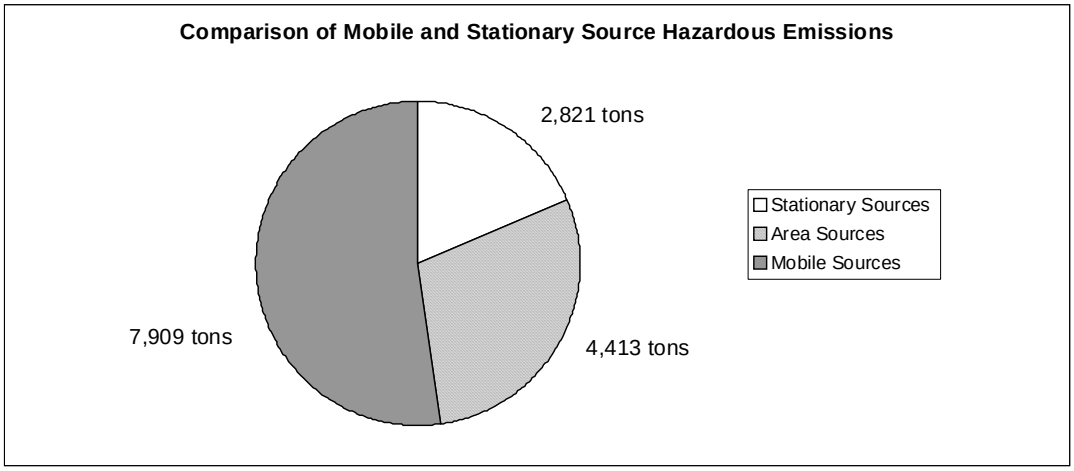
A more detailed summary of emissions estimates for the San Joaquin Valley is provided in Table A-1 in Appendix A.

TACs 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 regulated primarily 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. Although mobile sources are primarily regulated by the State and

U.S.EPA, the District has developed incentive programs to assist in risk reduction from these sources. These incentive programs are discussed in greater detail later in this report.

Stationary sources include point sources provided by facility operators and/or districts and aggregated points sources estimated by the ARB and/or districts. This stationary source information is included in the CTI pursuant to the Air Toxics "Hot Spots" Act of 1987 (AB 2588). Areawide sources are sources without specific locations that spread out over large areas, such as paved or unpaved roads or consumer products. Mobile sources consist of on-road vehicles such as passenger cars and trucks, motorcycles, busses, and heavy-duty trucks and other mobile. Other mobile includes but is not limited to trains, ships, off-road equipments, off-road motorcycles, and boats. Natural sources in this inventory contain information for wildfires and petroleum seeps.

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



State Air Toxics “Hot Spots” Act

Implementation

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 emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and require that owners of significant-risk facilities reduce their risks below the level of significance in accordance with the provisions of the “Emissions Inventory Criteria and Guidelines Report” adopted by ARB in 1989. The “Emissions Inventory Criteria and Guidelines Report” was last amended on August 27, 2007 to include additional reporting requirements for diesel engines, including agricultural engines, emergency standby engines, diesel engines less than 50 HP, and portable diesel engines.

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 is one motivating factor for such reductions in risk from facilities. Of the sixteen Valley facilities that had been deemed to pose significant health risks since implementing the toxics program, all sixteen have reduced those risks to a level no longer considered significant.

As a major positive development in 2007, the last two significant risk facilities, Diamond Foods Incorporated, in Stockton, and Kern Oil & Refining Company, in Bakersfield reduced their risks to less than significant. The significant health risk that once impacted thousands of Valley residents due to these facilities has been eliminated. The efforts made to reduce the potential health risk posed by these facilities are described in the following table.

Table 2 – Risk Reduction at Air Toxics Hot Spots "Significant Risk" Facilities in 2007

Facility Name	Status
Diamond Foods Incorporated	Found to pose a significant cancer risk in 1998. The facility notified approximately 216 residents in 1998. During 2005, the facility removed an ammonia refrigeration system, which removed 3,580 pounds of ammonia per year. That same year the facility removed a walnut shell-fired Cogen Plant, resulting in the removal of several heavy metals and benzene. In 2006, the facility installed a scrubber to reduce emissions of propylene oxide (PPO). Total PPO emissions were reduced from 69,500 lb/yr to 9,600 lb/yr as a result of the new scrubber, representing a 75% reduction in PPO emissions.
Kern Oil Refining	Found to pose a significant cancer risk in 1991. Process and operational changes from 2002 to 2004 include: retrofit boilers to comply with implementation of Rule 4305; removed residual oil firing from units 1 (crude unit- 2 heaters) and 6 (boiler), resulting in removal of 4.32 pounds per year of PAHs, and 181 pounds per year of 1,3-Butadiene; removal of boiler #8 permitted as unit 11, resulting in removal of 213 pounds per year of 1,3-Butadiene; and implementation of Rule 4623 vapor control requirements, resulting in removal of 981 pounds per year of Gasoline Vapors (now speciated as Benzene, Toluene, Ethyl benzene, & Xylene (BTEX)), and 562 pounds per year of Benzene.

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 2007, the District reviewed and approved toxic emissions inventory reports and updates for 50 Valley facilities. New data from these reports was entered into the California Emission Inventory Data and Reporting System (CEIDARS). The following table summarizes the 50 updates and reports approved by the District in 2007.

Table 3 –Air Toxics Hot Spots Reports and Updates Approved in 2007

Facility Name	Location
Holly Sugar	Tracy
Bridgemark	Kings County
Oakland Petroleum	Kern County
Kern Oil & Refining Co.	Bakersfield
Land O'Lakes	Tulare
Pacific Gas & Electric	Avenal
Earthgrains	Fresno
Carpenter	Lathrop
Chevron North America	Bakersfield
HJ Heinz Company	Stockton
Atlantic Oil Company	Kern County
Occidental of Elk Hills Inc	Light Oil Western, Kern County
Occidental of Elk Hills Inc	Kern County
Frito Lay North America Inc	Bakersfield
Specialized Vehicles Corp	Tulare
Advanced Food Products LLC	Visalia
Defense Logistics Agency	Stockton
7/11 Materials Inc	Modesto
Taft Manufacturing Company	Taft
JR Simplot Company	Lathrop
Tinkler Mission Chapel	Fresno
Unilever Supply Chain Inc	Merced
Shell Pipeline Company LP	Coalinga
Port of Stockton	Stockton
PPG Industries	Fresno
SC Johnson Home Storage Inc	Fresno
Quebecor World	Merced
Heller Performance Polymers	Visalia
Calmat Company	Fresno
Vintage Production California	Bakersfield
Mish Funeral Homes	Oildale
Allen Mortuary	Turlock
Star Building Systems	Lockeford
Ball Metal Food Container	Oakdale
Conagra Foods	Modesto
High Sierra Limited	Bakersfield
Cherokee Memorial Park	Lodi
Pyramid Oil Company	Bakersfield
Pyramid Oil Company	Light Oil Production, Kern County

Facility Name	Location
Exxon Mobile Pipeline	Taft
Seneca Resources Corporation	Bakersfield
California Dairies Inc	Fresno
Greif Brothers Corporation	Merced
Varco Prudent Buildings Inc	Turlock
Big West of California	Bakersfield
Forty Mile Creek Company LLC	Bakersfield
Newby Rubber Inc	Bakersfield
Gotland Oil Company	Bakersfield
Golden State Metals	Bakersfield
Butler Manufacturing Company	Visalia

Based on the submitted update summaries, eight facilities will be required to submit Toxic Emissions Inventory Reports in 2008. These facilities are:

Table 4 – Air Toxics Hot Spots Reports and Updates Required in 2008

Facility Name	Location
HJ Heinz Company	Stockton
Taft Manufacturing Company	Taft
JR Simplot Company	Lathrop
Atlantic Oil Company	Heavy Oil
Holly Sugar	Tracy
Star Building Systems	Lockeford
California Dairies Inc	Fresno
Golden State Metals	Bakersfield

"Industry-wide" Surveys

For common types of smaller commercial facilities that may emit toxic air contaminants, the District utilizes Industry-wide surveys, which provide a more streamlined and cost-effective method of preparing toxics inventories. 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 2007. With the added streamlining effort of combining the point source emissions inventory with the toxics inventory, these industry-wide facilities will be surveyed on an annual basis, allowing for expeditious screening risk assessments and improved quality of the state's inventory.

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, such as Diamond Foods Incorporated installing a scrubber system to reduce their toxic emissions.

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 eight prioritizations performed for Valley facilities in 2007.

Table 5 – Air Toxics Hot Spots Prioritizations Performed in 2007

Facility Name	Location	Prioritization	Ranking
Holly Sugar	Tracy	0.00017	LOW
Bridgemark	Kings County	0.01	LOW
Oakland Petroleum	Heavy Oil Western	0.0007	LOW
Kern Oil & Refining Co.	Bakersfield	6.79	INTERMEDIATE
Land O'Lakes	Tulare	1.83	INTERMEDIATE
Pacific Gas & Electric	Avenal	0.15	LOW
Earthgrains	Fresno	0.16	LOW
Carpenter	Lathrop	40.7	HIGH

It should be noted that high priority does not mean high risk, only that a health risk assessment will be required to further evaluate potential health risk.

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.

Carpenter

In 2007, Carpenter, located in Lathrop, was prioritized as a "high" priority facility. They submitted a Health Risk Assessment as required under the Hot Spots

program, which is now under review by District staff. If found to be a significant risk facility, Carpenter will be required to notify individuals that may be impacted.

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.

District Assistance and Streamlining Efforts

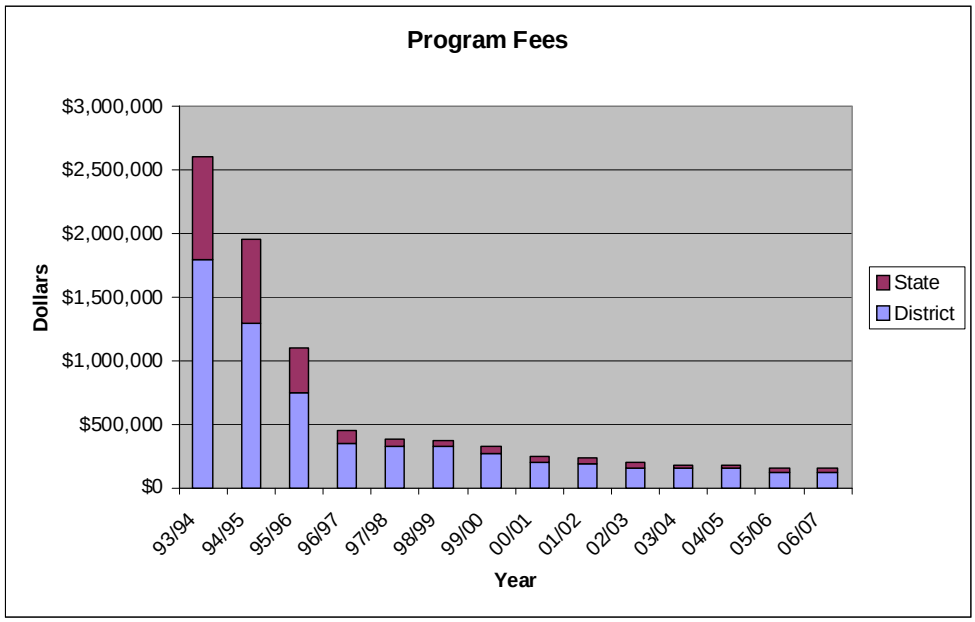
The District remains in close contact with facilities in the Air Toxics Hot Spots program, conducting site visits whenever possible, to assist in meeting ongoing requirements. The District offers technical assistance to these facilities, minimizing the economic impact on the sources while increasing the accuracy of reported toxics information. To further minimize the economic impact on these facilities, the District has integrated the Air Toxics and Emissions Inventory programs, an enhancement that eliminates the need for duplicate reporting efforts by the facilities and allows for quick and accurate processing of update TEIR reports or health risk assessments with the most current facility information. This, in turn, expedites the determination for potential further reporting by the sources. The District has made other efforts to provide facilities with assistance, such as developing air dispersion modeling guidelines, and making available critical technical data required to run air dispersion modeling.

Air Toxics Hot Spots Program Cost

Minimizing Program Costs

In the course of implementing the Toxics "Hot Spots" Program, the District has made significant progress in making air toxics reduction efforts less costly for affected facilities. These reductions have been 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 have been 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 14 fiscal years. In 2007, the District's Board approved an 8% across-the-board fee increase for District services. The changes to the fee rules were adopted on January 17, 2008 and were effective January 18, 2008. Due to the recently adopted fee rule increases, there is an expected slight increase in required toxics program fees in 2008.

Figure 2 - Toxics Program Fees



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

California Air Resources Board Activities Supported by Toxics Fees

- Review potential additions to the toxics substances list;
- Develop source test methods;
- Assist districts in implementing the guideline regulations;
- Assist facility operators in preparing protocols and risk assessments;
- Assist districts in reviewing risk assessments and protocols;
- Manage the statewide "Hot Spots" data.

District Activities Supported by Toxics Fees

- Review of toxic emission inventory plans and reports;
- Review of updates;
- Rank facilities for health risk assessment;
- Review and approve risk assessments;
- Participate in notification process;
- Perform budgeting and billing functions;
- Prepare public reports;
- Review of applications for new and modified sources of air toxics;

- Risk Management Review;
- Title III Implementation Activities

OEHHA Activities Supported by Toxics Fees

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

Reducing Public Exposure to Health Risks

Permitting Risk Management Review Activities

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 potential 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 reviews are 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 (Policy APR-1905), Toxic Best Available Control Technology (TBACT) 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 not to 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 2007, District staff performed risk management reviews for over 900 projects with increases in hazardous air pollutant emissions.

Diesel Exhaust Risk Reduction

In August of 1998, following a comprehensive 10-year scientific investigation, the State ARB 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, 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. In September 2000, the California ARB adopted the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles*. The Plan's goals are a 75 percent reduction in diesel PM by 2010 and an 85 percent reduction by 2020 from the 2000 baseline. In addition to the State's efforts to reduce diesel PM, the District has also implemented multiple regulations and programs that will significantly reduce the diesel PM emitted in the San Joaquin Valley. More information regarding the health effects of diesel PM emissions may be found at

http://www.arb.ca.gov/research/diesel/diesel-health.htm. Highlights of these efforts to reduce diesel PM emissions are described in the following section.

Reducing Diesel PM Health Risk Through District Rules & State Airborne Toxic Control Measures (ATCM)

District Rule 4702 and the ATCM for Stationary Compression Ignition Engines

On July 16, 2005, the District adopted Rule 4702, which contains stringent emissions standards and operational requirements for internal combustion engines that impact existing diesel-fired engines, including agricultural pump engines. On November 8, 2004, and subsequently on November 10, 2006, ARB approved an ATCM to control diesel PM emissions and other air pollutants from diesel engines. These rules have achieved significant reductions in diesel PM emissions as a result of lower required emissions from new engines and replacements of existing engines, including large numbers of stationary diesel agricultural pump engines being replaced with electrical motors. The diesel PM reductions resulting from replacement of existing agricultural pump engines is expected to continue at an aggressive pace over the next several years, bringing a tremendous reduction of diesel PM emissions to the Valley.

District Toxic Best Available Control Technology (TBACT)

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 requirements. 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, a reduction of 60% from typical diesel combustion emissions levels. The District began implementing the State guidance for stationary diesel engines in March of 2001. Since that time, the

District has approved hundreds of proposals for new cleaner engines meeting these TBACT requirements.

ATCM for Portable Diesel-Fueled Engines

On February 26, 2004, ARB adopted an ATCM for portable diesel-fueled engines. The ATCM became effective on March 11, 2005 and contains stringent emissions standards and operational requirements that impact new and existing portable diesel engines. All existing portable diesel engines are required to be certified by January 1, 2010, and all new portable engines are required to meet the latest certification standards. In addition, the ATCM contains stringent diesel PM fleet standards that apply after 2010. The District has been implementing these new standards in the review of applications for District Portable Registrations or permits for portable diesel engines. This ATCM is expected to result in a substantial reduction in Valley diesel PM emissions over the next several years.

State Control Measure for In Use Off-road Diesel Vehicle Rule

On July 26, 2007, ARB adopted a regulation to reduce diesel PM and oxides of nitrogen (NO_X) emissions from in-use (existing) off-road heavy-duty diesel vehicles. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, representing approximately 180,000 pieces of equipment. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, and airport ground support equipment. Vehicles with engines less than 25 horsepower are exempt. The regulation is expected to reduce diesel exhaust emissions by an average of 1,560 tons per year statewide between 2010 and 2030. This represents a 73% reduction in diesel PM from emissions levels anticipated in the absence of this regulation, preventing an estimated 4,000 premature deaths.

The regulation also includes the Surplus Off-road Opt-in for NO_X (SOON) program. Local air districts may opt into the SOON program to reduce NO_X emissions beyond what is required by the regulation using incentive funds. The District is currently developing the regulation required to implement the SOON program.

Diesel Particulate Matter Control Measure for On-road Heavy-duty Diesel-fueled Vehicles Owned or Operated by Public Agencies and Utilities

On December 6, 2006, ARB adopted the Diesel Particulate Matter Control Measure for On-road Heavy-duty Diesel-fueled Vehicles Owned or Operated by Public Agencies and Utilities. This control measure will reduce emissions from these types of vehicles over several deadlines, with the first groups of vehicles required to be in compliance by December 31, 2007. This control measure is particularly effective because it reduces diesel PM emissions in the heart of

residential communities where municipal and utility vehicles frequently conduct business, and where the public is significantly impacted by diesel PM emissions.

ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling

On October 20, 2005, ARB adopted an ATCM to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth-equipped diesel trucks. The emission performance requirements require technologies used as alternatives to idling the truck's main engine. The new engine requirements require 2008 and newer model year heavy-duty diesel engines to be equipped with non-programmable engine shutdown systems that automatically shuts down the engine after five minutes of idling or, alternatively, meet a more stringent NO_X idling emission standard. Beginning January 1, 2008, in-use truck requirements require operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Each year heavy-duty diesel truck idling contributes to hundreds of pounds of PM as well as other pollutants to the Valley. The District Incentive Program has subsidized truck stop support equipment to reduce diesel truck idling along the main goods movement corridors. Tests conducted by the District and ARB have determined that an idling truck can consume up to a gallon of diesel fuel an hour. The idling of heavy-duty trucks, at the time of delivery, represents a high percentage of emissions around developed areas in the San Joaquin Valley.

ATCM for Transport Refrigeration Units

On February 26, 2004, ARB adopted an ATCM to reduce emissions of diesel PM from Transport Refrigeration Units (TRUs). TRUs are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars. Although TRU engines are relatively small, ranging from 9 to 36 horsepower, significant numbers of these engines congregate at distribution centers, truck stops, and other facilities, resulting in the potential for health risks to those that live and work nearby. ARB estimates that diesel PM emissions from TRUs will be reduced 65% by 2010, and 92% by 2020.

Cleaner Fuels

California’s diesel fuel is the least polluting in the nation. In 2003, the ARB adopted a new regulation lowering the sulfur content of diesel fuel to enable the use of advanced emission control technologies for diesel engines. The California diesel regulations for sulfur and aromatics are estimated to result in 25 percent less PM and about seven percent less oxides of nitrogen (NOx) emissions. Sulfur levels in diesel fuel were required to be less than 15 parts per million by July, 2006 (as compared to the previous standard of 500 parts per million). This

lower-sulfur diesel fuel requirement is fully implemented now throughout the San Joaquin Valley, and has resulted in significantly reduced diesel PM emissions.

Reducing Emissions from Rail Yards

In June and July 2007, ARB staff presented to the public a draft of a rail yard health risk assessments for several rail yards located in Southern California. These were prepared under the 2005 Railroad Agreement between ARB, Union Pacific Railroad (UP), and BNSF Railway (BNSF). The Agreement secured the commitment of UP and BNSF to expeditiously implement a number of feasible and cost-effective measures to reduce emissions from locomotives throughout California. The Agreement initiated cooperative efforts between the railroads and the ARB to assess and mitigate public health risks around 17 major rail yards throughout the State. The Agreement also includes provisions for ongoing public involvement at each major rail yard, where community and environmental justice concerns can be addressed directly. Since the Agreement ARB staff has been reviewing and incorporating appropriate changes to finalize health risk assessments (HRA) for these Railways. The health risk assessments show that diesel particulate is a dominant toxic air contaminant (TAC) in and around rail yard facilities. Diesel fuel is used as the primary fuel for locomotives, on road trucks, and off-road vehicles as well as equipment used to move bulk cargo. Emissions from locomotives, yard operations (primarily switch locomotives moving rail cars within the facility), contribute the largest amount of locomotive diesel PM emissions. Restricting of goods travel from railways, retrofitting, and supplementing equipment in railways with cleaner burning equipment has reduced emissions.

District Emission Reduction Incentive Program

The District has operated highly successful grant programs since 1992. The staff members of the District's Emission Reduction Incentive Program (ERIP) have been responsible for the development, implementation, and on-going administration of all District grant and incentive programs. Their success has provided a significant impact on improving the Valley's air quality. Through these voluntary programs, the District provides incentive funds to a wide variety of industries in the Valley for the implementation of new reduced diesel PM emission technology.

To date, the District has awarded over $194 million in grant funding, achieving over 59,000 tons of emission reductions. With funds provided from multiple sources, the District has strived to design all of their programs to meet maximum cost effectiveness standards in order to ensure the integrity of all monies expended to reduce emissions. Applications for grant programs are accepted year round, processed and calculated for cost effectiveness, and depending on funding availability, projects are then contracted to applicants. To continue interest in the grant programs, ERIP staff partakes in public outreach programs to identify potential applicants. In 2007, some of the components of the District's incentive program aimed at reducing diesel PM were:

- School Bus PM retrofits
- School Bus Replacements

- Locomotive engines
- Heavy Duty On-Road vehicles
- Heavy Duty Off-Road vehicles

For example, the Heavy-Duty Engine Program, which is by far the District's largest and most successful incentive program utilizes incentive funds to repower, replace, or retrofit existing high-polluting diesel equipment or vehicles. Applicants also use the funds to purchase new lower-emission equipment or vehicles, which contribute to cleaner air. In 2007 alone, the District handled over 300 applications for a total of more than $35 million (see Table 3 below), resulting in approximately 180 tons per year of diesel PM reductions.

Table 3: Heavy-Duty Engine Incentive Program 2007 statistics

Component:	Applications:	Executed:
Ag-Engines	245	$13,718,862.32
Infrastructure	1	$500,000.00
Locomotive	1	$182,400.00
Off-Road	33	$12,609,352.00
On-Road	36	$8,149,509.00
School Bus Retrofit	5	$470,194.45
Grand Total:	**321**	**$35,630,317.77**

The District expects to receive a significant increase in incentive funding for future projects in the coming years, which will make possible substantial further decreases in diesel PM and other toxic air contaminant emissions in the San Joaquin Valley.

Reducing Other Health Risk Through State ATCMs

In addition to the State ATCMs targeted for diesel PM reductions described earlier in this report, ARB has adopted many ATCMs to reduce the emissions of other toxic air contaminant emissions, and subsequently reduce the health risk impact on the public from these pollutants. The District actively implements the ATCMs through adoption of ATCMs as District regulations, inclusion of specific ATCM requirements in the permits to operate for affected facilities, and outreach programs to improve compliance by facilities.

Existing ATCMs

The following ATCMs have been adopted by the District as regulations:

- Hexavalent Chromium - Decorative and Hard Chrome Plating, Chrome Acid Anodizing Facilities
- Hexavalent Chromium - Cooling Towers
- Ethylene Oxide - Sterilizers and Aerators
- Dioxin - Medical Waste Incinerators

- Fluorides - Phosphoric Acid Plants
- Asbestos - Containing Material for Surfacing Applications
- Toxic Metals from Non-Ferrous Metal Melting
- Perchloroethylene from Dry Cleaning Operations

Other ATCMs are implemented primarily through the permitting process. These include the ATCM for Stationary Compression Ignition Engines and the ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater.

New ATCMs

During 2007, the District began implementation of the following new ATCMs. The implementation of these ATCMs will significantly reduce the risk associated with emissions from the sources impacted by these regulations.

Hexavalent Chromium ATCM for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities

This revision to the existing ATCM became effective on October 24, 2007. It establishes new, more stringent emission limitations that depend upon size and nearness to sensitive receptors, limits the use of chemical fume suppressants, and adopts new housekeeping, education, monitoring, recordkeeping, and reporting requirements. The District chose to implement this ATCM by revising Rule 7011 to incorporate the revised ATCM by reference. The District also required submission of a compliance plan and applications for Authorities to Construct (ATCs). A compliance workshop was held on November 17, 2007 to assist facility owners and operators in complying with the ATCM. The District's Governing Board adopted the rule on January 17, 2008.

ATCM for Perchloroethylene Emissions from Dry Cleaning Operations

The ARB adopted a new ATCM at its public hearing on January 25, 2007. The amendments will phase out the use of Perc dry cleaning machines and related equipment by January 1, 2023. In addition, the amendments will put in place revisions to the Curriculum for the Environmental Training Program for Perc Dry Cleaning Operations (Training Curriculum). There were changes to the operational requirements for dry cleaners as well. For example, the revised ATCM requires that owners/operators maintain a spare set of gaskets on-site. Also, the trained operator must now be on-site whenever the machine is operated. These amendments became effective upon final approval by the Office of Administrative Law on December 27, 2007. The District will adopt the revised ATCM in 2008 by reference.

Composite Wood Product ATCM

Formaldehyde is produced on a large scale worldwide. One major use includes the production of wood binding adhesives and resins. On April 26, 2007, ARB approved an ATCM to reduce formaldehyde emissions from composite wood products including hardwood plywood, particleboard, medium density fiberboard, thin medium density fiberboard, and also furniture and other finished products made with composite wood products. ARB approved a version of an ATCM that included undeveloped regulation concepts. These concepts were developed into regulatory language and a modified version of the Composite Wood Product ATCM was released for a 15-day public comment period on January 31, 2008. District staff have been and will continue to participate in this rule-making effort.

Implementation of Federal Air Toxics Mandates

The Federal Environmental Protection Agency (EPA) has issued National Emission Standards for Hazardous Air Pollutants (NESHAPS) through Part 61 and Part 63 of Title 40 of the Code of Federal Regulations (CFR). The Part 61 NESHAPS were issued prior to the adoption of the Federal Clean Air Act Amendments of 1990. Those NESHAPS are specific to a particular hazardous air pollutant (HAP). Due to little activity in adopting NESHAPs, the 1990 amendments to the Federal Clean Air Act established a new procedure for developing NESHAPS. A list of 189 HAPs was established. EPA identified industries that emitted those HAPs and established a prioritized list of over 70 source categories for which maximum achievable control technology (MACT) standards would be promulgated. These MACT standards apply to major sources of HAPs, defined as sources with emissions greater than 10 tons per of a single HAP, or 25 tons per year of combined HAPs. Many of these source categories are already subject to state and local regulation, which have traditionally been more stringent than the federal regulations. EPA has already adopted MACT standards to address the majority of the source categories identified.

In addition to the MACT standards for major sources, EPA is also required to adopt NESHAP standards to reduce the health risk associated with area (non-major) sources of HAPs. As the result of a lawsuit, EPA is under court order to promulgate area source NESHAPS for 4 categories of sources by December 15, 2006; for 6 categories by June 15, 2007; and for 10 categories each 6 months thereafter until June 15, 2009. Similar to the MACT standards for major sources, many of the area sources subject to these standards are already subject to state and local regulation. Area source NESHAPS have already been promulgated for Oil and Natural Gas Production Facilities; Polyvinyl Chloride and Copolymers Production, Primary Copper Smelting, Secondary Copper Smelting, and Primary Nonferrous Metals-- Zinc, Cadmium, and Beryllium; Acrylic and Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production and Fabrication, Lead Acid Battery Manufacturing, and Wood Preserving; Clay Ceramics Manufacturing, Glass Manufacturing, and Secondary Nonferrous Metals Processing; Electric Arc Furnace Steelmaking Facilities; and Hospital Ethylene Oxide Sterilizers.

Current Status of Delegation

The District currently is delegated authority by EPA to implement and enforce NESHAPs through two mechanisms. First, all major sources of HAPs are required to obtain Title V operating permits. The NESHAP requirements for these major sources are included in the Title V permits for which the District is delegated authority by EPA. Second, the District is delegated authority to implement and enforce all area source NESHAPs that are included in District Rule 4002, most recently amended on May 20,

2004. The District is investigating options for obtaining delegation of authority for the recently adopted area source NESHAPs. Under the District's Air Toxics Program and federal regulations, there are several options for implementing new NESHAP standards. These options are discussed in more detail below. The District will choose the most appropriate option for implementing each federal standard, and will hold public workshops to obtain public input on the implementation of these additional standards.

Straight Delegation

Accepting delegation of the federal standard as written by amending Rule 4002 or by agreeing to automatic delegation with an option of opting-out for specific NESHAPS using an approach developed by the California Air Pollution Control Officers Association (CAPCOA);

Rule Adjustment

Proposing minor changes to the federal MACT rule that make the adjusted rule no less stringent than the federal standard;

Rule Substitution

Substituting one or more existing, new, or amended District rules for the federal standard (It should be noted that California Districts have been delegated authority for the chrome plating and dry cleaning NESHAPS because EPA has agreed that the ATCMs for those source categories are equivalent to the NESHAPS.);

Streamlining Multiple Applicable Requirements

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.

Program Substitution

Using existing programs to assure compliance with the requirements of federal standards.

No Delegation

Use existing programs to reduce the emissions of hazardous air pollutants without delegation of federal standards.

The NESHAPS for which the District has received delegation through Rule 4002 are listed in Table B-1 in Appendix B. All current NESHAPS for which the District has not received delegation through Rule 4002 are listed in Table B-2 in Appendix B.

California Environmental Quality Act and Health Risk Reduction

The California Environmental Quality Act (CEQA) requires public agencies to evaluate project environmental impacts and all feasible alternatives or mitigation measures that can substantially reduce or avoid those impacts. Generally, the main responsibility for satisfying CEQA requirements, or “lead agency” role, falls under the responsibility of city or county planning agencies.

As local concern about health risk impacts associated with toxic emissions increases, local planning agencies have requested guidance for incorporating an assessment of these impacts into their CEQA review of proposed projects. Some have established policies and procedures to consider these impacts under CEQA, but most have not. As a result, there is a great need for assistance agencies in incorporating health risk impacts from toxic emissions into their CEQA-related programs.

Modeling Guidance and Tools

Air districts have traditionally provided guidance to local lead agencies in evaluating and addressing air pollution impacts from projects subject to CEQA. Recognizing the need for information and screening tools to support decision makers as they establish policies and programs for CEQA, the District has revised its Health Risk Assessment (HRA) modeling guidance document to address issues that arise in CEQA HRAs.

The modeling guidance provides for worst-case assumptions that can be used by proponents to develop their CEQA HRA modeling analyses. Additionally, the District has developed screening tools that can be used to evaluate simple projects without the need to perform dispersion modeling. In addition to developing these tools, the District has been involved in a state-wide effort to develop guidance addressing health risk impacts in the CEQA process.

Public Assistance

With concerns about health risk impacts from CEQA projects and the need to streamline the CEQA HRA review process; the District has dedicated a significant amount of effort into providing assistance to proponents and their consultants in preparing CEQA HRAs. This assistance includes providing extensive assistance and education to public agencies and consultants regarding health risk modeling. In addition to providing direct assistance, the District carefully reviews the HRAs included in CEQA documents circulated by public agencies for review, and provides further feedback and guidance.

Air Dispersion Modeling

Air quality models use mathematical techniques to simulate the physical and chemical processes that affect air pollutants as they disperse and react in the atmosphere. These models form the backbone of the air toxics management process, as they are used to assess the potential exposure of the public to various toxic emissions. Using inputs of meteorological data and source parameter information such as emission rates and stack height, models predict ambient concentrations of primary pollutants that are emitted. Models are also important to the air quality management process because they determine compliance with National/State Ambient Air Quality Standards (NAAQS/SAAQS), and other regulatory requirements such as New Source Review (NSR).

Transition from Industrial Source Complex Short Term ver. 3 (ISCST3) to AMS/EPA Regulatory Model (AERMOD)

The American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) was formed to introduce state-of-the-art modeling concepts into the EPA's air quality models. Through AERMIC, a modeling system, AERMOD, was developed to incorporate air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain.

With the promulgation of AERMOD as the preferred air dispersion model in EPA's *Guideline on Air Quality Models* (signed by the EPA Administrator on October 21, 2005 and published November 9, 2005 in the *Federal Register*), AERMOD is used for appropriate application as a replacement for ISCST3 after November 9, 2006. The District was the first air quality agency in California to successfully make this transition to the more accurate AERMOD modeling program.

Meteorological Data

In early 2006, the District undertook a detailed analysis and development of meteorological (met) data needed to run the newly-approved AERMOD dispersion model. This effort provided: 1) District model-ready met data, 2) a streamlined review process of met data, and 3) acceptable data for PSD modeling without detailed review by EPA Region IX.

All processed data is freely available for download on the District's web page at http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm.

Future Improvements

The District is planning to process additional met data from the current six sites (Bakersfield, Hanford, Fresno, Madera, Modesto, and Stockton. This would extend the District's met data sets from 2000 to 2007.

Additionally, The District is looking to purchase data generated from the MM5 meteorological model for the western part of the San Joaquin Valley. This would allow for better modeling on the Westside of the valley; where there are no Automated Surface Observation System (ASOS) that collect sufficient data needed for met processing.

Modeling Guidance

During the development of the meteorological data it was determined that guidance would be needed to address implementation of AERMOD and the tools associated (AERMET, AERSCREEN) with the operation of the model. The District developed a modeling guidance document that was designed to address major issues involved with running AERMOD and specific guidance with default modeling parameters for common source types. The modeling guidance document can be found on the District's web site at http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm.

Modeling Tools

With the increase in the time required to run AERMOD and in the number of modeling projects that support District efforts, screening tools were needed. Additionally, the District recognized the need to provide methods for conducting screening health risk assessments on simple projects to non-modelers. The following screening tools will soon be posted on the District's web site to allow for these types of assessments:

Screening Tools

- School and Transit Bus
- Internal Combustion Engines
- Fast Food Restaurants
- Gasoline Station
- Truck Travel
- Truck Idling
- Transportation Refrigeration Unit
- Ambient Air Quality Analysis (AAQA)

Modeling Support to Public Agencies, State-wide, and Others

The District has become one of the leading air dispersion modeling experts in the state of California by ensuring that the newest models and techniques are implemented, providing modeling guidance to support internal and external users, and by taking a proactive approach to provide screening tools to assist those that may not have technical modeling resources available. Additionally, District staff has been called by local government agencies, other Districts, consultants working on projects outside the Valley, and ARB to provide modeling assistance.

Appendix A - Toxic Emissions Summary

Emissions Summary

Pollutant	*Emissions (tons per year)*
Diesel Particulate Matter*	7,695
Formaldehyde*	4,396
Benzene*	1,789
Acetaldehyde*	1,761
1,3-Butadiene*	503
Perchloroethylene*	588
Acrolein	563
Methylene Chloride*	429
PAHs	418
p-Dichlorobenzene*	147
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*	0.00
Dioxins/Benzofurans	0.00
Chromium, Hexavalent*	0.23

[1] Emissions for eight counties of San Joaquin Valley from California Air Resources Board California Toxics Inventory (CTI) for 2004, the latest available year. For future updates the California Toxics Inventory will be updated annually at the same time that the California Almanac of Emissions and Air Quality is published. Data identified by an asterisk (*) was obtained from the 2007 California Almanac of Emissions & Air Quality.

Appendix B - Current Status of NESHAP Delegation

NESHAP Delegated

NESHAPS for Which Authority Has Been Delegated to the District Because They Are Included in Rule 4002

Table B-1 - 40 CFR 63

Subpart	*Title*
A	General Provisions
F-I	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry
J	National Emission Standards for Hazardous Air Pollutants from Polyvinyl Chloride and Copolymers Production
L	National Emission Standards for Coke Oven Batteries
R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry
T	National Emission Standards for Halogenated Solvent Cleaning (except §63.462 - Batch cold cleaning machine standards)
U	National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins
W	National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production
X	National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting
Y	National Emission Standards for Marine Tank Vessel Loading Operations
AA	National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants
BB	National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants
CC	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
DD	National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations
EE	National Emission Standards for Magnetic Tape Manufacturing Operations
GG	National Emission Standards for Aerospace Manufacturing and Rework Facilities
HH	National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities
II	National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)
JJ	National Emission Standards for Wood Furniture Manufacturing Operations
KK	National Emission Standards for the Printing and Publishing Industry

Subpart	*Title*
LL	National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants
MM	National Emission Standards for Hazardous Air Pollutants from Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills
YY	National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology (Generic MACT)
CCC	National Emission Standards for Hazardous Air Pollutants for Steel Pickling--HCl Process Facilities and Hydrochloric Acid Regeneration Plants
DDD	National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production
GGG	National Emission Standards for Hazardous Air Pollutants From Pharmaceutical Production
HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities
III	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production
JJJ	National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins
LLL	National Emission Standards for Hazardous Air Pollutants for Source Categories; Portland Cement Manufacturing Industry
MMM	National Emission Standards for Hazardous Air Pollutants: Pesticide Active Ingredient Production
NNN	National Emission Standards for Hazardous Air Pollutants for Source Categories; Wool Fiberglass Manufacturing
OOO	National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins
PPP	National Emission Standards for Hazardous Air Pollutants for Polyether Polyols Production
QQQ	National Emission Standards for Hazardous Air Pollutants from Primary Copper Smelting
RRR	National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production
TTT	National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting
UUU	National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
VVV	National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works
XXX	National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese
AAAA	National Emission Standards for Hazardous Air Pollutants from Municipal Solid Waste Landfills
CCCC	National Emission Standards for Hazardous Air Pollutants from

Subpart	Title
	Manufacturing of Nutritional Yeast
EEEE	National Emission Standards for Hazardous Air Pollutants from Organic Liquids Distribution (Non-Gasoline)
FFFF	National Emission Standards for Hazardous Air Pollutants from Miscellaneous Organic Chemical Manufacturing
GGGG	National Emission Standards for Hazardous Air Pollutants from Solvent Extraction for Vegetable Oil Production
HHHH	National Emission Standards for Hazardous Air Pollutants from Wet-Formed Fiberglass Mat Production
JJJJ	National Emission Standards for Hazardous Air Pollutants from Paper and Other Web Coating
KKKK	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Metal Cans
MMMM	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Miscellaneous Metal Parts and Products
NNNN	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Large Appliances
OOOO	National Emission Standards for Hazardous Air Pollutants from Printing, Coating, and Dyeing of Fabrics and Other Textiles
PPPP	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Plastic Parts and Products
QQQQ	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Wood Building Products
RRRR	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Metal Furniture
SSSS	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Metal Coil
TTTT	National Emission Standards for Hazardous Air Pollutants from Leather Finishing Operations
UUUU	National Emission Standards for Hazardous Air Pollutants from Cellulose Products Manufacturing
VVVV	National Emission Standards for Hazardous Air Pollutants from Boat Manufacturing
WWWW	National Emission Standards for Hazardous Air Pollutants from Reinforced Plastic Composites Production
XXXX	National Emission Standards for Hazardous Air Pollutants from Rubber Tire Manufacturing
YYYY	National Emission Standards for Hazardous Air Pollutants from Stationary Combustion Turbines
AAAAA	National Emission Standards for Hazardous Air Pollutants from Lime Manufacturing Plants
BBBBB	National Emission Standards for Hazardous Air Pollutants from Semiconductor Manufacturing
CCCCC	National Emission Standards for Hazardous Air Pollutants from Coke Ovens: Pushing, Quenching, and Battery Stacks

Subpart	*Title*
EEEEE	National Emission Standards for Hazardous Air Pollutants from Iron and Steel Foundries
FFFFF	National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing
GGGGG	National Emission Standards for Hazardous Air Pollutants from Site Remediation
HHHHH	National Emission Standards for Hazardous Air Pollutants from Miscellaneous Coating Manufacturing
IIIII	National Emission Standards for Hazardous Air Pollutants from Mercury Emissions From Mercury Cell Chlor-Alkali Plants
JJJJJ	National Emission Standards for Hazardous Air Pollutants from Brick and Structural Clay Products Manufacturing
KKKKK	National Emission Standards for Hazardous Air Pollutants from Clay Ceramics Manufacturing
LLLLL	National Emission Standards for Hazardous Air Pollutants from Asphalt Processing and Asphalt Roofing Manufacturing
MMMMM	National Emission Standards for Hazardous Air Pollutants from Flexible Polyurethane Foam Fabrication Operations
PPPPP	National Emission Standards for Hazardous Air Pollutants from Engine Test Cells/Stands
QQQQQ	National Emission Standards for Hazardous Air Pollutants from Friction Materials Manufacturing Facilities
RRRRR	National Emission Standards for Hazardous Air Pollutants from Taconite Iron Ore Processing
SSSSS	National Emission Standards for Hazardous Air Pollutants from Refractory Products Manufacturing
TTTTT	National Emission Standards for Hazardous Air Pollutants from Primary Magnesium Refining

NESHAP Not Delegated

NESHAPS For Which Authority Has Not Been Delegated to the District Because They Are Not Included in Rule 4002

Table B-2 - 40 CFR 63

Subpart	*Title*
L	National Emission Standards For Coke Oven Batteries
M	National Perchloroethylene Air Emission Standards For Dry Cleaning Facilities – California Not Delegated Authority To Enforce 17 CCR 93109 Instead Of Subpart M For Major Sources.
N	National Emission Standards For Chromium Emissions From Hard And Decorative Chromium Electroplating And Chromium Anodizing Tanks – California Delegated Authority To Enforce 17 CCR 93102 Instead Of Subpart N. Applies To Old ATCM.
O	Ethylene Oxide Emissions Standards For Sterilization Facilities
Q	National Emission Standards For Hazardous Air Pollutants For Industrial Process Cooling Towers
OO	NATIONAL Emission Standards For Tanks - Level 1
PP	National Emission Standards For Containers
QQ	National Emission Standards For Surface Impoundments
RR	National Emission Standards For Individual Drain Systems
SS	National Emission Standards For Closed Vent Systems, Control Devices, Recovery Devices And Routing To A Fuel Gas System Or A Process
TT	National Emission Standards For Equipment Leaks - Control Level 1
UU	National Emission Standards For Equipment Leaks - Control Level 2 Standards
VV	National Emission Standards For Oil-Water Separators And Organic-Water Separators
WW	National Emission Standards For Storage Vessels (Tanks) - Control Level 2
XX	National Emission Standards For Ethylene Manufacturing Process Units: Heat Exchange Systems And Waste Operations
EEE	National Emission Standards For Hazardous Air Pollutants From Hazardous Waste Combustors
DDDD	National Emission Standards For Hazardous Air Pollutants: Plywood And Composite Wood Products
IIII	National Emission Standards For Hazardous Air Pollutants: Surface Coating Of Automobiles And Light-Duty Trucks
ZZZZ	National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines
DDDDD	National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, And Institutional Boilers And Process Heaters
NNNNN	National Emission Standards For Hazardous Air Pollutants: Hydrochloric Acid Production
WWWWW	National Emission Standards For Hospital Ethylene Oxide Sterilizers

Subpart	*Title*
YYYYY	National Emission Standards For Hazardous Air Pollutants For Area Sources: Electric Arc Furnace Steelmaking Facilities
ZZZZZ	National Emission Standards For Hazardous Air Pollutants For Iron And Steel Foundries Area Sources
BBBBBB	National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, And Pipeline Facilities
CCCCCC	National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Dispensing Facilities
DDDDDD	National Emission Standards For Hazardous Air Pollutants For Polyvinyl Chloride And Copolymers Production Area Sources
EEEEEE	National Emission Standards For Hazardous Air Pollutants For Primary Copper Smelting Area Sources
FFFFFF	National Emission Standards For Hazardous Air Pollutants For Secondary Copper Smelting Area Sources
GGGGGG	National Emission Standards For Hazardous Air Pollutants For Primary Nonferrous Metals Area Sources - Zinc, Cadmium, And Beryllium
HHHHHH	National Emission Standards For Hazardous Air Pollutants: Paint Stripping And Miscellaneous Surface Coating Operations At Area Sources
LLLLLL	National Emission Standards For Hazardous Air Pollutants For Acrylic And Modacrylic Fibers Production Area Sources
MMMMMM	National Emission Standards For Hazardous Air Pollutants For Carbon Black Production Area Sources
NNNNNN	National Emission Standards For Hazardous Air Pollutants For Chemical Manufacturing Area Sources: Chromium Compounds
OOOOOO	National Emission Standards For Hazardous Air Pollutants For Flexible Polyurethane Foam Production And Fabrication Area Sources
PPPPPP	National Emission Standards For Hazardous Air Pollutants For Lead Acid Battery Manufacturing Area Sources
QQQQQQ	National Emission Standards For Hazardous Air Pollutants For Wood Preserving Area Sources
RRRRRR	National Emission Standards For Hazardous Air Pollutants For Clay Ceramics Manufacturing Area Sources
SSSSSS	National Emission Standards For Hazardous Air Pollutants For Glass Manufacturing Area Sources
TTTTTT	National Emission Standards For Hazardous Air Pollutants For Secondary Nonferrous Metals Processing Area Sources