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Air Resources Board

Proposed Amendments to the Air Toxics "Hot Spots" Fee Regulation for Fiscal Year 1993-1994

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Stationary Source Division

Staff Report: Initial Statement of Reasons for Proposed Rulemaking

Proposed Amendments to the Air Toxics "Hot Spots" Fee Regulation

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EXECUTIVE SUMMARY

A. OVERVIEW

In this report, the staff of the Air Resources Board (ARB or Board) presents recommended amendments to the Air Toxics "Hot Spots" Fee Regulation (Air Toxics Hot Spots Fee Regulation or Fee Regulation) for fiscal year 1993-94. The proposed amendments are shown in Appendix I to this report. The Fee Regulation authorizes each district to collect fees which fund the state and district costs of implementing the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the Hot Spots Act or Act)[1]. The Hot Spots Act is reproduced in Appendix II to this report.

The Hot Spots Act was enacted to determine the extent of toxic air releases and potential near-source exposures and risk in California. In approving the Hot Spots Act, the Legislature found that facilities that manufacture or use hazardous substances may routinely expose surrounding populations to toxic air contaminants. The Legislature also determined that the emission information available was not sufficient to allow an assessment of the potential health impacts of these exposures.

The state's and air districts' costs of implementing the Act are recovered from fees paid by facilities subject to the Act. The Fee Regulation was first adopted in 1988, as required by the Hot Spots Act, and has been revised annually. This year, we are recommending major changes to the methodology for determining facility fees to more directly relate a facility's fees to its emissions of toxic substances.

Although we were not anticipating increases in state costs for fiscal year 1993-94, legislation enacted last year (Senate Bill 1731, Calderon, Chapter 1162, 1992) imposes significant new requirements on the program

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1. Health and Safety Code sections 44300-44394

which will require additional resources. To fulfill this new legislative mandate, the Governor's proposed budget for the Air Toxics Hot Spots Program for fiscal year 1993-94 reflects an increase of $1.9 million, $1,451,000 for the Office of Environmental Health Hazard Assessment (OEHHA) and $469,000 for the ARB. After restoration of last year's one-time ten percent budget decrease imposing a decrease of $221,000 for this fiscal year related to database savings and technical budget adjustments, total program costs would increase from a current $3,472,000 for fiscal year 1992-93 to $5,627,000 for fiscal year 1993-94.

In April 1993, we held public workshops to present the proposed state cost increase and to discuss the other proposed changes to the Fee Regulation. As a result of the comments we received at the workshops and in recognition of the current economic climate, we will be proposing that the increase be reduced by $457,000 to a total of $1.5 million. The reduced budget will affect planned program activities. OEHHA will not be able to evaluate risk reduction audits and plans in the coming fiscal year. OEHHA also will not address air quality modeling and emissions uncertainty analysis in the new risk assessment guidelines. Fewer microenvironmental factors will be evaluated for uncertainty. Development of facility-specific risk assessment guidelines will be slower.

We are also proposing two amendments to the regulation which will reduce the impact of fees for smaller businesses. We are proposing a fee cap of $700 for small businesses, plus we are proposing that fees for facilities included in an industrywide inventory (eg. dry cleaners, gas stations) be no greater than $250.

District program costs, for those districts which have requested the ARB to adopt fees for them, are increasing from $6.5 million for fiscal year 1992-93 to $6.8 million for fiscal year 1993-94. Among individual districts, however, some are reducing their costs while others are increasing their costs. Nine districts are reducing their program costs for a total reduction of $457,340, while three districts are increasing their costs for a combined total of $720,276.

Overall statewide program costs for fiscal year 1993-94 will be $14.2 million, of which 36 percent are state costs and 64 percent are district costs.

Although we are proposing an increase in state costs to address new legislative requirements, we expect that over the next five years, state program costs will decline. In the absence of the new legislative requirements, the Hot Spots Program is approaching full implementation and program costs have stabilized. In June, the Board will consider amendments to the Emission Inventory Criteria and Guidelines Regulation which simplify reporting requirements.

The new simplified reporting requirements will substantially lower costs incurred by most facilities to comply with the requirements, for fiscal year 1993-94 and in the future. Also, in implementing the new

legislative mandates, the ARB effort to develop self-conducted audit checklists will result in substantial cost savings to affected businesses, because they will be able to largely rely on ARB guidance and avoid costs they would otherwise incur.

B. HOT SPOTS ACT REQUIREMENTS

The Hot Spots Act requires owners or operators of facilities to prepare emission inventory reports which list and quantify the toxic substances they use, manufacture, or emit. This information is submitted to the district for review and prioritization. Based on the emissions information, the district may require the facility to prepare an evaluation of the potential health effects (health risk assessment) associated with the facility's air toxics emissions. The risk assessment results are used by the district to identify facilities that will notify the exposed public of potential health risks. As a result of Senate Bill 1731, effective January 1993, facilities determined by the district to present a significant risk to the exposed public will be required to complete an audit and plan of feasible control measures to reduce toxics emissions and implement these measures within specified timeframes.

The Hot Spots Act also requires the ARB to maintain a list of substances that have the potential to cause chronic or acute health effects when present in the air. This list is used to determine which facilities are subject to the Hot Spots Act's requirements and the substances whose emissions must be reported.

The ARB is required by the Act to adopt a criteria and guidelines regulation for the preparation of site-specific emission inventory plans and reports. The Emission Inventory Criteria and Guidelines Regulation was first adopted in 1989. Portions of the Emission Inventory Criteria and Guidelines Regulation are reproduced in Appendix III to this report. In June 1993, the Board will be considering amendments to this regulation. The amendments focus emission updates on high priority facilities and greatly reduce the biennial inventory requirements. These changes will result in substantial cost savings to industry.

The ARB is also required to prepare an inventory of emissions from mobile sources, natural sources, and area sources not subject to permit requirements. A report summarizing air toxics emissions from these sources was completed in May 1990.

In 1992, the Act was amended by Senate Bill (SB) 1378, McCorquodale, Chapter 375, 1992, and SB 1731, Calderon, Chapter 1162, 1992. Senate Bill 1378 requires that districts with approved toxics emission inventories, base their fees to the maximum extent practicable, on toxics emissions and the level of priority assigned to the facility by the district. As required by SB 1731, OEHHA is now required to adopt new, comprehensive, risk assessment guidelines which include provisions for the submission of supplemental health risk assessment information. Prior to adoption, these guidelines must be subject to at least two public workshops, coordinated with the

California Air Pollution Control Officers Association (CAPCOA) and the ARB, and be reviewed by the independent Scientific Review Panel. The ARB is to provide assistance to smaller businesses who are required to complete an audit of feasible risk reduction measures. The Act specifies that the state and district costs of implementing its requirements must be recovered through fees assessed on facilities subject to the Act.

Figure 1 summarizes the state's implementation activities under the Hot Spots Program.

The requirements of the Act regarding emissions and reporting, risk reduction, and cost recovery are discussed in more detail below.

1. Facilities Subject to the Act

The Hot Spots Act applies to any facility that manufactures, produces, uses, or releases a listed substance and that emits more than ten tons per year (TPY) of a criteria pollutant[2]. Facilities that emit less than ten TPY of a criteria pollutant are subject to the requirements of the Hot Spots Act if they are part of a facility class included in the ARB's Hot Spots emission reporting requirements. Facilities which were already listed on a district's toxics emission survey, inventory, or report are also subject to emission reporting requirements.

The requirements of the Act are phased in. Beginning in 1989, the requirements applied to facilities that emit over 25 TPY of criteria pollutants and that manufacture, produce, use, or release a listed substance. These facilities, as well as facilities on district toxics inventories, reports or surveys, make up Phase I of the program. Requirements for Phase II facilities began in 1990. Phase II facilities are those that emit 10-25 TPY of criteria pollutants and manufacture, produce, use, or release a listed substance. Phase III includes facilities that emit less than ten TPY of criteria pollutants, fall within certain industrial classes, and produce, emit or use a listed substance. The Phase III requirements, which began in 1991, must be completed two years after the corresponding deadlines for Phase I facilities. The approximate number of facilities subject to the Act in Phase I, Phase II, and Phase III are 4,100, 1,500, and 24,500, respectively.

Implementation requirements for the three phases of the Hot Spots program overlap, as shown in Figure 2. As of August 1991 all three phases of the program had been initiated.

With the enactment of SB 1731, a new Phase IV has been added to the program. Implementation of the new requirements began in January 1993.

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2. The term "criteria pollutants," as used in this report, refers to the following pollutants: total organic gases (TOG), particulate matter (PM), nitrogen oxides (NOx), and sulfur oxides (SOx).

Figure 1

State Hot Spots Program Implementation Activities

Methods Development/Emission Inventory/Regulatory Development and Implementation:

- Regulatory Development and Implementation (ARB)
  - --develop amendments to regulations
  - --prepare for and conduct public workshops
  - --prepare for and hold meetings with interested groups
  - --maintain list of substances (identify new and/or delete compounds) and respond to questions
  - --track status of implementation
  - --provide assistance to districts
- Methods Development and Review (ARB)
  - --review source tests
  - --review and approve alternative test methods in inventory plans and reports
  - --review and comment on pooled source test proposals
  - --conduct Toxic Source Test seminars for district staff
  - --develop air toxics emission factors
- Air Toxics Emission Data System (ATEDS) (ARB)
  - --perform computer programming tasks
  - --develop and implement electronic data submittal
  - --develop a personal computer version of ATEDs and operator's manual
  - --analyze data for setting priorities for toxic air pollutant control
  - --provide emission database information to other government departments and the public
  - --computer time contract (Teale Data Center)
- Emission Data Collection, Validation (ARB)
  - --conduct initial data review
  - --correct data (with district concurrence)
  - --conduct quality control checks and correct data
  - --follow-up with districts on data submittal and collection procedures
  - --data entry contract

Figure 1 (continued)

Health Risk Assessment:

- Health Risk Assessment Review (OEHHA)

  --review health risk assessments submitted by districts
  --correct health risk assessments that are inaccurate
  --identify areas of incompleteness in health risk assessments
  --supply comments to the district regarding health risk assessments
  --assist the district staff in interpreting the results of a health risk assessment

- Development of Noncancer Methods, Health Guidance Values, and Acute Effects Database (OEHHA)

  --identify new cancer potencies
  --identify new chronic and acute health exposure levels
  --develop chemical potencies for cancer causing agents
  --develop health reference exposure levels for substances causing acute and chronic health effects
  --develop noncancer health risk assessment methods
  --develop and operate a chemical database for substances having acute effects

- Risk Assessment Assistance (OEHHA or ARB as noted)

  --provide assistance to risk assessment preparers, the public and districts on appropriate procedures (OEHHA - health assessment, ARB - exposure assessment)
  --verify computer modeling and meteorological data (ARB)
  --provide assistance on health reference exposure levels and chemical potencies (OEHHA)
  --review changes to emission inventory procedures to ensure that data are usable for health risk assessment (OEHHA)
  --update of health risk assessment personal computer program (ARB)

Public Notification:

- Develop Public Notification Procedures (OEHHA - health assessment, ARB - exposure assessment)

  --assist districts and facilities with public notification procedures and public meetings

- Participate in Public Notification Workshops and Hearings (OEHHA and ARB)

Figure 1 (continued)

Senate Bill 1731, Calderon, Requirements:

- o Health Risk Assessment Guideline Development (OEHHA)
  - --develop, maintain, and administer new facility risk assessment guidelines
  - --develop risk expressions that describe the probability and uncertainty in the risk assessment
  - --develop microenvironmental, dispersion modeling (ARB to assist), and demographic factors for facility specific health risk assessments
  - --coordinate with the CAPCOA and the ARB
  - --notify the public of guidelines developed
  - --hold public workshops to discuss guidelines
  - --present guidelines to Scientific Review Panel for comment
  - --provide guidance to districts
  - --review supplemental health risk assessment information
  - --revise and update guidelines as appropriate
- o Risk Reduction Guidelines and Checklists Development (ARB)
  - --assist smaller businesses to obtain information, assess risk reduction methods, and apply risk reduction techniques
  - --locate possible emission sources
  - --identify cost-effective control technologies
  - --indicate possible pollution prevention measures
  - --develop checklists for self-conducted audits and risk reduction options for industries comprised mainly of small businesses
- o Evaluate Risk Reduction Audits and Plans (OEHHA)
  - --evaluate and provide assistance on air toxics risk reduction audits and plans to districts and facilities
  - --develop a description of the incremental reductions in risk that occur when exposure is reduced
  - --evaluate whether toxic risk reduction measures will increase risk from exposure to the chemical in another media

Figure 2

Air Toxics Hot Spots Program Implementation Schedule (1)

	1989	1990	1991	1992	1993	1994
GUIDELINES/DATA MANAGEMENT						
o ARB issues emissions inventory guidelines	MAY					
o ARB develops data management program	JULY					
o ARB updates emission inventory guidelines		June				
o ARB updates the list of substances and revises the inventory guidelines accordingly		Sept	June			
EMISSIONS INVENTORY						
o Industries submit inventory plans	AUG	AUG*	Aug**			
o Districts approve plans	Dec	Dec*	Dec**			
o Industries submit toxic emissions data		June	June*	June**		
o Districts review data		Sept	Sept*	Sept**		
o Industry submits biennial update plans (2)			Aug	Aug*	Aug**/Aug	Aug*
RISK ASSESSMENT						
o Districts designate priorities		DEC	Dec*	Dec**		
o Specified facilities submit risk assessments			May	May*	May**	
o OEHHA completes review of risk assessments			Nov	Nov*	Nov**	
o District approval of risk assessments				May	May*	May**
o Public Notification...(follows risk assessment approval)				May	May*	May**
o Industry submits biennial update risk assessments (2)					May	May*
REPORTS						
o Districts begin issuing annual reports			JULY			

Phase I: Large sized (>25 ton) facilities and facilities listed on toxics inventories
* Phase II: Medium sized (10 to 25 ton) facilities
** Phase III: Small sized (<10 ton) facilities

(1) This figure provides the earliest possible dates for achieving the milestones of the Air Toxics "Hot Spots" Program. Submittal dates specified in the Health and Safety Code are shown in uppercase print.

(2) Dates in which the biennial update milestones are outlined to start unless an alternate schedule is specified by the district.

2. Reporting Requirements

Facilities subject to the Act must prepare air toxics emission inventory plans that indicate how emissions will be measured or calculated. These plans must be reviewed by the district. Upon approval by the district, the facility operator must implement the plan by submitting an inventory of emissions to the district within 180 days. The information from the facilities is tracked biennially and updated if necessary. The Emission Inventory Criteria and Guidelines Regulation, adopted by the ARB, contains detailed Hot Spots Program emission reporting requirements.

For certain classes of facilities, the districts must prepare industrywide inventories; facility operators are not required to prepare individual reports. The districts determine whether an industrywide inventory is appropriate by reviewing the criteria specified in the Act. These criteria include the following: the proportion of small businesses in the industry, the uniformity of emissions characteristics within the industry, and the financial burden to the facilities within the industry if required to prepare individual inventory plans and reports.

After reviewing the emission inventory data, the districts must rank facilities into high, intermediate, or low priority categories to assess potential health risks. High priority facilities must prepare a risk assessment to evaluate the potential adverse health effects on the exposed population and submit it to the district. To respond to concerns from the exposed public, the districts may also require facilities not designated as "high priority" to prepare and submit a risk assessment. CAPCOA has developed the following two documents to help districts and facility operators meet these requirements: the CAPCOA Air Toxics "Hot Spots" Program Facility Prioritization Guidelines (July 1990) and the CAPCOA Air Toxics "Hot Spots" Program Risk Assessment Guidelines (January 1992).

The risk assessments are reviewed by the district and by the OEHHA. The districts must also make the health risk assessments available for public review upon request. If a district determines that there is a potentially significant health risk associated with emissions from a facility, the facility operator must notify all exposed persons of these findings. The CAPCOA has developed a document to help districts develop public notification procedures, the CAPCOA Air Toxics "Hot Spots" Program Public Notification Guidelines (October 1992).

3. Risk Reduction Requirements (New for 1993)

Whenever a district judges that there is a potentially significant risk associated with emissions from a facility, the facility operator is required to conduct a risk reduction audit and develop a plan to implement airborne toxic risk reduction measures. These measures include changes in production processes or materials, operation and maintenance, and emission control methods. The plan must result in reduction of emissions to a level below the significant risk level within five years. Under certain circumstances, the district may either lengthen (up to five additional years) or shorten

the time period to implement the plan. Upon district identification that a facility presents a significant risk, facility owners have six months to submit their risk reduction audit and plan to the district.

The ARB is required to provide assistance to the districts and smaller businesses in obtaining information, assessing risk reduction methods, and applying risk reduction techniques. For industries comprised mainly of small businesses, the ARB is required to develop a self-conducted audit and checklist to assist them in meeting the requirements of the program. We anticipate development of several industry-specific audit and plan checklists which will save affected industries the costs of individually evaluating risk reduction methods.

4. Cost Recovery Requirements

The Hot Spots Act requires that the ARB adopt a regulation that recovers costs incurred by the districts (if so requested and certain conditions are met) and the state to administer the Hot Spots Act. State costs include those incurred by the OEHHA and the ARB. The Hot Spots Act requires the state to set an additional fee in the Fee Regulation to cover the direct costs to the state or the districts to review supplemental health risk information as defined in the Act. The districts must collect fees from facilities subject to the Hot Spots Act to defray anticipated state and district costs. These fees are those established either in fee schedules the ARB adopts as part of the Fee Regulation or in Hot Spots fee rules local districts adopt as required by the Fee Regulation.

C. PROPOSED AMENDMENTS TO THE FEE REGULATION

To comply with recent legislation, the staff proposes two major amendments to the Fee Regulation for fiscal year 1993-94, as follows:

- Change in fee basis - The first major amendment is to change the basis for calculating fees from criteria pollutants to a toxics and workload based approach. This conforms to SB 1378 McCorquodale, 1992, which requires fees to be based on toxic emissions and facility priority to the extent practicable. Distribution of state costs among districts, and the facility fees, would be determined by the number of facilities in various program categories (for example: whether a facility has had to do an inventory report or whether a facility's risk assessment is being reviewed by the OEHHA or a district). This change in the method of calculating fees links a facility's fees to the workload that the facility places on the district, the OEHHA, and the ARB. Because this workload is directly linked to the magnitude and potency of the emissions from a facility, it is a reasonable way to comply with SB 1378.

- Increase in state program costs - The second change is the increase in fees to provide for a state program cost increase of

$1.5 million. This change is necessary to perform the work required by SB 1731 Calderon, 1992.

The SB 1731 requires the OEHHA to adopt comprehensive, new, risk assessment guidelines. These newly mandated guidelines must consider likelihood distributions of risk estimates, uncertainty in air dispersion modeling and emission estimates, microenvironmental characteristics, detailed demographic data, and a description of incremental risk reductions. These guidelines must go through a full public participatory review process and be reviewed by the independent Scientific Review Panel. About $1.0 million or 68 percent of the proposed increase in state program costs is for the OEHHA.

SB 1731 requires the ARB to assist smaller businesses in producing the risk reduction audits and plans. SB 1731 requires the ARB and the districts to assist smaller businesses that have inadequate technical and financial resources to obtain information, assess risk reduction methods, and apply risk reduction techniques. For any industry that is comprised mainly of small businesses, with substantially similar technology, the ARB must develop a self-conducted audit and checklist. About $0.5 million or 32 percent of the proposed increase in state program costs is for the ARB to provide this assistance.

The staff also proposes the following miscellaneous amendments to the Fee Regulation for fiscal year 1993-94, as follows:

- Update the fee schedules. The fee schedules need to be updated to reflect the change in the fee basis. The schedules also need to be updated to reflect changes in anticipated state and district program costs for fiscal year 1993-94;

- Update district-specified flat fees for facilities included in the Survey and Industrywide facility program categories. A Survey facility is one that emits less than ten TPY of criteria pollutants and is required to submit a one-time survey to the district. An Industrywide facility is a facility included in an industrywide emission inventory prepared by the district. These modifications more accurately reflect the average cost of the program activities for these facilities;

- Delete annual fee requirements for facilities in the Survey and Industrywide facility program category under two conditions:

    1) that the facility previously paid a Hot Spots fee, and

    2) that the local district does not incur significant expense with respect to the facility and its compliance with the Act.

This amendment was requested by the districts. Once the industrywide inventory is prepared by the district, significant resources do not have to be expended on these facilities. Also, many of these facilities are small businesses;

- Establish a maximum fee of $700 for facilities defined as small businesses. A small business is defined as a business with ten or fewer employees and total annual gross receipts of less than $500,000. We are proposing a cap on fees for small businesses in recognition of their limited ability to pay and pass on the costs of fees.

- Establish an optional supplemental risk assessment review fee of $2,000. This fee allows districts to recover costs from facilities submitting supplemental information under the new provisions in state law, and will ensure that sources that do not use these provisions will not have to pay higher fees to support this portion of the district's workload. This fee is being established as required by Health and Safety Code section 44380.5;

- Establish an optional maximum fee of $1,000 for the Plan and Report (Simple) category. This amendment was requested by a district. The maximum fee is established in recognition that in some districts a limit on the category is necessary to ensure that the Plan and Report (Simple) facility fee is less than a Risk Assessment (Simple) facility fee.

- Delete the requirement for the annual adoption of district Hot Spots fee rules and the state Fee Regulation and require only an annual review to determine if amendments are necessary. This change is proposed as a clarification. Health and Safety Code section 44380 does not require the ARB to annually adopt the Fee Regulation, only to review it annually;

  Under this proposal, the districts would not have to adopt a fee rule annually if the rule has a provision for automatic readoption by operation of law. With this type of provision in place, it is not necessary for the district to go through the expense of an annual adoption process;

- Revise the list of districts which have requested the ARB to establish fee schedules as part of the Fee Regulation (all other districts must adopt district Hot Spots fee rules) and delete those that will adopt district rules. Health and Safety Code section 44380 allows the Board to adopt fee schedules for districts that provide district board-approved costs to the ARB by April 1. The proposed amendments add fee schedules for the districts who met this requirement and deletes fee schedules for districts that will be adopting local fee rules;

- o Update the list of district air toxics inventories, reports, or surveys (Appendix A to the proposed Fee Regulation, formerly Appendix B). The San Joaquin Valley Unified and the Monterey Bay Unified Air Pollution Control Districts submitted updated lists for inclusion in the proposed Appendix A; and

- o Delete the List of Substances from the Fee Regulation and make appropriate reference to the List of Substances in the Emission Inventory Criteria and Guidelines Regulation. The number of substances on the list remains unchanged. We propose to make this change because the Emission Inventory Criteria and Guidelines Regulation list is equivalent. Also, it is more important to retain the List of Substances in the Emission Inventory Criteria and Guidelines Regulation because it separates the substances whose emissions must be quantified and those that do not need to be quantified.

D. ESTIMATED FEES FOR FISCAL YEAR 1993-94

1. Fees for Fiscal Year 1993-94

As of the writing of this report, approximately 30,000 facilities statewide will be subject to the Hot Spots Program requirements and fees in fiscal year 1993-94. As Figure 2 (on page 8) shows, we are now approaching full implementation of the Hot Spots Act. Both state and district Hot Spots program costs would have stabilized this year if there had been no changes to state law from legislation enacted in 1992.

The estimated total state and district costs for fiscal year 1993-94 are $14.2 million, an 18 percent increase over fiscal year 1992-93. Of this total, approximately $9.0 million or 64 percent are district costs, and approximately $5.2 million or 36 percent are state costs. The total state costs increase from $3.4 million for fiscal year 1992-93 to $5.2 million for fiscal year 1993-94, a 49 percent increase. The ARB's share of the proposed state cost is $2.4 million and the OEHHA's share is $2.8 million. In addition to these costs, a five percent adjustment factor is included in the fees. This adjustment factor is necessary to account for unforeseen business closures, nonpayment, and uncertainty in the emissions information. Table 1 shows the current year Hot Spots budget, proposed Governor's budget for fiscal year 1993-94, and staff proposed reductions in the budget.

Table 2 shows the average facility fees proposed for the districts for which the ARB proposes to adopt a district fee schedule as part of the Fee Regulation. Because the proposal changes the basis for calculating fees from criteria pollutants to program category and workload, we have not provided a comparison of existing fees to proposed fees by category. For example, we propose to base fees on whether a facility has to complete an inventory report or whether a facility's risk assessment is being reviewed by the OEHHA or a district. Facilities were not classified in this manner

Table 1

Current Year Budget and Proposed Budget

FY 1992-93	ARB	OEHHA	Total
Proposed	2,172,000	1,780,000	3,952,000
10% Budget Reduction	-395,000	0	-395,000
Statewide Technical Budget Adjustment*	-85,000	0	-85,000
Final FY 1992-93	1,692,000	1,780,000	3,472,000
FY 1993-94 Governor's Budget			
Restoration of 10% Reduction	395,000	0	395,000
Database Savings	-221,000	0	-221,000
Statewide Technical Budget Adjustments*	61,000		61,000
SB 1731 Requirements			
Limited-term positions**	74,000	272,000	346,000
One-time equipment and contracts***	28,000	175,000	203,000
Remaining costs	367,000	1,004,000	1,372,000
Subtotal for SB 1731	469,000	1,451,000	1,920,000
Initial Proposed FY 93/94	2,396,000	3,231,000	5,627,000
Reduced Proposal			
Reduced Calderon Activity			
Limited-term positions		-272,000	-272,000
Other costs		-185,000	-185,000
Subtotal	0	-457,000	-457,000
Reduced Proposed FY 93/94	2,396,000	2,774,000	5,170,000

* Reflects employee salary adjustments.

** ARB: 1.0 position one-year limited term
OEHHA: 5.0 positions subject to re-evaluation in fiscal year 1995-96.

*** ARB: One-time equipment costs
OEHHA: One-time equipment ($125,000) and contract ($50,000) costs.

Table 2

Proposed Facility Fees*

Program Category	Total Fees (Average)**
Survey	90
Industrywide	80
Plan and Report	
Simple	760
Intermediate	1,600
Complex	4,180
Risk Assessment - Under Review by the District***	
Simple	970
Intermediate	2,620
Complex	6,000
Risk Assessment - Under Review by the State****	
Simple	1,220
Intermediate	4,660
Complex	11,560
Notification	37,900

* Summary of proposed fees for air pollution control districts whose fee schedules are included in the Fee Regulation

** To reduce the effects of skewed data, the highest and lowest facility fees in each category were not included in the average.

*** Facilities whose risk assessment is being reviewed by the district. The risk assessment was not submitted to the state between April 1, 1992, and March 31, 1993.

**** Facilities whose risk assessment was submitted to OEHHA for review between April 1, 1992, and March 31, 1993.

in previous years. Facilities that are in the same workload group would pay the same fees to cover the state cost of the program, but may pay different overall fees because district costs vary. For a listing of facility fees by district, refer to Table 3 in Appendix I.

2. Reasons for Increases in State Costs

The proposed increased state expenditures are necessitated by the new requirements of SB 1731. The SB 1731 adds two new key elements to the Hot Spots Program. These include: the development and adoption of comprehensive, new risk assessment guidelines by the OEHHA for the Hot Spots Program; and to require reductions in toxic air pollutant emissions from significant risk facilities through risk reduction audits and plans. SB 1731 provides that the risk assessment guidelines be developed through a full public participatory process, including at least two public workshops, and review by the independent Scientific Review Panel (SRP).

The SRP is made up of University of California scientists, appointed by the Secretary for Environmental Protection and the Legislature, who are involved in researching the latest scientific techniques to assess both exposure and health impacts from toxic air pollutants. Because of the comprehensive nature of the guidelines to be developed by the OEHHA, it is also recognized that the guidelines will have wider uses by the districts in making permitting and mitigation decisions.

ARB responsibilities under SB 1731 to assist smaller businesses and develop self-conducted audit checklists are expected to provide many businesses financial relief from the expense of developing an individual facility audit and plan and in determining applicable measures to reduce emissions. The ARB will work with affected industries to identify controllable emission sources, identify cost-effective control technologies, and indicate possible pollution prevention measures (other than add-on controls). We also plan to assist businesses by conducting engineering evaluations to identify cost-effective options for risk reduction. We feel this effort on the part of the ARB will result in substantial cost savings to affected businesses, because they will be able to rely on ARB guidance and checklists for their audits and plans and avoid incurring costs to have this work done for them.

We also anticipate that the districts will look to ARB and OEHHA for guidance on how to implement the audit and plan provisions of SB 1731 in a cost-effective manner. We are chairing a California Air Pollution Control Officers Association (CAPCOA) air toxics committee to evaluate the most efficient way to implement SB 1731.

3. Reasons for District Cost Increases

In the districts for which the ARB will adopt Hot Spots fee schedules, the projected total district program costs are increasing from $6.5 million for fiscal year 1992-93 to $6.8 million for fiscal year 1993-94, approximately a four percent increase. The costs were approved by the governing board of each district in open, noticed public hearings, in which

the public was given an opportunity to comment. The projected expenditures in individual districts vary because of differing overhead costs, the number of facilities subject to the program, and the type of facilities located within the district.

Of the 34 districts, 12 are estimating increases in district program costs for fiscal year 1993-94. Of the 12 districts with increased costs, two have indicated that their costs are increasing from eight to ten and fifteen percent, respectively, due to the requirements of SB 1731. Table 3 shows district program costs for fiscal year 1992-93 and 1993-94.

Some districts will adopt their own fee rules this year as authorized by the Fee Regulation. As a result, we cannot provide a comprehensive summary of the fees that will be assessed in these districts.

E. ENVIRONMENTAL AND ECONOMIC IMPACTS

We do not anticipate any potential adverse impacts on the environment attributable to implementation of the amended regulation. The Fee Regulation may provide indirect environmental benefits because the fees permit the collection and assessment of data that businesses can use to voluntarily reduce emissions.

Although some businesses would potentially experience a greater reduction in their profitability than others, overall, California businesses seem to be able to absorb the costs of the fees without significant adverse impact on their profitability. Given the current adverse economic conditions in California, nevertheless, the imposition of the amended fees may have a significant adverse impact on some businesses operating with little or no margin of profitability.

F. DEVELOPMENT OF THE FEE AMENDMENTS

The Air Toxics Hot Spots Fee Regulation Committee (Committee) was established in 1988 to develop the initial Fee Regulation. The Committee includes representatives from the districts, the ARB, and the OEHHA. The Committee met on September 10, 1992; October 28, 1992; and January 6, 1993 to discuss the proposed amendments to the Fee Regulation for fiscal year 1993-94. On March 12, 1993, the Committee held a teleconference to discuss the proposed amendments.

We also held seven public workshops in 1992 and 1993 during the development of the amended Fee Regulation. The locations and dates of the workshops are listed below:

Sacramento on July 22, 1992
Fresno on December 15, 1992
Sacramento on December 16, 1992
Los Angeles on December 17, 1992
Sacramento on April 16, 1993
Fresno on April 22, 1993
San Bernardino on April 23, 1993

Table 3

District Cost Comparison Between Fiscal Years 1992-93 and 1993-94*
(Dollars)

District	Fiscal Year 1992-93	Fiscal Year 1993-94
Amador	21,943	21,943
Bay Area	375,000	375,000
Butte	94,529	38,272
Calaveras	8,750	0**
Colusa	27,200	13,750
El Dorado	1,000	20,505**
Feather River	15,000	28,000
Glenn	18,769	8,995
Great Basin	6,000**	5,500**
Imperial	12,000	13,600
Kern (Desert)	64,874**	64,234**
Lake	1,000	5,800
Lassen	6,396**	3,000**
Mariposa	220	220
Mendocino	52,842**	26,714**
Modoc	200	0
Monterey	350,000	594,463
North Coast	27,370	27,370
Northern Sierra	6,000	6,000
Northern Sonoma	5,290	10,240
Placer	75,000	62,009**
Sacramento	123,609	102,314**
San Bernardino	402,739**	406,789**
San Diego	586,000	586,000
San Joaquin Valley	2,161,740**	1,830,600**
San Luis Obispo	25,000	67,588
Santa Barbara	349,700**	297,200**
Shasta	49,000**	50,000
Siskiyou	4,000	4,000
South Coast	3,260,697**	3,977,423**
Tehama	12,428**	9,090
Tuolumne	22,600	23,100**
Ventura	284,890	285,000
Yolo-Sólano	35,000	35,000
	8,486,786	8,999,719

* Costs are estimates unless otherwise noted.
** District Board approved cost.

We sent workshop notices to approximately 7,000 facility operators and members of the public. The notices included a summary of proposed changes and the proposed regulation. A copy of each workshop announcement is contained in Appendix IV.

G. RECOMMENDATION

We recommend that the Board adopt the proposed amendments to the Fee Regulation for fiscal year 1993-94. These amendments are described in more detail in Chapter II and are contained in Appendix I to this report.

I.

PROGRAM BACKGROUND

This chapter discusses the background of the Air Toxics "Hot Spots" Fee Regulation (Air Toxics Hot Spots Fee Regulation or Fee Regulation), including the requirements of the regulation, the legal authority to adopt fees, and describes which facilities are subject to the requirements of the regulation.

A. BACKGROUND

In this report, the staff of the Air Resources Board (ARB or Board) presents recommended amendments to the Air Toxics "Hot Spots" Fee Regulation (Air Toxics Hot Spots Fee Regulation or Fee Regulation) for fiscal year 1993-94. The proposed amendments are shown in Appendix I to this report. The Fee Regulation authorizes each district to collect fees which fund the state and district costs of implementing the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the Hot Spots Act or Act). The Hot Spots Act is reproduced in Appendix II to this report.

The Hot Spots Act was enacted to determine the extent of toxic air releases and potential near-source exposures and risk in California. In approving the Hot Spots Act, the Legislature found that facilities that manufacture or use hazardous substances may routinely expose surrounding populations to toxic air contaminants. The Legislature also determined that the emission information available was not sufficient to allow an assessment of the potential health impacts of these exposures.

The state's and air districts' costs of implementing the Act are recovered from fees paid by facilities subject to the Act. The Fee Regulation was first adopted in 1988, as required by the Hot Spots Act, and has been revised annually. This year, we are recommending major changes to the methodology for determining facility fees to more directly relate a facility's fees to its emissions of toxic substances.

B. HOT SPOTS ACT REQUIREMENTS

The Hot Spots Act requires owners or operators of facilities to prepare emission inventory reports which list and quantify the toxic substances they use, manufacture, or emit. This information is submitted to the district for review and prioritization. Based on the emissions information, the district may require the facility to prepare an evaluation of the potential health effects (health risk assessment) associated with the facility's air toxics emissions. The risk assessment results are used by the district to identify facilities that will notify the exposed public of potential health risks. As a result of Senate Bill 1731, effective January 1993, facilities determined by the district to present a significant risk to the exposed public will be required to complete an audit and plan of feasible control measures to reduce toxics emissions and implement these measures within specified timeframes.

The Hot Spots Act also requires the ARB to maintain a list of substances that have the potential to cause chronic or acute health effects when present in the air. This list is used to determine which facilities are subject to the Hot Spots Act's requirements and the substances whose emissions must be reported.

The ARB is required by the Act to adopt a criteria and guidelines regulation for the preparation of site-specific emission inventory plans and reports. The Emission Inventory Criteria and Guidelines Regulation was first adopted in 1989. Portions of the Emission Inventory Criteria and Guidelines Regulation are reproduced in Appendix III to this report. In June 1993, the Board will be considering amendments to this regulation. The amendments focus emission updates on high priority facilities and greatly reduce the biennial inventory requirements. These changes will result in substantial cost savings to industry.

The ARB is also required to prepare an inventory of emissions from mobile sources, natural sources, and area sources not subject to permit requirements. A report summarizing air toxics emissions from these sources was completed in May 1990.

In 1992, the Act was amended by Senate Bill (SB) 1378, McCorquodale, Chapter 375, 1992, and SB 1731, Calderon, Chapter 1162, 1992. Senate Bill 1378 requires that districts with approved toxics emission inventories, base their fees to the maximum extent practicable, on toxics emissions and the level of priority assigned to the facility by the district. As required by SB 1731, OEHHA is now required to adopt new, comprehensive, risk assessment guidelines which include provisions for the submission of supplemental health risk assessment information. Prior to adoption, these guidelines must be subject to at least two public workshops, coordinated with the California Air Pollution Control Officers Association (CAPCOA) and the ARB, and be reviewed by the independent Scientific Review Panel. The ARB is to provide assistance to smaller businesses who are required to complete an audit of feasible risk reduction measures. The Act specifies that the state and district costs of implementing its requirements must be recovered through fees assessed on facilities subject to the Act.

The Hot Spots Act requires that the ARB adopt a regulation that recovers costs incurred by the districts (if so requested and certain conditions are met) and the state to administer the Hot Spots Act. State costs include those incurred by the OEHHA and the ARB. The Hot Spots Act requires the state to set an additional fee in the Fee Regulation to cover the direct costs to the state or the districts to review supplemental health risk information as defined in the Act. The districts must collect fees from facilities subject to the Hot Spots Act to defray anticipated state and district costs. These fees are those established either in fee schedules the ARB adopts as part of the Fee Regulation or in Hot Spots fee rules local districts adopt as required by the Fee Regulation.

C. LEGAL AUTHORITY TO ADOPT FEES

1. Assembly Bill 2588, Connelly

In 1987, the Air Toxics "Hot Spots" Information and Assessment Act (Air Toxics Hot Spots Act, Hot Spots Act, or the Act) was signed into law (Assembly Bill 2588, Connelly, Chapter 1252, 1987). The Hot Spots Act requires that fees be assessed upon the operator of every facility subject to the Act. The fees are to be based on the reasonably anticipated costs to be incurred by the state and the districts to implement and administer the Act.

Under the Act, the districts collect and the state compiles a toxics emission inventory. The state uses the emission data obtained from the Hot Spots Program to prioritize substances for identification as Toxic Air Contaminants. The state analyzes the emission data to develop control measure strategies. These data also serve as a benchmark to determine the effectiveness and cost-benefit of these control measures.

The districts also use these same data to develop district control measures. The program data has helped the state identify classes of facilities as potentially significant emission sources. The toxics emission database will be used to determine the importance of air toxics problems in California in relation to other environmental problems. The inventory information will also assist the ARB in providing small businesses with guidance on risk reduction methods as required under the new provisions of the Act.

The emission inventory information assists industry in identifying and implementing risk reduction measures now required under the Hot Spots Act. The facilities can use their resources to lower emissions from the industrial processes and identify substances posing the greatest potential risk to public health. A facility's awareness of the magnitude and scope of its toxic emissions gives that facility the information necessary to apply the most effective risk reduction measures at a reasonable cost. With a heightened awareness, numerous facilities have voluntarily reduced air toxic pollutant emissions as a result of the Hot Spots Program.

2. Assembly Bill 4070, Connelly

The Act was amended in 1990 by Assembly Bill 4070, Connelly, Chapter 1432, 1990. Assembly Bill 4070 requires districts to adopt rules which assess fees, sufficient to cover state and local agency costs, on each facility subject to the Act. The amendments specify that the Board must adopt fees for any district that provides board-approved district program costs to the ARB prior to April 1. The amendments also specify that the state board shall review and may amend the fee regulation annually.

3. Senate Bill 1378, McCorquodale

In 1992, the Act was amended by Senate Bill 1378, McCorquodale, Chapter 375, 1992. Senate Bill 1378 requires any district with an approved toxics emission inventory, by August 1 of the preceding year, to adopt a fee schedule using toxics emissions as the basis to the extent it is practicable. The fees would be proportionate to the extent of the releases identified in the toxics emission inventory and the level of priority assigned to that source by the district.

4. Senate Bill 1731, Calderon

The Act was also amended in 1992 by Senate Bill 1731, Calderon, Chapter 1162, 1992. With respect to fees, Senate Bill 1731 provides that a supplemental fee may be assessed by the district or the state upon the operator of a facility that, at the operator's option, submits supplemental health risk assessment information. The supplemental fee shall be set by the state board in the Fee Regulation.

D. OVERALL APPLICABILITY

1. General

The existing Fee Regulation applies to any facility which meets one of the following criteria:

(1) The facility manufactures, formulates, uses, or releases a listed substance (or substance which reacts to form a listed substance) and emits ten tons per year (TPY) or more of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides.

(2) The facility is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by a district.

(3) The facility manufactures, formulates, uses, or releases a listed substance (or substance which reacts to form a listed substance) and emits less than ten TPY of each criteria pollutant and is subject to the emission inventory requirements.

2. Exemptions

One category of sources is exempt from certain program requirements and from the Fee Regulation. Health and Safety Code section 44324 exempts certain uses of pesticides from the Hot Spots Act. Economic poisons employed in their pesticidal use are exempt unless that facility was subject to district permit requirements on or before August 1, 1987. Landfill facilities, that are in compliance with the "Calderon" landfill gas testing requirements (Health and Safety Code section 41805.5), are exempt from certain emission reporting requirements, but they are subject to other provisions of the Act and, therefore, to the Fee Regulation.

II.

PROPOSED CHANGES

This chapter discusses the proposed amendments to the Fee Regulation for fiscal year 1993-94 that relate to the change in method for calculating fees and other proposed modifications.

A. CURRENT REGULATION

1. Basis for Existing Fees

The existing Fee Regulation bases fees primarily on criteria pollutant emissions. At the time the Fee Regulation was first implemented in 1988, a criteria pollutant inventory was in existence for facilities subject to the Act. It was agreed to use criteria pollutant emissions to calculate fees until sufficient toxics emissions information was available to consider as an alternative fee basis.

2. Existing Fee Calculation Method

The existing regulation specifies that the ARB will calculate the fees for all facilities subject to the Fee Regulation based on the emissions of criteria pollutants listed in the most recent approved emission inventory. Each district's share of state costs is equal to its share of the statewide emission inventory. That is, a hypothetical district whose emissions equal ten percent of the statewide emission inventory would be liable to recover ten percent of the state costs. Although the Fee Regulation specifies fee schedules for only those districts that have complied with specified requirements, it establishes the share of state costs for all 34 districts.

The fee for an individual facility is the sum of that facility's share of state and district costs. For facilities emitting 25 or more TPY of a criteria pollutant, there are currently two options districts may choose for fee calculation. The two options are cost per ton and cost per facility

(graduated fee). Both options are directly related to the facility's criteria pollutant emissions.

For facilities emitting 10-25 TPY of criteria pollutants, the districts have three options for fee calculation: a cost per ton calculated by the ARB, a flat fee calculated by the ARB, and a district-specified flat fee. The two fee options calculated by the ARB are directly related to criteria pollutant emissions. For the district-specified flat fee, the basis is not limited to criteria pollutants emissions. It is based on a district's workload for facilities of similar size.

For facilities emitting less than ten TPY of criteria pollutants and for facilities on district toxics inventories, the fees are specified by the district as a flat fee for facilities. These flat fees are based on district workload. Consideration is also given to the economic burden these fees may have on smaller facilities.

For districts adopting their own Hot Spots fee rules, the statutes and the Fee Regulation did not previously specify the basis to be used for calculating fees. District fee rules in existence use several different bases for their fees including criteria pollutant emissions, toxics emissions, and workload. In accordance with the requirements of Senate Bill 1378, McCorquodale, any district after January 1, 1993, that has an approved toxics emission inventory, by August 1 of the preceding year, will adopt a fee schedule using toxics emissions as the basis to the extent possible. The fees should be proportionate to the extent of the releases identified in the toxics emission inventory and the level of priority assigned to that source by the district.

B. PROPOSED NEW METHOD FOR DETERMINING FACILITY FEES

We are proposing that the Fee Regulation be amended so that fees assessed under the authority of the regulation would be based on the program category of a facility instead of its criteria pollutant emissions.

1. Process

The proposal to change the basis of the fee calculation is the most significant proposed change in the proposed amendments to the Fee Regulation for fiscal year 1993-94. Developing the new basis required extensive coordination with other government agencies, district representatives, the public, and the Fee Regulation Committee.

We met with the staff from other California Environmental Protection Agency boards and departments with fee programs to evaluate their methods of calculating fees. The purpose of this evaluation was to determine if there were existing fee methods that could be adapted to the Hot Spots Program. From May 1992 through August 1992, we held meetings with representatives from the districts in different areas of the state to receive the districts' input and ideas. A meeting was held in late January 1993 for representatives from all districts. The representatives were given a progress report on the status of the proposed changes for fiscal year 1993-94 and given an opportunity to comment on the proposed basis change.

We held seven public workshops to elicit comments and suggestions on alternatives to relying on the criteria pollutant inventory as the basis for the Fee Regulation. Notices of each workshop were sent to approximately 7,000 facility operators and members of the public. A copy of each workshop announcement is contained in Appendix IV.

In addition to the public workshops, we held three separate briefings for representatives from the affected industries and industry associations. Representatives from environmental groups were invited to a meeting to preview the information on the proposed changes to the Fee Regulation. However, no representatives attended the meeting.

At each of these meetings and workshops we received valuable input, comments, and suggestions on our fee basis proposal. All of these were considered and many of these suggestions were incorporated into our final proposal.

The Air Toxics Hot Spots Fee Regulation Committee (Committee) was instrumental in developing the proposed amendments to the Fee Regulation. The Committee includes representatives from the districts, the ARB and the Office of Environmental Health Hazard Assessment (OEHHA). The Committee met three times to develop the proposed amendments, and conferred once by telephone conference.

A summary of the meetings and workshops held during the development process is as follows:

Chronology of Public Participation

May 14, 1992	- Meeting with Sacramento district staff to discuss their regulation.
May 19, 1992	- Meeting with Bay Area staff to discuss their regulation.
May 29, 1992	- Telephone call with San Diego staff to discuss their regulation.
July 22, 1992	- Public workshop in Sacramento to elicit ideas for conversion.
August 5, 1992	- Meeting with Integrated Waste Management Board to receive information on their fees.
August 18, 1992	- Meeting with Department of Pesticide Regulation to receive information on their fees.
August 19, 1992	- Meeting with Department of Toxic Substances Control to receive information on their fees.
August 19, 1992	- Meeting with State Water Resources Control Board to receive information on their fees.
August 24, 1992	- Meeting with district personnel in Redding to get their input.
August 27, 1992	- Meeting with district personnel in San Luis Obispo to get their input.
August 28, 1992	- Meeting with district personnel in Victorville to get their input.
September 10, 1992	- Fee Regulation Committee meeting in Sacramento to discuss list of options and select final candidates.

October 28, 1992	- Fee Regulation Committee meeting in Sacramento to select proposals for December workshops.
November 17, 1992	- Briefing for industry representatives on our proposed options and plan for workshop.
November 19, 1992	- Briefing scheduled for representatives from environmental groups. No attendees.
December 15, 1992	- Public workshop on methods in Fresno.
December 16, 1992	- Public workshop on methods in Sacramento.
December 17, 1992	- Public workshop on methods in Los Angeles.
January 6, 1993	- Fee Regulation Committee meeting in Sacramento.
January 29, 1993	- Meeting for all districts, presented costs and draft fee schedules.
March 12, 1993	- Fee Regulation Committee conference call on latest changes.
March 25, 1993	- Meeting with industry on proposed regulation.
April 7, 1993	- Meeting with a Tri-TAC representative on proposed regulation.
April 16, 1993	- Public workshop on proposed amendments in Sacramento.
April 22, 1993	- Public workshop on proposed amendments in Fresno.
April 23, 1993	- Public workshop on proposed amendments in San Bernardino.

2. Options Considered for Distributing State Costs

From the ideas obtained at the public workshop in July 1992, the Committee developed a list of criteria to evaluate the proposed methods. Using the criteria, the Committee reduced the list of options to three primary proposals. The three primary options for allocating state costs were the following: to base the fees on population, to use weighted toxics emissions, and to base fees on the number of facilities in a program category.

The first option divides up the state's costs according to district population. This option is easy to do, and the database is accurate. One disadvantage is that the state Hot Spots workload is not directly related to population. Also, some districts have large commuter populations but relatively few facilities subject to the Act. Assessing fees based on population would result in these facilities paying a disproportionate share of the costs. Thus, the method is not equitable, not based on toxics emissions, and not recommended for facility fees.

The second option, weighted toxics, is related to toxicity and prioritization. This option uses the quantity of toxics emitted multiplied by a weighting factor to account for potency. A disadvantage of this option is that quality-checked data on all facilities are not available on a statewide basis. This option would not be based on a complete database and would not be stable.

The third option, selected by the Committee to discuss at public workshops, is to allocate state costs based on the number of facilities in program categories. This option is not complicated, and it is related to the proportion of work that the state does for individual districts. Toxics

emissions and priority are considered through the program categories. The method is equitable, and it uses stable numbers.

3. Options Considered for Calculating Facility Fees

For calculation of facility fees, the Committee chose three primary options: weighted toxic emissions, use of a flat fee plus an hourly rate, and use of facility program category.

The use of weighted toxics emissions as a facility fee basis is related to toxicity and prioritization. This option uses the quantity of toxics emitted multiplied by a weighting factor to account for potency. As stated above, a disadvantage of this option is that quality-checked data are not available on a statewide basis for all phases of the Program. This option would not be based on a complete database and would not be stable.

The flat fee plus an hourly rate option is workload related; however, accounting for all staff time by individual facility would cause an increase in workload for most districts. The information received from the districts also indicates that many resources are used in assisting small businesses who must comply with the Act. Charging these smaller businesses an hourly rate could cause an economic burden. This method would also make it difficult to ensure that all the costs would be recovered, as required by the Act.

The facility program category option is not complicated and is based on stable numbers. Toxicity and priority are considered and fees are related to the workload a particular type of facility requires of the district.

Based on all these considerations, we propose that the facility program category option be used as the basis for the facility fees for those districts requesting ARB adoption of their fee schedules. For greater equity, we propose that the same facility program categories be used for allocation of the state's costs among all 34 districts.

4. Program Categories

The proposed fee basis uses the number of facilities in various program categories. Facilities are classified into a program category according to the Air Toxics Hot Spots Program requirements and the Source Classification Codes (SCC) for that facility. The six basic program categories are as follows: Survey, Industrywide, Plan and Report, Risk Assessment, Notification, and Audit and Plan. The complete definitions for these categories are included in the proposed amendments to the regulation; however the definitions are summarized below for easier reference.

Survey facilities are facilities which emit less than ten TPY of criteria pollutants for which the facility operator must complete a survey of production, use, or other presence of listed substances. Industrywide facilities are facilities which emit less than ten TPY of criteria pollutants for which the district is preparing industrywide inventories.

A Plan and Report facility is a facility that has been required by the district by April 1, 1993, to prepare an individual inventory plan and report. A Risk Assessment facility is a facility that has been required by the district by April 1, 1993, to prepare a health risk assessment. In response to comments received, these two categories were further subdivided as described in subsequent paragraphs.

Notification facilities are those facilities that are required by the district to notify the public of potential health risks associated with the air toxics emissions from that facility. The Audit and Plan category refers to facilities that are required to prepare a Risk Reduction Audit and Plan by the Hot Spots Act.

To account for whether a risk assessment is under review at the OEHHA or at a district, we further subdivided the risk assessment category into Risk Assessment-District and Risk Assessment-State. During the early stages of the risk assessment preparation, the resources are expended at the district. Much of the state's resource effort occurs when the OEHHA reviews the health risk assessment. Following the OEHHA's review, the resource effort is again concentrated at the district, until the health risk assessment is approved. For the Risk Assessment-State category, we propose to use the risk assessments that were submitted to the OEHHA from April 1, 1992, through March 31, 1993. By specifying a one year period for the state category, a facility would not be assessed a fee for the Risk Assessment-State category more than once. For the Risk Assessment-District category, we propose to include facilities who have been notified by the district by April 1, 1993, that they must prepare a risk assessment.

a. Source Classification Codes

Recognizing the range of complexity in facilities, and in response to public comment, we further divided the Plan and Report and Risk Assessment Categories into subcategories to account for complexity. Based on districts' experience and the staff's analysis of facilities, there was found to be a correlation between the number of different SCCs at a facility and the complexity of that facility. Any operation that causes air pollution can be classified by one or more of these SCCs. Each SCC represents a specific process or function that is logically associated with a point source of air pollution within a given source category.

For the fee categories, as identified by different SCCs, we defined a facility with one or two processes as simple; a facility with three, four, or five processes as intermediate, and a facility with more than five processes as complex. Based on the criteria pollutant emission inventory, 79 percent of the facilities in the state are simple having one or two SCCs; 15 percent of the facilities are intermediate having three, four, or five SCCs; and six percent of the facilities are complex having more than five SCCs. (The category term "intermediate" with respect to SCCs and fees does not relate to the term "intermediate" used with respect to prioritization for health risk assessment.)

The use of program categories as the basis for fees is in accordance with the mandate of Senate Bill 1378, McCorquodale. The proposed basis of

program categories meets these requirements, because the program categories are determined by toxics releases and priority.

5. Resource Indexes

Resource indexes are used to allocate costs among the program categories. The resource indexes account for the different resource requirements and varying complexity of facilities in the different categories. The resource indexes are a method of balancing workload, toxicity of emissions, priority, and complexity among facility categories. A different set of indexes is used for allocating state core program, state risk assessment, and district program costs. A detailed explanation of the determination and use of the resource indexes is contained in Appendix V.

C. PROPOSED FEES

For consistency and greater equity, we propose that the same method be used for both allocation of state costs among districts and for facility fees in the districts requesting the ARB to adopt a fee schedule.

1. Distribution of State and District Costs

The state's costs to be recovered are the total amount reasonably anticipated by ARB and OEHHA to implement and administer the Air Toxics Hot Spots Program for the specified fiscal year. The districts' costs are used only in calculating facility fees for the districts requesting the ARB to adopt their fee schedules.

For districts requesting the ARB to adopt fee schedules for them, flat fees would be established for facilities in each of the program categories. Districts would specify the fee amounts for the facilities in two of the categories, Survey and Industrywide. The basic formula used in calculating a fee for the other categories is as follows: the cost is divided by the weighted number of facilities. This equals a unit cost. The unit cost is the cost for the simplest facility in a category. The unit cost is multiplied by the resource index to get the cost for the more complex categories. This basic formula holds true for all three of the types of costs associated with the program. These costs are district costs, state core program costs, and state risk assessment costs.

The individual facility fee is the sum of the appropriate district cost, the state core program cost, and if applicable, the state risk assessment cost. This method results in a uniform state portion of the fee for all facilities in a category in all districts. A detailed explanation of the fee calculation methodology is included in Appendix V.

2. Adjustment Factor

The existing fee calculation procedure includes an adjustment factor of five percent for the state's costs. In addition, a five percent adjustment factor is added to the districts' costs recovered through the Fee Regulation. The adjustment factors are included to allow for unforeseen closing of businesses, nonpayment, uncertainty in the facility category information, and uncertainty in the number of facilities that meet the small

business cap provision. We are not recommending any changes to the adjustment factors for fiscal year 1993-94.

3. Undercollection and Overcollection of Costs

The existing Fee Regulation specifies that districts who do not collect sufficient fees to recover state and district costs may, upon notifying the Executive Officer of the ARB, recover the shortfall through fees collected in the following fiscal year. The Fee Regulation also specifies that the Executive Officer may relieve a district of a portion of the fees which must be remitted to the state, if the district's shortfall is due to "demonstrated good cause," such as the unanticipated closure of facilities subject to fees. The regulation requires districts whose fees are adopted by the ARB, and that have collected more in Hot Spots fees than is necessary to recover costs, to report this over-collection to the ARB. The districts are then required to retain the excess for expenditure in the following two fiscal years. We are not proposing any amendments to these provisions.

4. Cap on Fee for Small Businesses

Among the criteria the Committee developed for evaluation of proposals for a new fee basis was that the method should have a small business consideration. For purposes of this Fee Regulation, we propose the following definition for small business: "Small Business" means a business which is independently owned and operated and meets the following criteria, or a business affiliated with another concern, if the combined activities of both concerns meet the following criteria: 1) the number of employees is 10 or less, and 2) the total annual gross receipts are less than $500,000.

This definition was used because it is the same definition used by the South Coast Air Quality Management District (AQMD), the district with the most facilities. This definition is simple, has been in use effectively for some time, and it is inexpensive for the district to determine applicability.

Many of the facilities subject to the provisions of the Hot Spots Act are small businesses. Small businesses typically operate with small reserves and low net income. Many of them are not able to absorb an increase in the cost of doing business. We also recognize that the current economic conditions in the state are not favorable; therefore, a cap for small businesses is appropriate.

In previous years, most of the small businesses paid low flat fees, because most of them emit less than 25 tons per year of criteria pollutants. Most of the small businesses will still pay the lowest fees or may qualify for a fee waiver if they are included in the Survey and Industrywide categories. In addition, most of the small businesses will be in the "Simple" facility program category and will, therefore, pay the lowest fees proposed. Some small businesses; however, could be in the higher fee categories, and could be subject to a fee that may be detrimental to the profitability of their business. To prevent undue hardship for these businesses, we propose that an upper limit of $700 be placed on any Hot

Spots fee that a small business would pay. Based on our economic impact analysis, a fee of $700 should not pose a burden on small businesses.

5. Cap on Fees for Plan and Report (Simple) Category

In response to a request from a district, we are proposing to set an upper limit of $1,000 on the fee for the Plan and Report (Simple) facility category. This limit will be at the district's option, provided that it does not result in a shortfall in the collection of revenue. The $1,000 limit will ensure that the fee for the Plan and Report (Simple) category will be less than the fee for the Risk Assessment-State (Simple) category. This corresponds to the typical workload required by these two categories.

6. Survey and Industrywide Categories

The fees for the Survey and Industrywide categories are specified by the respective districts and are not calculated by the ARB. The existing Fee Regulation contains Table 9 which is a three-tiered fee schedule for facilities emitting less than ten TPY of criteria pollutants that are subject to Hot Spots reporting requirements.

Generally, a facility emitting less than ten TPY year is subject to Hot Spots Act requirements if it falls into one of the facility classes listed in Appendix E to the Emission Inventory Criteria and Guidelines Regulation (see Appendix III). The Emission Inventory Criteria and Guidelines Regulation specifies three types of reporting requirements for less than ten TPY facilities. These requirements, and the corresponding proposed fees as contained in Table 9 of the existing Fee Regulation, are summarized below.

Facilities which are a part of a facility class in Appendix E-I to the Emission Inventory Criteria and Guidelines Regulation must submit an emission inventory plan and report. The fees for "E-I facilities" are shown in Column A of Table 9 of the existing Fee Regulation.

Facilities which are a part of a facility class in Appendix E-II to the Emission Inventory Criteria and Guidelines Regulation must submit a one-time facility survey form pertaining to the production, use, or other presence of a listed substance at the facility. The fees for "E-II facilities" or "Survey facilities" are shown in Column B of Table 9 of the existing Fee Regulation.

Each district may prepare "industrywide" air toxics emission inventory plans and reports for some facility classes. The fees for facilities included in an industrywide inventory are shown in Column C of Table 9 of the existing Fee Regulation.

The proposed method of basing fees on program category would include "E-I facilities" that are preparing individual plans and reports in one of the six basic program categories; therefore, the fees in Column A of Table 9 of the existing Fee Regulation would no longer be applicable. The proposed amendments delete Column A and re-label Column B and C as "A, Survey Facilities," and "B, Industrywide Facilities." Table 9 in the existing Fee Regulation is re-numbered as Table 4 in the proposed amendments.

Table 4 in the proposed amendments contains several additional changes. The table is updated to reflect fees for the districts requesting that the ARB adopt fee schedules for them and to delete the districts that have elected to adopt their own district Hot Spots fee rule. Several of the districts have also specified different fees from those in the existing regulation to reflect current district resource expenditures for that category of facility.

The existing Fee Regulation contains a provision for a waiver of the fees for Survey facilities if certain conditions are met. The Committee requested that similar language be included in the proposed amendments for Industrywide facilities. The facilities must meet the following conditions: the facility was previously assessed and has paid a Hot Spots program fee, and the district has determined that the continuing costs of implementing the Hot Spots Act requirements for the facility would be insignificant.

D. OTHER PROPOSED CHANGES

1. Supplemental Risk Assessment Fee

Senate Bill 1731, Calderon, directs the OEHHA to prepare and adopt risk assessment guidelines which include provisions to allow facility operators, at the operator's option, and to the extent that valid and reliable data are available, to include supplemental information. Senate Bill 1731 also provides that a supplemental fee may be assessed if the review of the supplemental risk assessment information substantially increases the cost of reviewing the health risk assessment by the district or the state. We are required by law to set the fee at an amount sufficient to cover the direct costs to review the information supplied by the operator.

The state has determined that a supplemental fee is not needed for the state's review of supplemental information; however, review by the districts may require additional district resources. The proposed amendments set the supplemental fee which the districts may assess at $2,000. The amount of this fee is based on the experience of the OEHHA regarding the time required to review similar information and an average per hour cost. For setting the fee, the OEHHA estimated that the review time would be approximately 20 hours. An hourly rate of $100 was used, based on the rates charged by consultants with appropriate qualifications.

2. Adoption of Fees

a. District Board Adoption of Fees

The existing Fee Regulation states that for districts adopting district Hot Spots fee rules, those rules or regulations shall be annually adopted. Some district rules have provisions which account for annual changes in the district share of state costs, district costs, and the base used for calculating fees. Annual adoption of a fee rule is not necessary for those districts.

The proposed amendments change this section of the regulation to allow more flexibility. The change in the specific language states that districts

with their own fee rules or regulations shall adopt the rule or regulation annually unless the rule or regulation contains a specific provision for automatically readopting the rule or regulation by operation of law.

b. State Board Adoption of Fees

The existing Fee Regulation requires annual adoption of fee schedules by the State Board. This is more restrictive than the Health and Safety Code section 44380 which states that the State Board shall annually review and may amend the fee regulation. The proposed amendments change applicable portions of the Fee Regulation for consistency with the Health and Safety Code. The proposed amendments state that the State Board shall annually review and may amend the fee regulation, including fee schedules. This provision could result in significant cost savings to both the districts and the state if an existing regulation is sufficient to ensure recovery of costs without amending it annually.

3. Districts Requesting State Adoption of Fee Schedules

Health and Safety Code section 44380 allows the ARB to adopt fee schedules for only those districts that submit district program costs to the ARB by April 1. The proposed fee schedules reflect each district's share of state costs, as calculated by the ARB, and district Hot Spots Program costs that have been approved by the governing board of the district at a noticed public hearing. Twelve districts have fulfilled the requirements and will have the ARB adopt Hot Spots fee schedules for them as a part of the statewide Fee Regulation. Those districts are: the Calaveras, Kern, Lassen, Placer, San Bernardino, Santa Barbara, and Tuolumne County Air Pollution control districts (APCDs); the Great Basin Unified APCD, and the Mendocino, Sacramento Metropolitan, San Joaquin Valley Unified and South Coast AQMDs.

Table 2, and proposed Tables 3, and 4 of the proposed amended regulation have been revised to reflect costs and fee schedules for those twelve districts.

Figure 3 lists the districts included in the state Fee Regulation and the districts adopting local fee rules.

4. Appendix A, The List of Substances

Appendix A of the existing Fee Regulation contains the List of Substances which is used to determine whether a facility is subject to the Hot Spots Act requirements. The Health and Safety Code section 44321 requires the ARB to maintain this list and the section enumerates criteria for placing substances on the list. We maintain an equivalent List of Substances for the Hot Spots Program in the Emission Inventory Criteria and Guidelines Regulation. To streamline the Fee Regulation, we propose to delete the List of Substances in Appendix A of the existing Fee Regulation, and incorporate by reference the List of Substances contained in the Emission Inventory Criteria and Guidelines Regulation. This will prevent confusion on which list to use to determine applicability of the law. The number of substances on the list remains unchanged.

5. Appendix B, District Toxics Inventories, Reports, or Surveys

Appendix B of the existing Fee Regulation is a list of air pollution control district inventories, reports, or surveys. These lists are among the criteria used to determine if a facility is subject to the Hot Spots Program, as required by Health and Safety Code section 44320(b).

We propose to re-label Appendix B as Appendix A and make two changes to the list of inventories. The San Joaquin Valley Unified APCD has updated their district toxics inventory. The title and date of the updated district list is reflected in the proposed amendments to the Fee Regulation. We propose to add the Monterey Bay Unified APCD Toxic Inventory to the proposed Appendix A.

6. Definitions

Section 90701 of the Fee Regulation defines the terms used in the regulation. The proposed change to a new fee basis requires the addition of numerous definitions. Definitions relating to the new fee basis have been added to this section, and definitions relating to the existing fee basis have been deleted.

Figure 3

State and Air District Adoption of Fees

Districts Included in the State Fee Regulation

Calaveras	Mendocino	San Joaquin Valley
Great Basin	Placer	Santa Barbara
Kern (Desert)	Sacramento	South Coast
Lassen	San Bernardino	Tuolumne

Districts Adopting Local Fee Rules

Amador	Lake	San Diego
Bay Area	Mariposa	San Luis Obispo
Butte	Modoc	Shasta
Colusa	Monterey	Siskiyou
El Dorado	North Coast	Tehama
Feather River	Northern Sierra	Ventura
Glenn	Northern Sonoma	Yolo-Solano
Imperial		

7. Deletions

Section 90704 of the existing Fee Regulation establishes fee calculation procedures, fees based on emissions of criteria pollutants, and fees for facilities on district inventories. The proposed method of basing fees on facility program categories eliminates the need for these portions of the Fee Regulation; therefore these portions have been marked for deletion.

Tables 3 through 8 of the existing regulation have also been deleted since they establish fees based on criteria pollutant emissions.

III.

ADOPTION OF FEES AND COLLECTION PROCESS

A. DISTRICT FEE RULES

The Hot Spots Act allows the districts the option of adopting fee rules rather than asking the ARB to adopt a fee schedule for the district. If a district adopts a fee rule to recover Hot Spots program costs, the district must follow the rule adoption procedures set forth in Health and Safety Code section 40725 through 40728. These procedures include no less than a 30-day public notice for hearings, opportunities for submission of public comments, and recordkeeping requirements. In addition, the Fee Regulation mandates that the district fee rules recover both state and district program costs.

B. STATE ADOPTED FEE SCHEDULES

The Hot Spots Act requires the ARB to adopt fee schedules for those districts that submit their program costs to the ARB by April 1. Because these anticipated program costs must be approved by formal action of the district's governing board, the public is given an opportunity to comment before the cost estimates are submitted to the ARB. The Fee Regulation requires the districts to specify how the collected fees will be used to implement and administer the program. This breakdown provides specific information on the local program budget and becomes part of the regulatory package.

The existing Fee Regulation requires that any fees collected beyond district and state program costs be retained by the districts for expenditure in the next two fiscal years. The regulation also requires that program revenues for the appropriate year be adjusted to reflect the carryover amount. The regulation specifies that the districts may increase their program costs to recover revenue shortfalls in the fiscal year after the year in which the shortfall is identified. The districts must also reduce district program cost estimates to reflect anticipated revenues from

specified flat fees. These provisions are needed to prevent unnecessary over- or under-collection of fees.

C. COLLECTION PROCESS

As required by Health and Safety Code section 44380(c), the districts must bill facilities for Air Toxics Hot Spots fees, whether the district adopts its own fee rule or is included in the ARB's Fee Regulation.

The existing Fee Regulation requires districts to bill facilities for fees imposed under this regulation, and it requires the district to remit the district's share of state costs, shown in Table 1 of the Fee Regulation, to the ARB by April 1. The existing regulation also specifies that a fee will be considered past due if the facility does not remit the fee to the district within 60 days after receiving the fee assessment notice. The districts must then assess a penalty of up to 100 percent of the assessed fee against any facility which fails to pay the Hot Spots fee.

IV.

STATE AND AIR POLLUTION CONTROL DISTRICT COSTS

A. BACKGROUND

In fiscal year 1992-93, we estimated that 30,000 facilities statewide were subject to the requirements of the Hot Spots Program. As in previous years, the basis for determining fees was the volume of criteria pollutants emitted from a facility. The estimated total cost to implement and administer the Hot Spots Program was $12,000,000. Of this amount, 29 percent was the state's cost of $3,472,000. The estimated costs to districts to implement and administer the Hot Spots Program for fiscal year 1992-93 was 71 percent of total program costs or $8,486,786.

The proposed state costs for implementing and administering the Act was anticipated to be $3,952,000 for fiscal year 1992-93. As a result of Board action and final approval of the State Budget on September 2, 1992, the program costs were reduced from $3,952,000 to $3,472,000. The final Hot Spots budget was a result of a one-time ten percent budget reduction, required by the final State Budget, of $395,200, and technical budget adjustments.

B. DISTRICT COSTS FOR FISCAL YEAR 1993-94

As of the writing of this report, we estimate that, again, approximately 30,000 facilities statewide will be subject to the requirements of the Hot Spots Program in fiscal year 1993-94. In the state's 34 districts, it is estimated that the total costs to these districts to implement and administer the Hot Spots Program for fiscal year 1993-94 will be $8,999,719. This represents an increase of approximately six percent from the fiscal year 1992-93 total of $8,486,786. Despite this overall increase, the anticipated districts' costs in 22 of the districts remains unchanged or is reduced from the districts' costs in fiscal year 1992-93.

Twelve districts received District Board approval of costs by April 1, 1993, and are requesting the ARB to adopt fee schedules for them. The districts requesting the ARB to adopt fee schedules for them are indicated in Table 4 by a double asterisk. District program costs, for the twelve districts which have requested the ARB to adopt fees for them, are increasing from $6.5 million for fiscal year 1992-93 to $6.8 million for fiscal year 1993-94, approximately a four percent increase. The costs were approved by the governing board of each district in open, noticed public hearings, in which the public was given an opportunity to comment.

Nine of these districts' costs remained unchanged or were reduced from fiscal year 1992-93, for a total reduction of $457,340. Three districts are increasing their costs for a combined total of $720,276. In these three districts, cost increases range from 1 to 22 percent. Facilities have been phased into the Program over several years, based on their volume of criteria pollutant emissions. Some of the differences in projected expenditures may reflect statewide differences in the number and variety of facilities in each phase of the program. Some cost increases are due to revenue shortfalls being carried forward from previous fiscal years and reevaluations of the resources needed to fully comply with mandates of the Act.

Table 4 shows the anticipated district Hot Spots Program costs for all districts for fiscal year 1993-94. The program costs shown in Table 4 may differ from the amounts shown in Table 2 of the Fee Regulation, "District Program Costs to be Recovered Through the Fee Regulation", which is the basis for the ARB fee calculations. This difference is due to adjustments for excess funds or deficits remaining from previous fiscal years and certain flat fees which are excluded from the fee calculations.

Of the 34 districts, 12 are estimating increases in district program costs for fiscal year 1993-94. Of the 12 districts with increased costs, two have indicated that their costs are increasing from eight to ten and fifteen percent, respectively, due to the requirements of SB 1731.

Some districts will adopt their own fee rules this year as authorized by the Fee Regulation. As a result, we cannot provide a comprehensive summary of the fees that will be assessed in these districts.

Table 4

District Cost Comparison Between Fiscal Years 1992-93 and 1993-94*
(Dollars)

District	Fiscal Year 1992-93	Fiscal Year 1993-94
Amador	21,943	21,943
Bay Area	375,000	375,000
Butte	94,529	38,272
Calaveras	8,750	0**
Colusa	27,200	13,750
El Dorado	1,000	20,505
Feather River	15,000	28,000
Glenn	18,769	8,995
Great Basin	6,000**	5,500**
Imperial	12,000	13,600
Kern (Desert)	64,874**	64,234**
Lake	1,000	5,800
Lassen	6,396**	3,000**
Mariposa	220	220
Mendocino	52,842**	26,714**
Modoc	200	0
Monterey	350,000	594,463
North Coast	27,370	27,370
Northern Sierra	6,000	6,000
Northern Sonoma	5,290	10,240
Placer	75,000	62,009**
Sacramento	123,609	102,314**
San Bernardino	402,739**	406,789**
San Diego	586,000	586,000
San Joaquin Valley	2,161,740**	1,830,600**
San Luis Obispo	25,000	67,588
Santa Barbara	349,700**	297,200**
Shasta	49,000**	50,000
Siskiyou	4,000	4,000
South Coast	3,260,697**	3,977,423**
Tehama	12,428**	9,090
Tuolumne	22,600	23,100**
Ventura	284,890	285,000
Yolo-Solano	35,000	35,000
	8,486,786	8,999,719

* Costs are estimates unless otherwise noted.
** District Board approved cost.

C. PROPOSED STATE COSTS FOR FISCAL YEAR 1993-94 WITHOUT NEW PROGRAM REQUIREMENTS

At the Board hearing on July 10, 1992, we projected that the state's costs for the Hot Spots Program would stabilize in fiscal year 1993-94. The proposed costs for fiscal year 1993-94, without the new requirements imposed by Senate Bill 1731, are anticipated to be $3,707,000. In the proposed budget for fiscal year 1993-94, the ten percent budget cut is restored, the Teale Data Center budget is reduced by $221,000, and there are statewide technical budget adjustments of $61,000.

D. DISCUSSION OF PROGRAM ACTIVITIES WITHOUT NEW PROGRAM REQUIREMENTS

The 34 individual districts, the ARB, and the OEHHA must coordinate to implement and administer the Hot Spots Program statewide. The Act specifies requirements and tasks that must be performed by these agencies.

Figure 4 summarizes the state's implementation activities under the Hot Spots Program without the new program requirements. These are discussed further as follows.

1. Facilities Subject to the Act

The Hot Spots Act applies to any facility that manufactures, produces, uses, or releases a listed substance and that emits more than ten tons per year (TPY) of a criteria pollutant. Facilities that emit less than ten TPY of a criteria pollutant are subject to the requirements of the Hot Spots Act if they are part of a facility class included in the ARB's Hot Spots emission reporting requirements. Facilities which were already listed on a district's toxics emission survey, inventory, or report are also subject to emission reporting requirements.

The requirements of the Act are phased in. Beginning in 1989, the requirements applied to facilities that emit over 25 TPY of criteria pollutants and that manufacture, produce, use, or release a listed substance. These facilities, as well as facilities on district toxics inventories, reports or surveys, make up Phase I of the program. Requirements for Phase II facilities began in 1990. Phase II facilities are those that emit 10-25 TPY of criteria pollutants and manufacture, produce, use, or release a listed substance. Phase III includes facilities that emit less than ten TPY of criteria pollutants, fall within certain industrial classes, and produce, emit or use a listed substance. The Phase III requirements, which began in 1991, must be completed two years after the corresponding deadlines for Phase I facilities. The approximate number of facilities subject to the Act in Phase I, Phase II, and Phase III are 4,100, 1,500, and 24,500, respectively.

Figure 4

State Hot Spots Program Implementation Activities Without New Program Activities

Methods Development/Emission Inventory/Regulatory Development and Implementation:

- Regulatory Development and Implementation (ARB)
  - --develop amendments to regulations
  - --prepare for and conduct public workshops
  - --prepare for and hold meetings with interested groups
  - --maintain list of substances (identify new and/or delete compounds) and respond to questions
  - --track status of implementation
  - --provide assistance to districts
- Methods Development and Review (ARB)
  - --review source tests
  - --review and approve alternative test methods in inventory plans and reports
  - --review and comment on pooled source test proposals
  - --conduct Toxic Source Test seminars for district staff
  - --develop air toxics emission factors
- Air Toxics Emission Data System (ATEDS) (ARB)
  - --perform computer programming tasks
  - --develop and implement electronic data submittal
  - --develop a personal computer version of ATEDs and operator's manual
  - --analyze data for setting priorities for toxic air pollutant control
  - --provide emission database information to other government departments and the public
  - --computer time contract (Teale Data Center)
- Emission Data Collection, Validation (ARB)
  - --conduct initial data review
  - --correct data (with district concurrence)
  - --conduct quality control checks and correct data
  - --follow-up with districts on data submittal and collection procedures
  - --data entry contract

Figure 4 (continued)

Health Risk Assessment:

- Health Risk Assessment Review (OEHHA)

  --review health risk assessments submitted by districts
  --correct health risk assessments that are inaccurate
  --identify areas of incompleteness in health risk assessments
  --supply comments to the district regarding health risk assessments
  --assist the district staff in interpreting the results of a health risk assessment

- Development of Noncancer Methods, Health Guidance Values, and Acute Effects Database (OEHHA)

  --identify new cancer potencies
  --identify new chronic and acute health exposure levels
  --develop chemical potencies for cancer causing agents
  --develop health reference exposure levels for substances causing acute and chronic health effects
  --develop noncancer health risk assessment methods
  --develop and operate a chemical database for substances having acute effects

- Risk Assessment Assistance (OEHHA or ARB as noted)

  --provide assistance to risk assessment preparers, the public and districts on appropriate procedures (OEHHA - health assessment, ARB - exposure assessment)
  --verify computer modeling and meteorological data (ARB)
  --provide assistance on health reference exposure levels and chemical potencies (OEHHA)
  --review changes to emission inventory procedures to ensure that data are usable for health risk assessment (OEHHA)
  --update of health risk assessment personal computer program (ARB)

Public Notification:

- Develop Public Notification Procedures (OEHHA - health assessment, ARB - exposure assessment)

  --assist districts and facilities with public notification procedures and public meetings

- Participate in Public Notification Workshops and Hearings (OEHHA and ARB)

Implementation requirements for the three phases of the Hot Spots program overlap, as shown in Figure 5. As of August 1991 all three phases of the program had been initiated.

With the enactment of SB 1731, a new phase has been added to the program. Implementation of the new requirements began January 1993. This is discussed further in Section E. New Program Requirements and Proposed State Costs.

2. Reporting Requirements

Facilities subject to the Act must prepare air toxics emission inventory plans that indicate how emissions will be measured or calculated. These plans must be reviewed by the district. Upon approval by the district, the facility operator must implement the plan by submitting an inventory of emissions to the district within 180 days. The information from the facilities is tracked biennially and updated if necessary. The Emission Inventory Criteria and Guidelines Regulation, adopted by the ARB, contains detailed Hot Spots Program emission reporting requirements.

For certain classes of facilities, the districts must prepare industrywide inventories; facility operators are not required to prepare individual reports. The districts determine whether an industrywide inventory is appropriate by reviewing the criteria specified in the Act. These criteria include the following: the proportion of small businesses in the industry, the uniformity of emissions characteristics within the industry, and the financial burden to the facilities within the industry if required to prepare individual inventory plans and reports.

After reviewing the emission inventory data, the districts must rank facilities into high, intermediate, or low priority categories to assess potential health risks. High priority facilities must prepare a risk assessment to evaluate the potential adverse health effects on the exposed population and submit it to the district. To respond to concerns from the exposed public, the districts may also require facilities not designated as "high priority" to prepare and submit a risk assessment. The CAPCOA has developed the following two documents to help districts and facility operators meet these requirements: the CAPCOA Air Toxics "Hot Spots" Program Facility Prioritization Guidelines (July 1990) and the CAPCOA Air Toxics "Hot Spots" Program Risk Assessment Guidelines (January 1992).

The risk assessments are reviewed by the district and by the OEHHA. The districts must also make the health risk assessments available for public review upon request. If a district determines that there is a potentially significant health risk associated with emissions from a facility, the facility operator must notify all exposed persons of these findings. The CAPCOA has developed a document to help districts develop public notification procedures, the CAPCOA Air Toxics "Hot Spots" Program Public Notification Guidelines (October 1992).

Figure 5

Air Toxics Hot Spots Program Implementation Schedule (1)

	1989	1990	1991	1992	1993	1994
GUIDELINES/DATA MANAGEMENT						
o ARB issues emissions inventory guidelines...	MAY					
o ARB develops data management program.....	JULY					
o ARB updates emission inventory guidelines.....		June				
o ARB updates the list of substances and revises the inventory guidelines accordingly.....		Sept	June			
EMISSIONS INVENTORY						
o Industries submit inventory plans.....	AUG	AUG*	Aug**			
o Districts approve plans.....	Dec	Dec*	Dec**			
o Industries submit toxic emissions data.....		June	June*	June**		
o Districts review data.....		Sept	Sept*	Sept**		
o Industry submits biennial update plans (2).....			Aug	Aug* ...	Aug**/Aug ..	Aug*
RISK ASSESSMENT						
o Districts designate priorities.....		DEC	Dec*	Dec**		
o Specified facilities submit risk assessments.....			May	May*	May**	
o OEHHA completes review of risk assessments.....			Nov	Nov*	Nov**	
o District approval of risk assessments.....				May	May*	May**
o Public Notification...(follows risk assessment approval).....				May	May*	May**
o Industry submits biennial update risk assessments (2).....					May	May*
REPORTS						
o Districts begin issuing annual reports.....			JULY			

Phase I: Large sized (>25 ton) facilities and facilities listed on toxics inventories
* Phase II: Medium sized (10 to 25 ton) facilities
** Phase III: Small sized (<10 ton) facilities

(1) This figure provides the earliest possible dates for achieving the milestones of the Air Toxics "Hot Spots" Program. Submittal dates specified in the Health and Safety Code are shown in uppercase print.

(2) Dates in which the biennial update milestones are outlined to start unless an alternate schedule is specified by the district.

3. District Activities

The districts review toxics emission inventory plans and reports and subsequent biennial updates before forwarding the information to the ARB. Industrywide emission inventory reports for some classes of facilities, comprised mainly of small businesses, are prepared by the districts to minimize the economic impact on these facilities. The emission data findings are reported to the OEHHA, the Department of Industrial Relations, and the city or county health department.

After reviewing emission inventory data, the districts prioritize facilities into low, intermediate, or high priority categories. Based on a facility's priority, the district may require preparation of a health risk assessment. Once a facility's risk assessment is submitted, the district must review the emission data and air dispersion modeling before forwarding it to the OEHHA for review. The OEHHA reviews the health risk assessment for accuracy and verifies that the correct chemical potencies have been used in determining the potential health risk. Based on the OEHHA review and comments, the district may approve the risk assessment, request corrections from the facility, or determine that the facility's potential health risk is significant enough to warrant public notification. The districts are required to establish public notification procedures.

Other district responsibilities include insuring that any permit issued to a new or modified source complies with the Hot Spots Act and publishing an annual report on the status of the district Hot Spots Program.

The districts are also required to collect Hot Spots fees and forward the district's portion of the state's cost to the state. Some districts are also responsible for developing and implementing their own fee rules.

4. State Activities

The ARB and the OEHHA are responsible for specific programmatic tasks specified in the Hot Spots Program statute. The state's requirements, prior to the 1992 amendments to the Act, may be subdivided into the following three categories: a) methods development/emission inventory/regulatory development and implementation, b) health risk assessment, and c) public notification.

a. Methods Development/Emission Inventory/Regulatory Development and Implementation

Regulatory Development and Implementation

Each year, as required by the Act, we review the Fee Regulation and develop amendments as appropriate. To insure the state's and districts' costs are recovered, we review the methodologies for distributing the state's cost and facility fees with the Committee and develop the subsequent fee basis. We consult with the districts to verify district program costs

and facilities subject to the Act, conduct public workshops and meetings, and author the staff report for the Fee Regulation.

To insure that districts and facilities submit useful, accurate, and uniform emission information, we developed the Emission Inventory Criteria and Guidelines Regulation which details the procedures to be followed in collecting and submitting emission data to the district. We are currently proposing to amend this regulation to streamline emission reporting to reduce costs and burdens on resources of affected facilities. To amend the regulation, we must prepare for and conduct public workshops to inform the public of the proposals. We also hold meetings with affected industries and environmental groups to inform them of the proposals. The list of substances in the inventory regulation is regularly reviewed to identify new compounds which should be added to the list or to delete compounds as necessary.

We track the status of implementation within the districts, provide assistance, and work closely with the air district staffs on a daily basis. We also review legislation regarding the emission inventory and fees.

Methods Development and Review

Under the Emission Inventory Criteria and Guidelines Regulation, the ARB is responsible for specifying the test methods when source testing is required to quantify emissions of toxic pollutants from specific sources. This activity includes the development of emission test methods, the review of pooled source test proposals, the review of source test reports for quality assurance, and the approval of requests to use alternative test methods. For example, we have reviewed over 450 pooled source test proposals to date. To keep the district staffs informed of source test procedures, we also conduct periodic seminars.

To streamline future emission inventory reporting and to ensure consistency and accuracy in the reported data, we will develop air toxics emission factors. In this endeavor, we may also conduct a limited amount of follow-up source testing. Through a research contract, a contractor will use source test data, validate it based upon the Hot Spots source test protocols, and develop air toxics emission factors. These emission factors should decrease the need for future source testing.

Air Toxics Emission Database

The ARB developed and manages the statewide Air Toxics Emission Data System (ATEDS). Maintaining and updating the database, and analyzing the resultant data, involves various computer programming tasks. We are also developing and implementing a system which would allow electronic submittal of emission data from the districts. In addition, we are developing a personal computer version of ATEDS.

Based on the compiled toxics emissions, we analyze the data and set priorities for identifying and controlling toxic air contaminants. The ARB

also makes the emission data available to other government agencies and the public.

Emission Data Collection and Validation

When toxics emission data are received from the districts, we conduct an initial data review and make appropriate corrections prior to inputing the data into the ATEDS. We routinely coordinate with districts on data collection procedures. Numerous quality control checks are performed to insure data accuracy and further corrections to the data may result.

The ARB also contracts with the state's Teale Data Center for the computer time necessary to run the various analyses. We also contract for temporary data entry personnel.

The total resources required by the state to carry out the tasks outlined in the Methods Development/Emissions Inventory/Regulatory Development and Implementation section is $1,513,000, which includes the computer Teale Data Center contract of $175,000 and a key data entry contract of $164,000.

b. Health Risk Assessment

Health Risk Assessment Review

Operators of the highest priority facilities within a district are required to submit assessments of the potential health effects (risks) that may be associated with emissions from the facility. The OEHHA is responsible for reviewing health risk assessments prepared by facilities and submitted by the districts. The OEHHA reviews the health exposure assessment and verifies that the appropriate chemical potencies have been employed in assessing potential health risk. As part of the review, the OEHHA corrects risk assessments that are inaccurate and identifies areas of incompleteness. If inconsistencies are found, the OEHHA may request the district to verify the air dispersion modeling data. In comparison to standard risk assessment methodologies, the OEHHA also reviews risk assessments that contain risk assessment results from the use of non-standard methodologies. Following the review, the OEHHA staff supplies comments to the districts and assists the district's staff in interpreting the results.

Development of Noncancer Methods, Health Guidance Values, and Acute Effects Database

The OEHHA is responsible for identifying new cancer potencies, new chronic exposure levels, and new acute health exposure levels. The OEHHA also develops chemical potencies for cancer causing agents and develops health reference exposure levels for substances causing acute and chronic health effects. Development of both noncancer risk assessment methods and of a chemical database for substances having acute effects is ongoing.

Risk Assessment Assistance

We provide assistance to risk assessment preparers, the public, and districts on appropriate exposure assessment procedures. The ARB also verifies computer modeling and meteorological data. The OEHHA provides assistance to these same groups on health reference exposure levels and chemical potencies involved in quantifying potential health risk. Changes to emission inventory procedures are reviewed to ensure that the data are usable for health risk assessment. The ARB also updates the health risk assessment personal computer program that is used to prepare low cost risk assessments.

The ARB and the OEHHA work with the CAPCOA and the districts to provide risk assessment guidelines for use in preparing risk assessments. The guidelines have been updated annually since 1991.

The total of the state's costs required to perform the tasks associated with health risk assessment are $1,911,000. Included in this amount are contracts totaling $870,000. An allocation of $500,000 allows the OEHHA to contract with qualified, independent contractors with expertise in specialized areas to review risk assessments. This allocation was necessary due to the unanticipated large number of risk assessments that were submitted by the districts for review. A contract for $220,000 is used for development of noncancer risk assessment methodology, as well as for literature searches and background information on chemicals to establish reference levels. A third contract for $150,000 is used to develop and maintain a database of acute toxicity values.

c. Public Notification

When a district determines that a risk assessment indicates there is a significant potential health risk associated with emissions from a facility, the operator of the facility must provide notice regarding the results of the risk assessment to exposed persons. The ARB and OEHHA have worked in conjunction with the CAPCOA to develop and publish public notification guidelines. The ARB and the OEHHA also assist the districts and facilities with developing specific procedures for public notification. Both groups participate, as requested, in public notification workshops, hearings, or when needed to interpret risk assessment results to the public.

The total state resources required to perform the tasks associated with public notification are $283,000.

E. NEW PROGRAM REQUIREMENTS AND PROPOSED STATE COSTS

Senate Bill 1731, Calderon, amended the Act in 1992. Specifically, it requires the OEHHA to adopt new facility risk assessment guidelines, after consulting with CAPCOA's Risk Assessment Committee and the ARB; circulating them to the public and regulated community; submitting the guidelines to the Scientific Review Panel on Toxic Air Contaminants; and holding public workshops. To the extent valid data are available, these newly mandated

risk assessment guidelines must allow facility operators to include alternative risk parameter values, likelihood distributions of risk estimates, microenvironmental characteristics, data from dispersion models, and population distributions. Potentially, unique statistical methods could be employed in addressing uncertainty in parameter values. The OEHHA is also required to provide guidance to the districts in considering this supplemental information, when it is included in a risk assessment. Supplemental information must be reviewed by the OEHHA as part of the risk assessment review. Figure 6 summarizes the state's implementation activities under the new requirements.

As proposed in the Governor's budget for fiscal year 1993-94, the cost to the OEHHA to develop, gain approval, and maintain the new risk assesment guidelines would be $1,241,000 including a contract of $405,000. These contract dollars would be used to research and evaluate likelihood distribution-based risk assessment methodology, microenvironmental factors, dispersion modeling, and demographic factors. The cost to the ARB to assist the OEHHA in preparation of the guidelines in fiscal year 1993-94 is $78,000. The total cost for the risk assessment guidelines is $1,319,000.

As a result of comments received during the workshops held in April, and the state's current economic climate, the OEHHA proposed to reduce the costs associated with development of the new risk assessment guidelines by $373,000. This cost reduction will lower the number of microenvironmental factors which would be evaluated for uncertainty. The OEHHA will not have the resources to address air quality modeling and emissions uncertainty analysis in the guidelines. Further, development of the guidelines will take longer. This reduction brings the cost for development of the new risk assessment guidelines to $946,000.

1. Risk Reduction Requirements (New for 1993)

Whenever a district judges that there is a potentially significant risk associated with emissions from a facility, the facility operator is required to conduct a risk reduction audit and develop a plan to implement airborne toxic risk reduction measures. These measures include changes in production processes or materials, operation and maintenance, and emission control methods. The plan must result in reduction of emissions to a level below the significant risk level within five years. Under certain circumstances, the district may either lengthen (up to five additional years) or shorten the time period to implement the plan. Upon district identification that a facility presents a significant risk, facility owners have six months to submit their risk reduction audit and plan to the district.

Another requirement of Senate Bill 1731 is that facilities, whose emissions of toxics are determined by the district to pose significant potential health risks, must conduct a toxic risk reduction audit and develop a plan that evaluates airborne toxic risk reduction measures (ATRRMs). ATRRMs are defined as changes in production or materials that will reduce toxic emissions. The plans submitted by these high risk facilities must describe how, within five years, toxics emissions will be lowered below a level that poses no significant health risks.

Figure 6

New Requirements

Senate Bill 1731, Calderon

- Health Risk Assessment Guideline Development (OEHHA)
  - --develop, maintain, and administer new facility risk assessment guidelines
  - --develop risk expressions that describe the probability and uncertainty in the risk assessment
  - --develop microenvironmental, dispersion modeling (ARB to assist), and demographic factors for facility specific health risk assessments
  - --coordinate with the CAPCOA and the ARB
  - --notify the public of guidelines developed
  - --hold public workshops to discuss guidelines
  - --present guidelines to Scientific Review Panel for comment
  - --provide guidance to districts
  - --review supplemental health risk assessment information
  - --revise and update guidelines as appropriate
- Risk Reduction Guidelines and Checklists Development (ARB)
  - --assist smaller businesses to obtain information, assess risk reduction methods, and apply risk reduction techniques
  - --locate possible emission sources
  - ~~--identify cost-effective control technologies~~
  - --indicate possible pollution prevention measures
  - --develop checklists for self-conducted audits and risk reduction options for industries comprised mainly of small businesses
- Evaluate Risk Reduction Audits and Plans (OEHHA)
  - --evaluate and provide assistance on air toxics risk reduction audits and plans to districts and facilities
  - --develop a description of the incremental reductions in risk that occur when exposure is reduced
  - --evaluate whether toxic risk reduction measures will increase risk from exposure to the chemical in another media

We are required to assist smaller businesses in complying with the risk reduction audit and plan requirements of Senate Bill 1731. The bill requires the ARB and the districts to assist smaller businesses, that have inadequate technical and financial resources, to obtain information, assess risk reduction methods, and apply risk reduction techniques. The ARB would identify emission points to control, identify cost-effective control technologies, and indicate possible pollution prevention measures. Options for risk reduction may include modifying feedstocks, evaluating system enclosures, controlling emissions, and modifying operational standards and practices. Information received from the districts indicates that many categories of smaller businesses will be designated as high risk facilities and will be required to reduce their emissions below a level which poses no potential significant health risk.

For any industry that is comprised of mainly smaller businesses, with substantially similar technology, the ARB must develop a self-conducted audit and checklist. The ARB, in cooperation with the districts, would forward the checklist to the businesses to assist them in meeting the audit and plan requirement. For certain source categories that have statewide significance, this assistance may be in the form of risk reduction guidelines.

As proposed, the ARB would develop risk reduction guidelines, each covering different small business categories. The risk reduction guidelines for the identified source categories would be used by smaller businesses and would be made available to other facilities wishing to voluntarily reduce their emissions. As proposed, the ARB would develop risk reduction guidelines covering various small business categories. In addition to identifying possible emission points, the guidelines would assist a facility in selecting risk reduction methods.

Developed by the ARB, the self-conducted audit and checklist, for any industry comprised of mainly smaller businesses, will allow a small business operator to avoid the expense of developing an individual facility audit and plan and provide ease in determining applicable measures to meet the new requirements of the Hot Spots Act.

The cost to the ARB to assist small businesses in reducing their risk by developing the self-conducted checklist and the risk reduction guidelines is $391,000 for fiscal year 1993-94.

The OEHHA anticipated that they would be asked to evaluate air toxics risk reduction audits and plans and provide assistance to facility operators, the ARB, and the districts regarding verification of proposed health risk reductions. In response to comments received at the workshops and because of the state's current economic condition, the OEHHA is proposing to reduce the cost for audit and plan review by $30,000, and redirect $126,000 to development of new risk assessment guidelines. Because of these reductions and redirection, OEHHA will not be able to evaluate risk reduction audits and plans in the coming fiscal year.

The state's total proposed cost, contained in the Governor's budget, to implement Senate Bill 1731 in fiscal year 1993-94 is $1,920,000. The proposed reductions of $457,000 reduces the implementation costs to $1,463,000. Reducing the implementation costs will affect planned program activities as described above.

F. PROPOSED STATE HOT SPOTS BUDGET FOR FISCAL YEAR 1993-94

Although we were not anticipating increases in state costs for fiscal year 1993-94, legislation enacted last year (Senate Bill 1731, Calderon, Chapter 1162, 1992) imposes significant new requirements on the program which will require additional resources. To fulfill this new legislative mandate, the Governor's proposed budget for the Air Toxics Hot Spots Program for fiscal year 1993-94 reflects an increase of $1.9 million, $1,451,000 for the Office of Environmental Health Hazard Assessment (OEHHA) and $469,000 for the ARB. After restoration of last year's one-time ten percent budget decrease and technical budget adjustments, total program costs would increase from a current $3,472,000 for fiscal year 1992-93 to $5,627,000 for fiscal year 1993-94.

In April 1993, we held public workshops to present the proposed state cost increase and to discuss the other proposed changes to the Fee Regulation. As a result of the comments we received at the workshops and in recognition of the current economic climate, we will be proposing that the increase be reduced by $457,000 to a total of $1.5 million. The reduced budget will affect planned program activities. OEHHA will not be able to evaluate risk reduction audits and plans in the coming fiscal year. OEHHA also will not address air quality modeling and emissions uncertainty analysis in the new risk assessment guidelines. Fewer microenvironmental factors will be evaluated for uncertainty. Development of facility-specific risk assessment guidelines will be slower.

Including the $457,000 reduction to implement Senate Bill 1731, the total proposed state costs to implement and administer the Hot Spots Program for fiscal year 1993-94 is $5,170,000. This is a 49 percent increase over the state's budget for fiscal year 1992-93. Of the $5,170,000, a total of $1,463,000 is proposed for implementation of new legislation, Senate Bill 1731. The addition of the state's adjustment factor of five percent brings the total state cost to be recovered to $5,428,500.

The current year budget, the proposed budget for the state costs associated with the Hot Spots Program, and the reduced proposal are shown in Table 5. The proposed state Hot Spots Program costs are shown in Figure 7. A detailed breakdown of the state Hot Spots Program costs is provided in Appendix VI.

Table 5

Current Year Budget and Proposed Budget

Fiscal Year (FY) 1992-93	ARB	OEHHA	Total
Proposed	2,172,000	1,780,000	3,952,000
10% Budget Reduction	-395,000	0	-395,000
Statewide Technical Budget Adjustment*	-85,000	0	-85,000
Final FY 1992-93	1,692,000	1,780,000	3,472,000
FY 1993-94 Governor's Budget			
Restoration of 10% Reduction	395,000	0	395,000
Database Savings	-221,000	0	-221,000
Statewide Technical Budget Adjustments*	61,000		61,000
SB 1731 Requirements			
Limited-term positions**	74,000	272,000	346,000
One-time equipment and contracts***	28,000	175,000	203,000
Remaining costs	367,000	1,004,000	1,372,000
Subtotal for SB 1731	469,000	1,451,000	1,920,000
Initial Proposed FY 93/94	2,396,000	3,231,000	5,627,000
Reduced Proposal			
Reduced Calderon Activity			
Limited-term positions		-272,000	-272,000
Other costs		-185,000	-185,000
Subtotal	0	-457,000	-457,000
Reduced Proposed FY 93/94	2,396,000	2,774,000	5,170,000

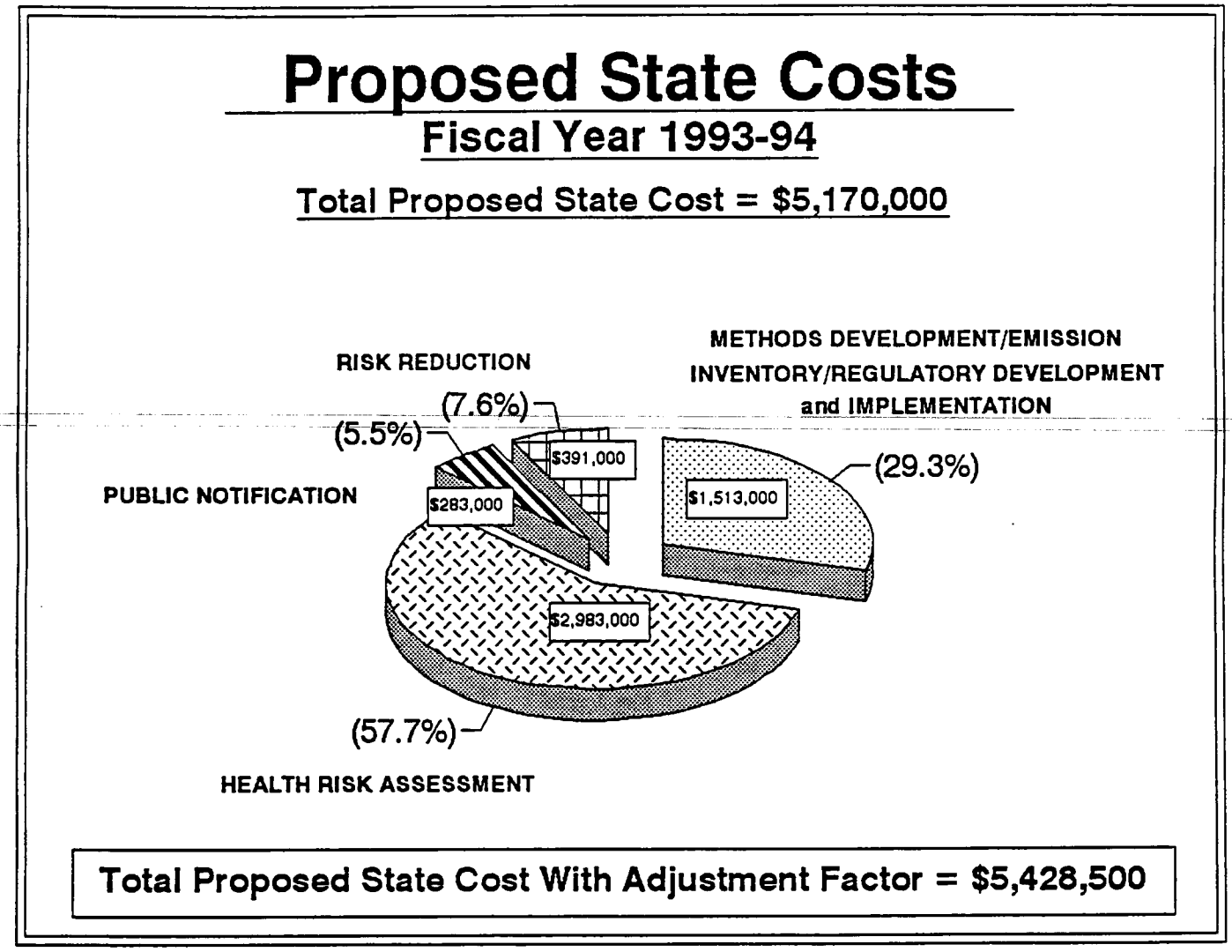
* Reflects employee salary adjustments.

** ARB: 1.0 position one-year limited term
OEHHA: 5.0 positions subject to reevaluation in fiscal year 1995-96.

*** ARB: One-time equipment costs
OEHHA: One-time equipment ($125,000) and contract ($50,000) costs.

Figure 7

Proposed State Costs For Fiscal Year 1993-94



G. DISTRIBUTION OF STATE COSTS

1. Distribution of State Core Program Costs

For the purpose of distributing the state's cost to the districts in the Fee Regulation, the following costs are distributed over all facilities as core program costs: method development, emission inventory, and regulatory development costs; health guidance value, noncancer risk assessment methods and acute toxicity database development costs; risk assessment guideline development cost (new requirement of Senate Bill 1731); and risk reduction guidance to small businesses cost (new requirement of Senate Bill 1731). This cost total is $3,801,000 or, with inclusion of the five percent adjustment factor, $3,991,050.

The methods development, emission inventory, and regulatory development costs are distributed over all facilities as core program costs. The development and review of source tests and pooled source test are necessary for facilities to accurately report emissions. All facilities subject to the Act are required to submit toxics emission data using the criteria outlined in the Emission Inventory Criteria and Guidelines Regulation. To submit accurate toxics emission data, facilities must consult and follow this regulation. Each facility must submit documentation of their toxics emissions to the district and, subsequent to this, the data are forwarded to the ARB. We are responsible for data verification and compilation into the ATEDS. We are required by the Act to review and adopt a fee regulation. All facilities which are subject to the Act are subject to the fee regulation. All facilities, therefore, are assessed a state cost related to methods development, emission inventory, and regulatory development.

The development of noncancer risk assessment methods, health guidance values, and the acute effects database costs of $825,000 are distributed among all facilities as core program costs for the following reasons. The OEHHA is charged with identifying and developing chemical potencies and exposure levels in order to assess potential health risks posed by emissions. Toxic air emissions from a facility are quantified and evaluated and all facilities are prioritized by the districts utilizing these potencies and exposure levels. The development of noncancer risk assessment methods is ongoing, and again, these methods are used to calculate health guidance values. The development of the chemical database for substances having acute effects is not directed at any specific facilities, but again it is used as a basis for providing health guidance values used in the program. All facilities, therefore, are assessed a cost for development of these values and the database.

The cost for the development and implementation of the risk assessment guidelines required by the newly-chaptered legislation, Senate Bill 1731, is divided among all facilities. It is expected that information contained in these guidelines will be used to continue to prioritize facilities. The facilities which would perform a risk assessment based on these new guidelines are currently categorized as Plan and Report facilities for distribution of the state's cost. It is unknown how many facilities will be

required to perform health risk assessments utilizing the new guidelines. For fiscal year 1993-94, we propose to distribute the guidelines development cost of $946,000 plus the redirected $126,000 over all facilities, but the distribution will be reevaluated for fiscal year 1993-94.

The ARB is mandated to assist smaller businesses in complying with the audit and plan provisions of Senate Bill 1731. The ARB plans to develop risk reduction guidelines and facility-conducted checklists. The checklists will allow smaller businesses to avoid the cost of developing an individual audit and plan. By definition smaller businesses would utilize these guidelines, but the facilities required to lower toxic emissions have yet to be identified. In light of this, and to lessen the economic burden on these smaller businesses, the costs associated with developing these guidelines and checklists of $391,000 are distributed among all facilities as core program costs.

2. Distribution of State Risk Assessment Costs

Costs for health risk assessment review, risk assessment assistance, and public notification are the state's risk assessment costs to be distributed among the districts. These state costs are distributed among the state risk assessment facilities (simple, intermediate, and complex), notification, and audit and plan facilities. The total cost distributed among these facilities is $1,369,000 or, with inclusion of the five percent adjustment factor, $1,437,450.

The state's costs to review health risk assessments, as well as risk assessment assistance, of $1,086,000 are incurred reviewing risk assessments and verifying the meteorological and air dispersion modeling data from specific facilities. Therefore, these costs are spread only among facilities that are defined as state risk assessment, notification, and audit and plan facilities.

The state's costs for notification of $283,000 are distributed only among the five previously identified state risk assessment categories. Only high risk facilities that have been determined by the district to pose a significant potential health risk must notify the exposed individuals. Many notification facilities may be required to conduct audits and prepare a plan to lower their risk below significant levels. To lessen the economic impact, the costs for notification are distributed among all risk assessment facilities. It is equitable that these costs be assessed only on the risk assessment facilities because only high priority facilities will be subject to these program requirements.

The state will not evaluate risk reduction audits and plans in the coming fiscal year. The two positions previously allocated to this task will be redirected to risk assessment guidelines development for fiscal year 1993-94.

3. Districts Share of the State's Cost

As described earlier, to distribute the state's cost among the districts, the number of facilities in each of the program categories and resource indexes are used to distribute the core program and risk assessment costs. The indexes are described in Appendix V of this report. With the new program costs, the portion of the state's costs for 17 of the districts would be reduced or unchanged from fiscal year 1992-93. The other 17 districts' share of the state's costs would increase.

A comparison of the distribution of state costs among districts between fiscal year 1992-93 and fiscal year 1993-94 is shown in Table 6. This table also shows a comparison from just the method.

H. TOTAL PROGRAM COSTS

Overall statewide program costs for fiscal year 1993-94 will be $14.2 million, of which 36 percent are state costs and 64 percent are district costs.

Although we are proposing an increase in state costs to address new legislative requirements, we expect that over the next five years, state program costs will decline. For example, in the absence of the new legislative requirements, the Hot Spots Program is approaching full implementation and program costs have stabilized. In June, the Board will consider amendments to the Emission Inventory Criteria and Guidelines Regulation which simplify reporting requirements.

The new simplified reporting requirements will substantially lower costs incurred by most facilities to comply with the requirements, for fiscal year 1993-94 and in the future. Also, in implementing the new legislative mandates, the ARB effort to develop self-conducted audit checklists will result in substantial cost savings to affected businesses, because they will be able to largely rely on ARB guidance and avoid costs they would otherwise incur.

The estimated total state and district costs for fiscal year 1993-94 are $14.2 million, an 18 percent increase over fiscal year 1992-93. Of this total, approximately $9.0 million or 64 percent are district costs, and approximately $5.2 million or 36 percent are state costs. The total state costs increase from $3.4 million for fiscal year 1992-93 to $5.2 million for fiscal year 1993-94, a 49 percent increase. The ARB's share of the proposed state cost is $2.4 million and the OEHHA's share is $2.8 million. In addition to these costs, a five percent adjustment factor is included in the fees. This adjustment factor is necessary to account for unforeseen business closures, nonpayment, and uncertainty in the emissions information.

The estimated total state and district costs for fiscal year 1993-94 are shown on Figure 8. The portion of the state costs due to the new requirements of Senate Bill 1731 are also shown.

Table 6

Comparison of Distribution of State Costs Among Districts

A	B	C	D	E	F
DISTRICT	COST TOTAL 1992-93	92-93 NEW METHOD	% CHANGE METHOD	COST TOTAL 1993-94	% CHANGE FROM 92-93
AMADOR	20010	5391	-73	8761	-56
BAY AREA	723761	260949	-64	408052	-44
BUTTE	17772	15443	-13	25098	41
CALAVERAS	1305	728	-44	1184	-9
COLUSA	13697	14423	5	23441	71
EL DORADO	8536	4079	-52	6630	-22
FEATHER RIVER	11445	11072	-3	17995	57
GLENN	12429	15638	26	21559	73
GREAT BASIN	6131	7430	21	12076	97
IMPERIAL	20309	11510	-43	20126	-1
KERN (DESERT)	114252	49189	-57	59117	-48
LAKE	9571	2040	-79	3315	-65
LASSEN	7640	2331	-69	3788	-50
MARIPOSA	547	291	-47	474	-13
MENDOCINO	8893	7867	-12	12786	44
MODOC	0	0	N/A *	0	N/A
MONTEREY	110542	90858	-18	124833	13
NORTH COAST	53062	5391	-90	8761	-83
NORTHERN SIERRA	20936	13549	-35	22020	5
NORTHERN SONOMA	62021	3059	-95	4972	-92
PLACER	15075	19814	31	32201	114
SACRAMENTO	32002	67010	109	95793	199
SAN BERNARDINO	263487	53308	-80	79541	-70
SAN DIEGO	140276	245495	75	304883	117
SAN JOAQUIN VALLEY	754028	550906	-27	820519	9
SAN LUIS OBISPO	97624	43505	-55	61449	-37
SANTA BARBARA	56095	62214	11	97100	73
SHASTA	24822	28886	16	41547	67
SISKIYOU	2748	874	-68	1421	-48
SOUTH COAST	1027918	2186259	113	2929608	185
TEHAMA	5460	2622	-52	4262	-22
TUOLUMNE	13479	4662	-65	7577	-44
VENTURA	68159	73331	8	115322	69
YOLO-SOLANO	10607	32197	204	52327	393
Total State Budget	3734639	3892321		5428538	

All Figures in Columns B, C, and E are in Dollars

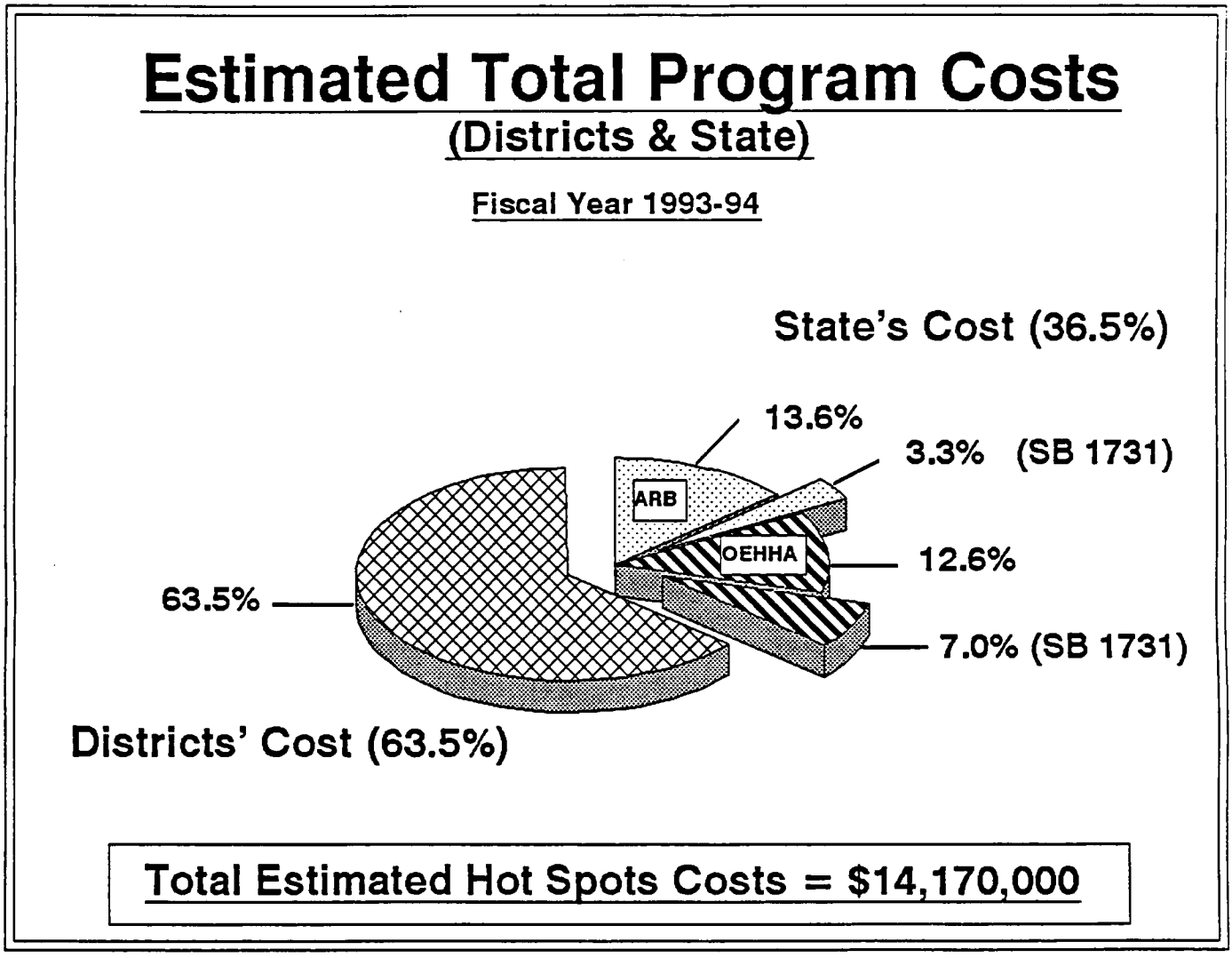
Adjustment Factor Included for Both Years (5 percent)

Columns C and D Use the 1992-93 Budget Amounts with the 10% reduction restored and the New Method

* N/A Means Not Applicable

Figure 8

Estimated Total Program Costs



I. FACILITY FEES

For the twelve districts requesting that ARB adopt their fee schedules, the individual facility fees are calculated using the proposed method described in Chapter II, Section B, and the district and state costs described in this chapter. Each facility fee is the sum of the district portion and the state portion for facilities in that category. The state portion for any category is uniform for all districts. Table 7 summarizes the range of proposed fees in the thirteen categories in the twelve districts for which the ARB is adopting fee schedules. District program costs in these twelve districts have been approved by the district board at a public hearing.

Because the proposal changes the basis of calculating fees from criteria pollutants to program categories and workload, we have not provided a comparison of existing fees to proposed fees by category. For example, we propose to base fees on whether a facility has to complete an inventory report or whether a facility's risk assessment is being reviewed by the OEHHA or a district. Facilities were not classified in this manner in previous years. Facilities that are in the same workload group would pay the same fees to cover the state cost of the program, but may pay different overall fees because district costs vary.

The range of fees shown in Table 7 is due to varying district costs. Many factors affect a district's costs of implementing the program. These factors include but are not limited to the following:

- the types and complexity of facilities located in each district,
- the types and complexity of listed compounds emitted,
- the district's overhead costs (regional variations in rent, salary base, etc.),
- the amount of assistance the district provides to facilities subject to the requirements of the Act.

Table 7

Range of Proposed Facility Fees*

Program Category	State Portion	District Portion* (range)	Total Fees (range)
Survey	0	25 - 100	25 - 100
Industrywide	0	20 - 250	20 - 250
Plan and Report			
Simple	474	0 - 526	474 - 1000
Intermediate	710	0 - 5252	710 - 5962
Complex	947	731 - 17507	1678 - 18454
Risk Assessment - Under Review by the District**			
Simple	474	500	974
Intermediate	710	513 - 8754	1223 - 9464
Complex	947	1539 - 26261	2486 - 27208
Risk Assessment - Under Review by the State***			
Simple	720	500	1220
Intermediate	3178	513 - 8754	3691 - 11932
Complex	7115	1539 - 26261	8654 - 33376
Notification	2921	35014	37935
Audit and Plan	N/A	N/A	N/A

* Summary of proposed fees for air pollution control districts whose fee schedules are included in the Fee Regulation

** Facilities whose risk assessment is being reviewed by the district. The risk assessment was not submitted to the state between April 1, 1992, and March 31, 1993.

*** Facilities whose risk assessment was submitted to OEHHA for review between April 1, 1992, and March 31, 1993.

V.

ENVIRONMENTAL AND ECONOMIC IMPACTS

This chapter provides our analysis of the environmental and economic impacts of the Fee Regulation. The economic impacts were determined using fees calculated based on the full proposed increase in state costs. The reduced proposal should result in a lesser impact on affected facilities.

A. ENVIRONMENTAL IMPACT

We do not anticipate any potential adverse impacts on the environment attributable to implementation of the amended regulations. The Fee Regulation may provide indirect environmental benefits because the fees permit the collection and assessment of data that businesses can use to voluntarily reduce emissions.

B. ECONOMIC IMPACT

Any facility subject to the Hot Spots Act may be required to pay a fee pursuant to the Fee Regulation. The applicability criteria are discussed in Chapter I of this report.

The economic impact analyses assessed the anticipated impact of all fees authorized by the Fee Regulation, including those that will be assessed by the 22 districts that will be adopting district fee rules for fiscal year 1993-94. Some of these districts will not adopt their fees until the ARB's Fee Regulation is approved because the district fee rules must provide for the recovery of both state and district costs, and each district's share of state costs will be established through these proposed amendments to the Fee Regulation. We have, therefore, estimated the fees that will be assessed by these 22 districts in fiscal year 1993-94 for the purpose of the economic impact analysis. The fiscal year 1993-94 district fees were estimated by

using draft and adopted district fee rules and proposed district fee schedules from the draft Fee Regulation.

1. State Government Agencies Costs

The Fee Regulation will impose costs on state agencies that must comply with the regulation's fee requirements. It is anticipated that affected state agencies that are subject to the amended regulation as users or emitters of toxic substances will be able to absorb the cost of complying with the regulation within existing budgets and resources. Hospitals, colleges and universities, and correctional facilities are examples of state-owned facilities that may have to pay Hot Spots fees. Costs to these state agencies are estimated to range from $100 to $4,875.

Implementing the Fee Regulation also imposes costs upon the ARB and the OEHHA. The Legislature mandated that all ARB and OEHHA costs arising from the implementation of the Hot Spots Act, including the cost of implementing the Fee Regulation, are to be recovered through the Fee Regulation. Each agency's budget for this program is established each year in the state budget. At the time of this analysis, the state budget had not been approved by the Legislature.

For purposes of estimating the state costs to be recovered through the Fee Regulation, we used the Hot Spots Program amounts submitted in the proposed Governor's budget for the ARB and the OEHHA.

2. Local Government Agencies Costs

~~The adoption of the proposed regulation will create costs for and~~ impose a state-mandated program upon local government agencies that will be required to pay the fees established by the regulation. Potentially affected agencies include air districts; air, water, and solid waste facilities; school districts; hospitals; and publicly owned treatment works (POTWs).

Implementing the amended regulation will create costs and impose a state-mandated local program upon the districts. These costs are incurred because a district must set up a program to notify and collect fees from the operator of every facility subject to the Hot Spots Act. However, these district costs are not reimbursable by the state within the meaning of Section 6 of Article XIII B of the California Constitution and Government Code, section 17500 et seq. because the districts have the authority to levy fees sufficient to pay for the mandated Fee Regulation program (Government Code section 17556(d)).

The district costs for twelve air pollution control districts will be recovered through the fee schedules in the proposed amendments to the Fee Regulation. The Fee Regulation requires the remaining districts to adopt district rules to recover both district costs and the district's share of state costs.

Elementary and secondary school costs of complying with the regulation are not reimbursable by the state within the meaning of Article IIIB, section 6 and Government Code sections 17500 et seq. because school districts have the authority to levy assessments sufficient to pay for the program mandated by this act.

Publicly owned treatment works carry out a uniquely governmental function, as the overwhelming number of treatment works are publicly owned. Nevertheless, their costs of compliance with the proposed regulation are not reimbursable by the state within the meaning of Article XIII B, section 6 and Government Code Sections 17500 et seq. because POTWs are authorized to levy service charges to cover the costs associated with the mandated fee regulation program.

3. Costs to Non-Government Facilities

The amended regulation will create costs and impose a state-mandated program on facilities that are subject to the Hot Spots Act. As described in Chapter I, each of these facilities may be required to pay a Hot Spots fee pursuant to the Fee Regulation.

For the districts not adopting district fee rules, fees applied to facilities will be calculated based on the facility program category, or specified by the district for facilities in the Survey and Industrywide categories. For districts adopting their own fee rules, the draft and adopted fee rules and schedules were used.

Table 3 of the amended regulation lists fee amounts by facility program category for each district which is having the ARB adopt fee schedules for them. Facility fees range from $474 for a facility in the Plan and Report (Simple) category to $37,935 for a facility in the Notification category. Table 4 of the proposed regulation lists the fees specified by districts for the Survey and Industrywide categories. Facility fees will vary by district because of differences in the anticipated district program costs.

4. Economic Impact Analysis

The ARB staff conducted a financial analysis as an indication of the economic impacts to businesses resulting from the fees proposed in this regulation. In 1992, Assembly Bill 3511, Jones, amended section 11346.53 of the Government Code to require that the economic impact analysis for regulation amendments assess the potential impact on all affected businesses, not just small businesses. Therefore, this analysis includes all business enterprises, rather than only small businesses as in previous years.

The approach used in assessing the potential economic impact of the amended regulation on businesses is as follows:

(1) We developed a list of Standard Industrial Classification (SIC) Codes that represent industries with businesses that would be required to pay fees. Using the ARB 1990 list of facilities

reporting emissions of criteria pollutants, a random sample of one to three businesses, from different areas of the state, was selected from each of the applicable SIC categories.

(2) Fees were estimated for each of these approximately 1000 businesses. The highest fee in each SIC was then used in the analysis.

(3) The fees required by this regulation are a business expense. Approximately 40 percent of the Hot Spots fee is deductible on state and federal tax returns as a business expense. This deduction is accounted for in determining potential economic impact.

(4) These adjusted fees were then subtracted from net profit data. The results were used to calculate the Return on Owners' Equity (ROE). The resulting ROE was then compared with the ROE, before the subtraction of the adjusted fees, to determine the impact on the profitability of the businesses. A substantial reduction in profitability (10 percent) indicates a potential for significant financial difficulties.

This analysis includes 246 industries with a variety of products. For some additional industries with affected businesses, however, an analysis of the potential impact of the fees could not be performed because of the lack of financial data.

Overall, California businesses seem to be able to absorb the costs of the fees without significant adverse impact on their profitability. Although some businesses would potentially experience a greater reduction in their profitability than others, the businesses appear to be able to absorb impact of the fee. In addition, the actual cost impact of the fees on the profitability of California businesses is most likely to be less than what we have estimated in this analysis for reasons described in the detailed analysis. The proposed fees are low enough and will be applied in such a manner that it is unlikely that they will result in a significant adverse economic impact on businesses. Given the current adverse economic conditions in California, nevertheless, the imposition of the amended fees may have a significant adverse impact on some businesses operating with little or no margin of profitability.

Appendix VII contains the detailed economic impact analysis.

VI.

EVALUATION OF ALTERNATIVES

This chapter discusses the various alternatives considered by the ARB staff in developing the proposed amendments.

A. EVALUATION OF ALTERNATIVES

Government Code section 11346.14 requires us to describe the alternatives to the proposed regulation that were considered. We identified the following options:

Option 1: Do not adopt a Fee Regulation.

We considered this option but believe that state law requires the ARB to review and adopt, if necessary, a Fee Regulation annually. Health and Safety Code section 44380(a) requires the ARB to adopt a regulation which requires districts to adopt fee rules for the recovery of state and local costs associated with the Air Toxics Hot Spots Program and which establishes fee schedules for districts that meet specified requirements. Districts that ask the ARB to calculate and adopt fees will have the means available to recover the costs of implementing and administering the program as required by law.

More specifically we believe that the tasks needed to implement the Hot Spots Act, as required by state law, cannot be completed without additional funding. We, therefore, recommend that this option be rejected. Also, the Fee Regulation is the only option in the Act which provides for assessing fees on nonvehicular sources to obtain the needed additional resources.

Option 2: Assess fees on a criteria pollutant emissions basis.

Criteria pollutant emissions have been used as the basis for the Hot Spots fees since the start of the program. Criteria pollutant emissions

were used because the inventory was available for affected facilities and is updated on a regular basis. At the Board Hearing in June 1991, however, the Board directed us, by resolution, to propose changes to the regulation so that fees would be assessed on the basis of toxic air releases. Senate Bill 1378, McCorquodale, effective in January 1993, also requires that Hot Spots fees be based on toxics emissions and priority assigned to facilities if practicable. We now have sufficient information to use a basis which is related to the types and quantities of toxics emissions. Because an alternative is available to using a criteria pollutant basis, we recommend that this option be rejected.

Option 3: Approve the proposed amendments to the Fee Regulation.

The Fee Regulation fulfills a very specific legal requirement. The proposed amendments are in accordance with the legislative and Board mandates. The proposed fee basis considers facility priority which is related to the facility's toxics emissions. No alternative would be more effective in carrying out the legislative mandated purpose for which the regulation is proposed, or would be as effective, equitable, and less burdensome to affected private persons.

B. RECOMMENDATION

We recommend that the Board adopt the proposed amendments to the Fee Regulation for fiscal year 1993-94. These amendments are described in more detail in Chapter II and are contained in Appendix I to this report.

Appendix I

Proposed Amendments to the Air Toxics Hot Spots Fee Regulation For Fiscal Year 1993-94

Note: Language to be added is underlined and language to be removed is slashed through

SUBCHAPTER 3.6 AIR TOXICS "HOT SPOTS" FEE REGULATION

Article 1. General

90700. Purpose and Mandate.

(a) This regulation sets forth the list of substances compiled by the Air Resources Board pursuant to Health and Safety Code Section 44321 and provides for the establishment of fees to pay for the cost of implementing and administering the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the "Act"; Stats 1987 ch 1252; Health and Safety Code Section 44300 et seq.).

(b) Each district with jurisdiction over facilities meeting the criteria set forth in Section 90702(a)(1), (a)(2), and (a)(3) shall annually collect from the operator of each such facility, and each operator shall pay, fees which shall provide for the following:

(1) Recovery of anticipated costs to be incurred by the State Board and the Department Office to implement and administer the Act, as set forth in Table 1 of this regulation, and

(2) Recovery of anticipated costs to be incurred by the district to implement and administer the Act, including but not limited to the cost incurred to: review emissions inventory plans, review emissions inventory data, review risk assessments, verify plans and data, and administer this regulation and the Air Toxics "Hot Spots" program.

NOTE: Authority cited: Sections 39600, 39601, 44321, and 44380, Health and Safety Code. Reference: Sections 44320, 44321, and 44380, Health and Safety Code.

90701. Definitions.

(a) "Air pollution control district" or "district" has the same meaning as defined in Section 39025 of the Health and Safety Code.

(b) "Air release" has the same meaning as defined in Section 44303 of the Health and Safety Code.

(c) "Approved emissions inventory" means an inventory of pollutants designated by the Executive Officer of the Air Resources Board in writing as the inventory to be used by the State Board for purposes of calculating the fee schedule for, and by districts

for purposes of billing facility operators pursuant to Section 90704 of the Air Toxics "Hot Spots" Fee Regulation.

(b) "Audit and Plan Facility" means a facility that is required by the district, by April 1 of the calendar year prior to the fiscal year, to prepare a Risk Reduction Audit and Plan in accordance with Sections 44390 through 44394 of the Health and Safety Code.

(dc) "Criteria pollutant" means, for purposes of this regulation, total organic gases, particulate matter, nitrogen oxides or sulfur oxides.

(e) "Department" means the State Department of Health Services.

(fd) "Facility" has the same meaning as defined in Section 44304 of the Health and Safety Code.

(e) "Facility Program Category" means a list of facilities provided to the Air Resources Board by the districts by April 1 of the calendar year prior to the fiscal year, which lists the facilities which meet the definitions in Section 90701 (b), (f), (g), (j), (k), (l), (m), (n), (o), (p), (q), (r), (s), (t), (u), and (z).

(f) "Industrywide Facility" means a facility included in an industrywide emission inventory prepared by an air pollution control district pursuant to Health and Safety Code Section 44323, or an individual facility which emits less than 10 tons per year of each criteria pollutant, falls within a class composed of primarily small businesses, as defined by subsection (v) below, and whose emissions inventory report was prepared by the air pollution control district.

(g) "Notification Facility" means a facility that is required by the district by April 1 of the calendar year prior to the fiscal year, to notify the public of the potential health risk associated with the air toxics emissions from that facility pursuant to Health and Safety Code Section 44362(b).

(h) "Office" means the Office of Environmental Health Hazard Assessment.

(gi) "Operator" has the same meaning as defined in Section 44307 of the Health and Safety Code.

(h) "Person" has the same meaning as defined in section 39047 of the Health and Safety Code.

(j) "Plan and Report Facility" means a facility that by April 1 of the calendar year prior to the fiscal year, has been required by the district to prepare an individual plan and report in accordance with Sections 44340, 44341, and 44344 of the Health and Safety Code. This includes facilities completing an update plan, an update report, or a biennial summary form .

(k) "Plan and Report Facility (Complex)" means a facility that meets the criteria set forth in Section 90701(j), and has more than five processes as determined by six-digit Source Classification Codes (SCC).

(l) "Plan and Report Facility (Intermediate)" means a facility that meets the criteria set forth in Section 90701(j), and has three to five processes as determined by six-digit SCC.

(m) "Plan and Report Facility (Simple)" means a facility that meets the criteria set forth in Section 90701(j), and has one or two processes as determined by six-digit SCC.

(n) "Risk Assessment-District Facility" means a facility that by April 1 of the calendar year prior to the fiscal year, has been required by the district to prepare a health risk assessment in accordance with Section 44360(b) of the Health and Safety Code, and whose risk assessment has not yet been approved by the district.

(o) "Risk Assessment-District Facility (Complex)" means a facility that meets the criteria set forth in Section 90701(n), and has more than five different processes as determined by six-digit SCC.

(p) "Risk Assessment-District Facility (Intermediate)" means a facility that meets the criteria set forth in Section 90701(n), and has three to five different processes as determined by six-digit SCC.

(q) "Risk Assessment-District Facility (Simple)" means a facility that meets the criteria set forth in Section 90701(n), and has one or two different processes as determined by six-digit SCC.

(r) "Risk Assessment-State Facility" means a facility whose risk assessment was received by the Office between April 1, 1992, and March 31, 1993.

(s) "Risk Assessment-State Facility (Complex)" means a facility that meets the criteria set forth in Section 90701(r), and has more than five different processes as determined by six-digit SCC.

(t) "Risk Assessment-State Facility (Intermediate)" means a facility that meets the criteria set forth in Section 90701(r), and has three to five different processes as determined by six-digit SCC.

(u) "Risk Assessment-State Facility (Simple)" means a facility that meets the criteria set forth in Section 90701(r), and has one or two different processes as determined by six-digit SCC.

(v) "Small Business" means a business which is independently owned and operated and meets the following criteria, or a business affiliated with another concern, if the combined activities of both concerns meet the following criteria: 1) the number of employees is 10 or less; and 2) the total annual gross receipts are less than $500,000.

(w) "Source Classification Codes" means number codes created by the United States Environmental Protection Agency used to identify processes associated with point sources that contribute emissions to the atmosphere.

(~~l~~x) "State costs" means the reasonable anticipated cost which will be incurred by the State Board and the ~~Department of Health Services~~ Office to implement and administer the Act, as shown in Table 1 of this part.

(y) "Supplemental Fee" means the fee charged to cover the costs of the district to review a health risk assessment containing supplemental information which was prepared in accordance with the provisions of Section 44360(b)(3) of the Health and Safety Code.

(z) "Survey Facility" means a facility which emits less than ten tons per year of criteria pollutants, and which falls in any class listed in Appendix E-II to Sections 93300 et seq. of Title 17 of the California Code of Regulations.

(~~l~~aa) "Total organic gases" or "TOG" means all gases containing carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

NOTE: Authority cited: Sections 39600, 39601, ~~and~~ 44380, and 44380.5, Health and Safety Code. Reference: Sections 44320, ~~44321, and~~ 44380, and 44380.5, Health and Safety Code.

Article 2. Applicability

90702. Facilities Covered.

(a) Except for facilities exempted by Health and Safety Code Section 44324, this regulation applies to any facility which:

(1) manufactures, formulates, uses, or releases any of the substances listed by the State Board pursuant to Health and Safety Code Section 44321 and contained in Appendix A ~~of this regulation~~ to Sections 93300 et seq. of Title 17 of the California Code of Regulations, which is incorporated by reference, or any other substance which reacts to form a substance so listed, and releases 10 tons per year or greater of any criteria pollutant, or

(2) is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by an air pollution control district and referenced in Appendix ~~B~~ A, or

(3) manufactures, formulates, uses or releases any listed substance or any other substance which reacts to form any listed substance, and which releases less than 10 tons per year of each criteria pollutant and falls in any class listed in Appendix E to Sections 93300 to 93354 of Title 17 of the California Code of Regulations.

NOTE: Authority cited: Sections 39600, 39601, 44321, and 44380, Health and Safety Code. Reference: Sections 44320, 44321, 44322, and 44380, Health and Safety Code.

Article 3. Fees

90703. District Board Adoption of Fees.

Except for the districts that have fulfilled all of the requirements specified in Section 90704(a), every district shall annually adopt a rule or regulation which recovers the costs specified in 90700(b), unless the district rule or regulation contains a specific provision for automatic readoption of the rule or regulation annually by operation of law.

(a) The State Board shall calculate each district's share of state costs on the basis of ~~criteria pollutant emissions as set forth in the most recent approved emissions inventory~~ the number of facilities in program categories as defined in Sections 90701(b), (g), (j), (k), (l), (m), (n), (o), (p), (q), (r), (s), (t), and (u).

NOTE: Authority cited: Sections 39600, 39601, 44321, and 44380, Health and Safety Code. Reference: Sections 44320, 44321, 44322, and 44380, Health and Safety Code.

90704. State Board Adoption of Fees.

(a) The State Board shall annually review and may amend the fee regulation, including the ~~adopt a~~ fee schedule which assesses a fee upon the operators of facilities subject to this regulation, and which identifies and provides for the recovery of both state costs and district costs to administer and implement the Act pursuant to Section 90700(b), for facilities located in districts that have completed all of the following requirements:

(1) The district board has approved, and adopted by resolution, the cost of implementing and administering the Act for the applicable fiscal year as specified in 90700(b)(2);

~~(2) The district has submitted a written request specifying the~~ amount to be collected for the applicable fiscal year, through fees established by the State Board regulation, as calculated pursuant to Section 90704(~~c~~), (d), (e), and (f), and including documentation of the calculations;

(3) The district has submitted the resolution, request and documentation specified in subsections (1) and (2) to the State Board by April 1 preceding the applicable fiscal year.

(b) Calculation of Fees.

(1) The State Board shall establish ~~calculate~~ the fee ~~rate~~ applicable to each facility for the recovery of state and district costs and shall notify each district in writing by December 1 of each year of the amount to be collected from each facility and of the amount of revenue which the district must remit to the State Board for reimbursement of state costs, as set forth in Table 1. When calculating the fees, the State Board shall take into account and allow for the unanticipated closing of businesses, unpredictable changes in emissions, nonpayment of fees, and other circumstances which would result in a shortfall in anticipated revenue.

(2) The State Board shall calculate fees on the basis of *emissions of criteria pollutants as set forth in the most recently approved emissions inventory, except for facilities subject to this regulation on the basis of the criteria set forth in Section 90702(a)(2)*/ the facility program category as set forth by the district by April 1 preceding the applicable fiscal year, except for facilities covered by Section 90704(d) and (e).

(3) The fee for any facility which meets the criteria set forth in both 90702(a)(1) and 90702(a)(2) shall be calculated on the basis of the procedures set forth for facilities covered by Section 90702(a)(1). Any facility which meets the criteria set forth in both 90702(a)(2) and 90702(a)(3) shall be assessed a fee pursuant to Section 90704(c)(4). Any facility which is subject to this regulation solely on the basis of the criteria set forth in Section 90702(a)(2) shall be assessed a fee pursuant to Section 90704(d).

(c) Fees Based on *Emissions of Criteria Pollutants*/ Facility Program Category.

(1) The State Board shall provide a flat fee per facility based on the facility program category of the facility as set forth in Table 3. The program categories are Plan and Report (Simple), Plan and Report (Intermediate), Plan and Report (Complex), Risk Assessment-District (Simple), Risk Assessment-District (Intermediate), Risk Assessment-District (Complex), Risk Assessment-State (Simple), Risk Assessment-State (Intermediate), Risk Assessment-State (Complex), Notification, and Audit and Plan.

(1) The State Board shall provide both a graduated cost per facility fee based on categories of emissions equal to or greater than 25 tons per year and a per ton emission fee for emissions of criteria pollutants equal to or greater than 25 tons per year, as set forth in Tables 3 - 7.

(2) For Kassen County APCD, San Bernardino County APCD, Shasta County APCD, and South Coast AQMD, the State Board shall calculate a per ton emission fee for emissions of criteria pollutants equal to or greater than 10 tons per year, as set forth in Table 7.

(3) For those districts not specified in subsection (c)(2) above, the State Board shall provide a flat fee for facilities which emit equal to or greater than 10 tons but fewer than 25 tons per year of criteria pollutants, as set forth in Table 8.

(4) Facilities which are subject to fees solely on the basis of Section 90702(a)(3), and those facilities subject to fees solely on the basis of 90702(a)(2) and (a)(3) shall be assessed the flat fee specified in Table 9 as follows: those facilities which fall in any class listed in Appendix E-I of Sections 93300-93354 of Title 17, California Code of Regulations (Emission Inventory Criteria and Guidelines Regulation), except for facilities for which the district is preparing an industrywide emissions inventory and Health risk assessment pursuant to Health and Safety Code Section 44323, shall be assessed the flat fee specified in Table 9, Column A, those facilities which fall in any class listed in Appendix E-II of the same regulation, except for facilities for which the district is preparing an industrywide emissions inventory and Health risk assessment pursuant to Health and Safety Code Section 44323 shall be assessed the flat fee specified in Table 9, Column B, those facilities for which the district is preparing an industrywide emissions inventory and Health risk assessment pursuant to Health and Safety Code Section 44323 shall be assessed the flat fee specified in Table 9, Column C. If a facility was previously assessed, and has paid, a fee pursuant to Column B of Table 9, subsequent fees pursuant to Column B of Table 9 shall be waived by the district, if the district determines that there are insignificant costs with respect to said facility under the Act.

(5) Upon review and approval by an air pollution control officer, a facility covered by Section 90702(a)(1) which manufactures, uses, or formulates, but does not release, a listed substance or precursor and whose emissions of criteria pollutants equal to or greater than 10 tons per year are limited solely to noncombustion-related particulate matter shall pay a flat fee of $100.00, provided the facility operator demonstrates to the satisfaction of the air pollution control officer that the noncombustion-related air release does not contain a substance listed in Appendix A.

(d) Fees for Facilities on District Inventories.

(1) Except as provided in Section 90703 and Section 90704(d)(2), (d)(3), (d)(4), and (d)(5), below, facilities subject to fees solely on the basis of the criteria set forth in Section 90702(a)(2), and which do not meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323, shall be assessed an annual fee of $100.00.

(2) Facilities located in the Santa Barbara County APCD which are subject to fees solely on the basis of the criteria set forth in section 90702(a)(2) and which do not meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323 shall be assessed an annual fee of $300.

(3) Facilities located in the San Joaquin Valley Unified APCD which are subject to fees solely on the basis of criteria set forth in Section 90702(a)(2), and which do not meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323, shall be assessed an annual fee of $400.

(4) Facilities located in Kern County APCD which are subject to fees solely on the basis of criteria set forth in Section 90702(a)(2), and which do not meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323, shall be assessed an annual fee of $450.

(5) Facilities located in South Coast AQMD which are subject to fees solely on the basis of criteria set forth in Section 90702(a)(2), and which do not meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323, shall be assessed an annual fee of $200.

(6) Facilities which are subject to fees solely on the basis of criteria set forth in Section 90702(a)(2), and which meet the criteria for industrywide inventories as specified in Health and Safety Code Section 44323, shall be assessed the annual fee specified in Table 9, Column C.

(d) Specified Flat Fees

(1) A Survey Facility shall be assessed the flat fee specified in Table 4, Column A. An Industrywide Facility shall be assessed the flat fee specified in Table 4, Column B. If a facility was previously assessed, and has paid, a fee pursuant to the program categories specified for Column A or B of Table 4, subsequent fees pursuant to Column A or B of Table 4 shall be waived by the district, if the district determines that there are insignificant costs with respect to said facility under the Act.

(e) Other Flat Fees

(1) Pursuant to the provisions of Section 44380.5 of the Health and Safety Code, the supplemental fee which may be assessed upon the operator of a facility, to cover the direct costs to

the district to review the information supplied, shall be $2,000.

(2) The maximum fee which a small business, as defined in Section 90701(v), shall pay will be $700. The districts shall provide to ARB by April 1 of the calendar year prior to the fiscal year, the number of facilities in each facility program category meeting the small business definition.

(3) If in the judgment of a district the action will not result in a shortfall in revenue, a district may request the fee for the Plan and Report (Simple) category be set at no more than $1,000.

(~~e~~f) Costs to be recovered by the regulation adopted by the State Board pursuant to Section 90704 shall be calculated as follows: Each district board shall approve its anticipated costs to implement and administer the Act. Before submitting this program cost information to the State Board, the district shall subtract from this amount anticipated revenues from collection of the flat fee specified in Section ~~90704(c)(4)~~ and 90704(d)(1); and any excess revenues obtained by the district pursuant to Section 90705(c). When submitting board-approved program costs to the State Board, the district shall include a breakdown of how the collected fees will be used.

NOTE: Authority cited: Section 39600, 39601, and 44380, Health and Safety Code. Reference: Sections 44320, 44322, 44380, and 44380.5, Health and Safety Code.

90705. Fee Payment and Collection.

(a) Each district shall notify and assess the operator of each facility subject to this regulation in writing of the fee due. Except as provided in Sections 90703, ~~90704(c)(4)~~, and 90704(d), and 90704(e), each district shall use the ~~approved emissions inventory~~ facility program category as the basis for billing. The operator shall remit the fee to the district within 60 days after the receipt of the fee assessment notice or the fee will be considered past due. If an operator fails to pay the fee within 60 days of this notice, the district shall assess a penalty of not more than 100 percent of the assessed fee, but in an amount sufficient, in the district's determination, to pay the district's additional expenses incurred by the operator's non-compliance. If an operator fails to pay the fee within 120 days after receipt of this notice, the district may initiate permit revocation proceedings. If any permit is revoked it shall be reinstated only upon full payment of the overdue fee plus any

late penalty, and a reinstatement fee to cover administrative costs of reinstating the permit.

(b) Each district shall collect the fees assessed by or required to be assessed by this regulation. After deducting the costs to the district to implement and administer the program, each district shall transmit to the State Board the amount the district is required to collect for recovery of state costs pursuant to Section 90700(b)(1), as set forth in Table 1, on or before April 1 of each year. Checks shall be made payable to the State Air Resources Board. The State Board shall forward the revenues to the State Controller for deposit in the Air Toxics Inventory and Assessment Account.

(c) Any fee revenues received by a district for which fees have been adopted pursuant to Section 90704 which exceed district and state costs shall be reported to the State Board and shall be retained by the district for expenditure in the next two fiscal years.

(d) In the event a district does not collect sufficient revenues to cover both the district program costs and the portion of the state costs which the district is required to remit to the State Board due to circumstances beyond the control of the district, including but not limited to plant closure or refusal of the source operator to pay despite permit revocation and/or other enforcement action, such district shall notify the Executive Officer of the State Board and may for demonstrated good cause be relieved by the Executive Officer from an appropriate portion of the fees the district is required to collect and remit to the state.

Documentation of the circumstances resulting in the shortfall shall be submitted to the ARB upon request. Nothing herein shall relieve the operator from any obligation to pay any fees assessed pursuant to this regulation.

(1) A district for which the Board has adopted a fee schedule pursuant to Section 90704 may, upon notifying the Executive Officer of the State Board, carry over such shortfall in revenue to the fiscal year after which the shortfall was discovered and add the shortfall amount to the program costs for such subsequent fiscal year.

Notes: Authority cited: Sections 39600, 39601, and 44380, Health and Safety Code. Reference: Section 44380, Health and Safety Code.

Table 1

Revenues to be Remitted to Cover State Costs
by Air Pollution Control District

Air Pollution Control District	Revenues to be Remitted	
Amador	20,010	8,761
Bay Area	723,761	408,052
Butte	17,772	25,098
Calaveras	1,305	1,184
Colusa	13,697	23,441
El Dorado	8,536	6,630
Feather River	11,445	17,995
Glenn	12,429	21,559
Great Basin	6,131	12,076
Imperial	20,309	20,126
Kern	114,252	59,117
Lake	9,571	3,315
Lassen	7,640	3,788
Mariposa	547	474
Mendocino	8,893	12,786
Modoc	0	
Monterey	110,542	124,833
North Coast	53,062	8,761
Northern Sierra	20,936	22,020
Northern Sonoma	62,021	4,972
Placer	15,075	32,201
Sacramento	32,002	95,793
San Bernardino	263,487	79,541
San Diego	140,276	304,883
San Joaquin Valley Unified	754,028	820,519
San Luis Obispo	97,624	61,449
Santa Barbara	56,095	97,100
Shasta	24,822	41,547
Siskiyou	2,748	1,421
South Coast	1,027,918	2,929,608
Tehama	5,460	4,262
Tuolumne	13,479	7,577
Ventura	68,159	115,322
Yolo-Solano	10,607	52,327
Total	3,734,640	$5,428,500

Table 2

District Costs to be Recovered Through the Fee Regulation

Air Pollution Control District	Anticipated District Costs*
Calaveras	0
Great Basin	3,500
Kern	42,924
Lassen	6,396
Mendocino	14,055
Placer	47,559
Sacramento	42,314
San Bernardino	366,039
San Joaquin Valley Unified	1,218,340
Santa Barbara	230,400
Shasta	21,827
South Coast	2,781,697
Tehama	3,428
Tuolumne	23,800
Total	$4,688,606

* These amounts do not include program costs which will be recovered by the flat fees described in Section 90704(c)(4) or (d), or may reflect adjustments for excess or insufficient revenues pursuant to Section 90705(c) and (d)(1).

Table 3*

Cost per Facility by District and Facility Program Category

Air Pollution Control District	Plan and Report (Simple)	Plan and Report (Intermediate)	Plan and Report (Complex)	Risk[1] Assessment (Simple)	Risk[2] Assessment (Simple)	Risk[1] Assessment (Intermediate)	Risk[2] Assessment (Intermediate)	Risk[1] Assessment (Complex)	Risk[2] Assessment (Complex)	Notification	Audit and Plan
Calaveras	474	710									
Great Basin	547	929	1678								
Kern	711	1420	3314				4361	4497	10665		
Lassen	868										
Mendocino	818	1743	4391	974				6113			
Placer	941	2110	5614								
Sacramento	577	1018	1973			1223	3691	2486	8654		
San Bernardino**	1000	5962	18454		1220	9464	11932	27208	33376	37935	
San Joaquin Valley	794	1669	4144	974		2309	4777	5743	11911		
Santa Barbara	769	1594	3894		1220			5368	11536		
South Coast	809	1716	4299	974	1220	2386	4854	5975	12143		
Tuolumne		2180	5847			3160		8297			

* This is a new table, however underlines have been omitted for clarity.

[1]Risk assessment under review by the district.

[2]Risk assessment submitted to OEHHA from April 1, 1992 through March 31, 1993.

** Fees for San Bernardino reflect 50 small businesses paying $700 and a Plan and Report simple fee cap of $1000.

TABLE 9Table 4

Fees for Sources Emitting Less Than Ten Tons of Each Criteria Pollutant as Required by Section 90704(c)(4)
Survey and Industrywide Facilities

District	A	B	C	
		A Survey Facilities		B Industrywide Facilities
Calaveras		100		100
Great Basin	25	25		25
Kern	450	100		250
Lassen	100	100		100
Mendocino	300	100		100
Placer		50		50
Sacramento		100		100
San Bernardino	100	100		100
San Joaquin Valley Unified	200	100	200	100
Santa Barbara	300	100 75	200	75
Shasta	400	100	100	
South Coast	200	100	100	20
Tehama	60	30	60	
Tuolumne		100		30

Table 3
Cost Per Facility Releasing Total
Organic Gases by District and Emissions Category

Dollars

Air Pollution Control District (APCD)	Tons per Year 25 - 49	Tons per Year 50 - 99	Tons per Year 100 - 499	Tons per Year 500 - 999	Tons per Year ≥ 1000
Great Basin Unified	-	746	-	-	-
Tehama	283	-	1200	-	-

Table 4
Cost Per Facility Releasing Particulate
Matter by District and Emissions Category

Dollars

Air Pollution Control District (APCD)	Tons per Year 25 - 49	Tons per Year 50 - 99	Tons per Year 100 - 499	Tons per Year 500 - 999	Tons per Year ≥ 1000
Great Basin Unified	513	914	-	-	-
Tehama	423	713	-	-	-

Table 5
Cost Per Facility Releasing Nitrogen
Oxides by District and Emissions Category

Dollars

Air Pollution Control District (APCD)	Tons per Year 25 - 49	Tons per Year 50 - 99	Tons per Year 100 - 499	Tons per Year 500 - 999	Tons per Year ≥ 100
Great Basin Unified	501	-	-	-	-
Tehama	498	600	1495	-	-

Table 6
Cost Per Facility Releasing Sulfur
Oxides by District and Emissions Category

Dollars

Air Pollution Control District (APCD)	Tons per Year 25 - 49	Tons per Year 50 - 99	Tons per Year 100 - 499	Tons per Year 500 - 999	Tons per Year ≥ 1000
Great Basin Unified	-	-	1434	-	-
Tehama	-	-	-	-	-

Table 7

Cost Per Ton Values (by District)

Air Pollution Control District	Cost Per Ton
Kern	10.04
Lassen	13.70
Mendocino	18.08
San Bernardino	17.92
San Joaquin Valley Unified	19.49
Santa Barbara	37.86
Shasta	14.02
South Coast	28.00

Table 8

Fee for 10-25 Ton Sources (by District)

Air Pollution Control District	Cost per Facility
Great Basin	185
Kern	450
Mendocino	850
San Joaquin Valley Unified	400
Santa Barbara	800
Tehama	286

Appendix A

List of Substances

APPENDIX A

AB 2588 LIST OF SUBSTANCES
(as required by Health and Safety Code Section 44321)

Sources: (1) California Air Resources Board
(2) Environmental Protection Agency
(3) International Agency for Research on Cancer
(4) Governor's List of Carcinogens and Reproductive Toxicants (HSC Section 25249.8)
(5) National Toxicology Program
(6) Hazard Evaluation System and Information Service
(7) Added pursuant to HSC Section 44321 (f)

FOOTNOTES: * Single CAS number not applicable.

** Metal compounds are to be reported as the metal atom equivalent in the compound, unless specific compounds are listed.

[] This designation indicates a synonym for the substance listed.

[POM] Substances with this designation are Polycyclic Organic Matter (POM) compounds. See the page containing the alphabetized listing of POM for its definition. POM is listed pursuant to sources (1) and (2); therefore, all substances that fit into this defined category will also have sources (1) and (2) listed.

[PAH, POM] Substances with this designation are Polycyclic Aromatic Hydrocarbon (PAH) compounds and are a subgroup of POM. See the page containing the alphabetized listing of PAHs for its definition.

[PAH-Derivative, POM] Substances with this designation are Polycyclic Aromatic Hydrocarbon derivatives and are a subgroup of POM. See the page containing the alphabetized listing of PAH-Derivatives for its definition.

ADD DATES: Dates designate when each listed substance was approved by the Board. The following codes apply:
(A)=July 1988; (B)=September 1989; (C)=September 1990
(D)=June 1991

CATEGORY 1: Substances required to be included on the AB 2588 list by HSC Sections 44321 (c),(d),(e), and (f).

CATEGORY 2: Substances required to be listed by HSC Sections 44321 (a) and (b) but which may be removed from the list based on criteria in HSC Section 44321 (a).

CATEGORY 1

Chemical Abstract Service (CAS) Number	Chemical Name	Source	Add Date
75070	Acetaldehyde	1,2,3,4	A
60355	Acetamide	1,2,3,4	A
67641	Acetone	1	D
75058	Acetonitrile	1,2	D
98862	Acetophenone	1,2	D
53963	2-Acetylaminofluorene [PAH-Derivative, POM]	1,2,4,5	A
62476599	Acifluorfen [POM]	1,2,4	C
107028	Acrolein	1,2	A
79061	Acrylamide	1,2,3,4	A
79107	Acrylic acid	1,2	D
107131	Acrylonitrile	1,2,3,4,5	A
23214928	Adriamycin [PAH-Derivative, POM]	1,2,3,4,5	A
107186	Allyl alcohol	7	D
107051	Allyl chloride	1,2,4	A
28981977	Alprazolam [POM]	1,2,4	C
7429905	Aluminum	1	D
1344281	Aluminum oxide (fibrous forms)	7	D
117793	2-Aminoanthraquinone [PAH-Derivative, POM]	1,2,4,5	A
60093	p-Aminoazobenzene [4-Aminoazobenzene] [POM]	1,2,3,4	A
97563	o-Aminoazotoluene [POM]	1,2,3,4,5	A
92671	4-Aminobiphenyl [POM]	1,2,3,4,5	A
6109973	3-Amino-9-ethylcarbazole hydrochloride [POM]	1,2,4,5	B
82280	1-Amino-2-methylanthraquinone [PAH-Derivative, POM]	1,2,4,5	A
7664417	Ammonia	1,2	A
6484522	Ammonium nitrate	1	D
7783202	Ammonium sulfate	1	D
62533	Aniline	1,2,4	C
90040	o-Anisidine	1,2,3,4,5	A
104949	p-Anisidine	7	D
-	Anthracene [PAH, POM]	(see PAHs)	
7440360	Antimony	7	D
*	Antimony compounds** including but not limited to:	1,2	D
1327339	Antimony trioxide	1,2,3,4	C

CAS Number	Chemical Name	Source	Add Date
7440382	Arsenic	1,2,3,4,5	A
*	Arsenic compounds **	1	D
*	Arsenic compounds (inorganic) **	1,2,3,4,5	A
	Including but not limited to:		
7784421	Arsine	1,2,7	A
492808	Auramine [POM]	1,2,3,4,5	A
103333	Azobenzene [POM]	1,2,4	C
7440393	Barium	7	D
*	Barium compounds **	1	D
-	Benz[a]anthracene [PAH, POM]	(see PAHs)	
98873	Benzal chloride	7	D
55210	Benzamide	7	D
71432	Benzene	1,2,3,4,5	A
92875	Benzidine (and its salts) [POM]	1,2,3,4,5	A
*	Benzidine-based dyes [POM]	1,2,3	A
	Including but not limited to:		
1937377	Direct Black 38 [PAH-Derivative, POM]	1,2,4,5	A
2602462	Direct Blue 6 [PAH-Derivative, POM]	1,2,4,5	A
16071866	Direct Brown 96 (technical grade)[POM]	1,2,4	B
-	Benzo[a]pyrene [PAH, POM]	(see PAHs)	
-	Benzo[b]fluoranthene [PAH, POM]	(see PAHs)	
98077	Benzoic trichloride (Benzotrichloride)	1,2,4,5	A
-	Benzo[j]fluoranthene [PAH, POM]	(see PAHs)	
-	Benzo[k]fluoranthene [PAH, POM]	(see PAHs)	
98884	Benzoyl chloride	1	D
94360	Benzoyl peroxide	7	D
5411223	Benzphetamine hydrochloride [POM]	1,2,4	C
100447	Benzyl chloride	1,2,4	A
1694093	Benzyl violet 4B [POM]	1,2,3,4	A
7440417	Beryllium	1,2,3,4,5	A
*	Beryllium compounds **	1,2,3,4,5	B
92524	Biphenyl [POM]	1,2	D
111444	Bis(2-chloroethyl) ether (DCEE)	1,2,4	D
494031	N-N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine) [PAH-Derivative,POM]	1,2,3,4,5	A
542881	Bis(chloromethyl) ether	1,2,3,4,5	A
108601	Bis(2-chloro-1-methylethyl) ether	7	D
103231	Bis(2-ethylhexyl) adipate	1	D
7726956	Bromine	2	A
*	Bromine compounds (inorganic) **	1,2	A
	Including but not limited to:		
7758012	Potassium bromate	1,3,4	A
75252	Bromoform	1,2,4	D
106990	1,3-Butadiene	1,2,3,4,5	A
141322	Butyl acrylate	1	D
71363	n-Butyl alcohol	1	D

CAS Number	Chemical Name	Source	Add Date
78922	sec-Butyl alcohol	1	D
75650	tert-Butyl alcohol	1	D
85687	Butyl benzyl phthalate	1	D
123728	Butyraldehyde	7	D
7440439	Cadmium	1,2,3,4,5	A
*	Cadmium compounds **	1,2,3,4,5	A
156627	Calcium cyanamide	1,2	D
105602	Caprolactam	1,2	D
133062	Captan	1,2,4	C
63252	Carbaryl [PAH-Derivative, POM]	1,2	D
*	Carbon black extracts	1,3,4	A
75150	Carbon disulfide	1,2,4	B
56235	Carbon tetrachloride	1,2,3,4,5	A
463581	Carbonyl sulfide	1,2	D
120809	Catechol	1,2	D
133904	Chloramben	1,2	D
1620219	Chlorcyclizine hydrochloride [POM]	1,2,4	A
57749	Chlordane	1,2,4	B
7782505	Chlorine	1,2	A
10049044	Chlorine dioxide	1	D
79118	Chloroacetic acid	1,2	D
532274	2-Chloroacetophenone	1,2	D
*	Chlorobenzenes	1	D
	Including but not limited to:		
108907	Chlorobenzene	1,2	A
25321226	Dichlorobenzenes (mixed isomers)	1,7	D
	Including:		
95501	1,2-Dichlorobenzene	1,7	D
541731	1,3-Dichlorobenzene	1,7	D
106467	p-Dichlorobenzene [1,4-Dichlorobenzene]	1,2,3,6	A
120821	1,2,4-Trichlorobenzene	1,2	D
510156	Chlorobenzilate [POM] (Ethyl-4,4'-dichlorobenzilate)	1,2,4	C
67663	Chloroform	1,2,3,4,5	A
107302	Chloromethyl methyl ether (technical grade)	1,2,4,5	A
*	Chlorophenols	1,3	A
	Including but not limited to:		
120832	2,4-Dichlorophenol	1,7	D
87865	Pentachlorophenol	1,2,4	C
95954	2,4,5-Trichlorophenol	1,2	D
88062	2,4,6-Trichlorophenol	1,2,4	A
76062	Chloropicrin	7	A
126998	Chloroprene	1,2	A
7440473	Chromium	7	D
*	Chromium compounds **	1,2	D

CAS Number	Chemical Name	Source	Add Date
18540299	Chromium, Hexavalent (and compounds)** Including but not limited to:	1,2,3,4,5	A
10294403	Barium chromate	1,2,5	D
13765190	Calcium chromate	1,2,5	D
1333820	Chromium trioxide	1,2,5	D
7758976	Lead chromate	1,2,5	D
10588019	Sodium dichromate	1,2,5	D
7789062	Strontium chromate	1,2,5	D
-	Chrysene [PAH,POM]	(see PAHs)	
4680788	C.I. Acid Green 3 [POM]	1,2,7	D
569642	C.I. Basic Green 4 [POM]	1,2,7	D
989388	C.I. Basic Red 1 [POM]	1,2,7	D
569619	C.I. Basic Red 9 monohydrochloride [POM]	1,2,4,5	B
2832408	C.I. Disperse Yellow 3 [POM] (Note: "C.I." means "color index ")	1,2,7	D
87796	Cinnamyl anthranilate [POM]	1,2,4,5	D
6358538	Citrus Red No. 2 [POM]	1,2,3,4	A
50419	Clomiphene citrate [POM]	1,2,4	C
7440484	Cobalt	7	D
*	Cobalt compounds**	1,2	D
*	Coke oven emissions	1,2,3,4,5	A
7440508	Copper	2	A
*	Copper compounds **	1,2	B
*	Creosotes	1,3,4	A
1319773	Cresols (mixtures of) [Cresylic acid] Including:	1,2	A
108394	m-Cresol	1,2	D
95487	o-Cresol	1,2	D
106445	p-Cresol	1,2	D
98828	Cumene	1,2	D
80159	Cumene hydroperoxide	1	D
*	Cyanide compounds** Including but not limited to:	1,2	D
74908	Hydrocyanic acid	2	A
110827	Cyclohexane	1	D
66819	Cycloheximide	6	A
20830813	Daunomycin [PAH-Derivative, POM]	1,2,3,4	A
23541506	Daunorubicin hydrochloride [PAH-Derivative, POM]	1,2,4	C
3468631	D&C Orange No. 17 [PAH-Derivative, POM]	1,2,4	C
2092660	D&C Red No. 8 [PAH-Derivative, POM]	1,2,4	D
6160021	D&C Red No. 9 [PAH-Derivative, POM]	1,2,4	C
81889	D&C Red No. 19 [POM]	1,2,4	C
50293	DDT (1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane) [POM]	1,2,3,4,5	A
1163195	Decabromodiphenyl oxide [POM]	1,2	D
613354	N,N'-Diacetylbenzidine [POM]	1,2,3,4	A
2303164	Diallate	7	D

CAS Number	Chemical Name	Source	Add Date
*	Dialkylnitrosamines Including but not limited to:	1	A
1116547	N-Nitrosodiethanolamine	1,3,4,5	A
55185	N-Nitrosodiethylamine	1,3,4,5	A
62759	N-Nitrosodimethylamine	1,2,3,4,5	A
924163	N-Nitrosodi-n-butylamine	1,3,4,5	A
621647	N-Nitrosodi-n-propylamine	1,3,4,5	A
10595956	N-Nitrosomethylethylamine	1,3,4	A
101804	4,4'-Diaminodiphenyl ether [POM]	1,2,3,4,5	A
*	Diaminotoluenes (mixed isomers) Including but not limited to:	1,4	C
95807	2,4-Diaminotoluene [2,4-toluenediamine]	1,2,3,4,5	A
334883	Diazomethane	1,2	D
226368	Dibenz[a,h]acridine [POM]	1,2,3,4,5	A
224420	Dibenz[a,j]acridine [POM]	1,2,3,4,5	A
-	Dibenz[a,h]anthracene [PAH, POM]	(see PAHs)	
194592	7H-Dibenzo[c,g]carbazole [POM]	1,2,3,4,5	A
132649	Dibenzofuran [POM]	1,2	D
*	Dibenzofurans (chlorinated) [POM] (see Polychlorinated dibenzofurans)		
-	Dibenzo[a,e]pyrene [PAH, POM]	(see PAHs)	
-	Dibenzo[a,h]pyrene [PAH, POM]	(see PAHs)	
-	Dibenzo[a,i]pyrene [PAH, POM]	(see PAHs)	
-	Dibenzo[a,l]pyrene [PAH, POM]	(see PAHs)	
96128	1,2-Dibromo-3-chloropropane [DBCP]	1,2,3,4,5	A
84742	Dibutyl phthalate	1,2	D
-	p-Dichlorobenzene [1,4-Dichlorobenzene] (see Chlorobenzenes)		
91941	3,3'-Dichlorobenzidine [POM]	1,2,3,4,5	A
28434868	3,3'-Dichloro-4,4'-diaminodiphenyl ether [POM]	1,2,3,4	B
72548	Dichlorodiphenyldichloroethane[DDD] [POM]	1,2,4	B
72559	Dichlorodiphenyldichloroethylene [DDE] [POM]	1,2,4	B
75343	1,1-Dichloroethane [Ethylidene dichloride]	1,2,4	C
540590	1,2-Dichloroethylene	7	D
94757	Dichlorophenoxyacetic acid, salts and esters [2,4-D]	1,2	D
78875	1,2-Dichloropropane [Propylene dichloride]	1,2,4	C
542756	1,3-Dichloropropene	1,2,3,4,5	A
78886	2,3-Dichloropropene	7	D
62737	Dichlorovos [DDVP]	1,2,4	B
115322	Dicofol [POM]	1,2	D
84173	Dienestrol [POM]	1,2,4	C
*	Diesel engine exhaust	1,3,4	C
111422	Diethanolamine	1,2	D
117817	Di(2-ethylhexyl) phthalate [DEHP]	1,2,3,4,5	A

CAS Number	Chemical Name	Source	Add Date
84662	Diethyl phthalate	7	D
56531	Diethylstilbestrol [POH]	1,2,3,4,5	A
64675	Diethyl sulfate	1,2,3,4,6	A
119904	3,3'-Dimethoxybenzidine [POH]	1,2,3,4,6	A
20325400	3,3'-Dimethoxybenzidine dihydrochloride [POH]	1,2,4	D
60117	4-Dimethylaminoazobenzene [POH]	1,2,3,4,5	A
121697	N,N-Dimethylaniline	1,2	D
57976	7,12-Dimethylbenz[a]anthracene [PAH-Derivative, POH]	1,2,4	C
119937	3,3'-Dimethylbenzidine [o-tolidine] [POH]	1,2,3,4,5	A
79447	Dimethyl carbamoyl chloride	1,2,3,4,5	A
68122	Dimethyl formamide	1,2,3	C
57147	1,1-Dimethylhydrazine	1,2,3,4,5	A
105679	2,4-Dimethylphenol [2,4-Xylenol]	7	D
131113	Dimethyl phthalate	1,2	D
77781	Dimethyl sulfate	1,2,3,4,6	A
25154545	Dinitrobenzenes (mixtures of) including:	4,7	C
99650	m-Dinitrobenzene	7	D
528290	o-Dinitrobenzene	7	D
100254	p-Dinitrobenzene	7	D
534521	4,6-Dinitro-o-cresol, and salts	1,2	D
51285	2,4-Dinitrophenol	1,2	D
42397648	1,6-Dinitropyrene [PAH-Derivative, POH]	1,2,3,4	D
42397659	1,8-Dinitropyrene [PAH-Derivative, POH]	1,2,3,4	D
25321146	Dinitrotoluenes (mixed isomers) including but not limited to:	7	D
121142	2,4-Dinitrotoluene	1,2,4	B
606202	2,6-Dinitrotoluene	7	D
117840	n-Dioctyl phthalate	7	D
123911	1,4-Dioxane	1,2,3,4,5	A
*	Dioxins [Chlorinated dibenzodioxins] [POH] (see Polychlorinated dibenzo-p-dioxins)		
630933	Diphenylhydantoin [POH]	1,2,4	A
122667	1,2-Diphenylhydrazine (Hydrazobenzene) [POH]	1,2,4,5	A
2475458	Disperse Blue 1 [PAH-Derivative, POH]	1,2,3,4	D
*	Environmental tobacco smoke	1,3,4	A
106898	Epichlorohydrin	1,2,3,4,6	A
106887	1,2-Epoxybutane	1,2	D
*	Epoxy resins	6	B
379793	Ergotamine tartrate [POH]	1,2,4	C
140885	Ethyl acrylate	1,2,3,4,6	A
100414	Ethyl benzene	1,2	D
75003	Ethyl chloride (Chloroethane)	1,2,4	A
541413	Ethyl chloroformate	7	D
-	Ethyl-4,4'-dichlorobenzilate (see Chlorobenzilate)		
74851	Ethylene	7	D
106934	Ethylene dibromide (1,2-Dibromoethane)	1,3,4,5,6	A
107062	Ethylene dichloride (1,2-Dichloroethane)	1,2,3,4,6	A
107211	Ethylene glycol	1,2	D
151564	Ethyleneimine (Aziridine)	1,2	D
75218	Ethylene oxide	1,2,3,4,5,6	A
96457	Ethylene thiourea	1,2,3,4,5	A
33419420	Etoposide [POH]	1,2,4	C
*	Fluorides and compounds including but not limited to:	2	B
7664393	Hydrogen fluoride	1,2,7	A
2164172	Fluometuron	7	D
*	Fluorocarbons (brominated)	6	A
*	Fluorocarbons (chlorinated) including but not limited to:	1,6	A
76131	Chlorinated fluorocarbon (CFC-113)	2,6	A
50000	Formaldehyde	1,2,3,4,5,6	A
*	Gasoline vapors	1,2,3,4	A
111308	Glutaraldehyde	1,6	A
*	Glycol ethers and their acetates including but not limited to:	1,2,6	A
111466	Diethylene glycol	1,6	C
111966	Diethylene glycol dimethyl ether	1,2,6	C
112345	Diethylene glycol monobutyl ether	1,2,6	C
111900	Diethylene glycol monoethyl ether	1,2,6	C
111773	Diethylene glycol monomethyl ether	1,2,6	C
25265718	Dipropylene glycol	1,6	C
34590948	Dipropylene glycol monomethyl ether	1,6	C
629141	Ethylene glycol diethyl ether	1,2,6	C
110714	Ethylene glycol dimethyl ether	1,2,6	C
111762	Ethylene glycol monobutyl ether	1,2,6	C
110805	Ethylene glycol monoethyl ether	1,2,6	B
111159	Ethylene glycol monoethyl ether acetate	1,2,6	C
109864	Ethylene glycol monomethyl ether	1,2,6	B
110496	Ethylene glycol monomethyl ether acetate	1,2,6	C
2807309	Ethylene glycol monopropyl ether	1,2,6	C
107982	Propylene glycol monomethyl ether	1,6	C
108656	Propylene glycol monomethyl ether acetate	1,6	C
112492	Triethylene glycol dimethyl ether	1,2,6	C
23092173	Halazepam [POH]	1,2,4	C
76448	Heptachlor	1,2,4	B
87683	Hexachlorobutadiene	1,2	D
118741	Hexachlorobenzene	1,2,3,6	A
*	Hexachlorocyclohexanes included but not limited to:	1,3,4,6	A
58899	Lindane	1,3,4	C
77474	Hexachlorocyclopentadiene	1,2	A
67721	Hexachloroethane	1,2,4	C

CAS Number	Chemical Name	Source	Add Date
1335871	Hexachloronaphthalene [PAH-Derivative, POM]	1,2,7	D
680319	Hexamethylphosphoramide	1,2,3,4,5	A
110543	Hexane	1,2	D
302012	Hydrazine	1,2,3,4,6	A
7647010	Hydrochloric acid	1,2	A
-	Hydrocyanic acid (see Cyanide compounds)		
7783064	Hydrogen sulfide	1,2	A
123319	Hydroquinone	1,2	D
-	Indeno[1,2,3-cd]pyrene [PAH, POM]	(see PAHs)	
78842	Isobutyraldehyde	7	D
*	Isocyanates	6	A
	Including but not limited to:		
822060	Hexamethylene-1,6-diisocyanate	1,2	D
101688	Methylene diphenyl diisocyanate [MDI] [POM]	1,2	D
624839	Methyl isocyanate	1,2	A
-	Toluene-2,4-diisocyanate (see toluene diisocyanates)		
-	Toluene-2,6-diisocyanate (see toluene diisocyanates)		
78591	Isophorone	1,2	D
67630	Isopropyl alcohol	1	D
80057	4,4'-Isopropylidenediphenol [POM]	1,2	D
77601634	Lactofen [POM]	1,2,4	B
7439921	Lead	1,4,6	A
*	Lead compounds **	1,2	D
	Including but not limited to:		
301042	Lead acetate	1,2,4,6	A
1335326	Lead subacetate	1,2,4	C
*	Lead compounds (inorganic) **	1,3	A
	Including but not limited to:		
7446277	Lead phosphate	1,4,5	A
846491	Lorazepam [POM]	1,2,4	C
108316	Maleic anhydride	1,2	A
7439965	Manganese	1,2	A
*	Manganese compounds **	1,2	B
7439976	Mercury	1,2,4,6	A
*	Mercury compounds **	1,2,4	B
	Including but not limited to:		
7487947	Mercuric chloride	2	A
593748	Methyl mercury [Dimethylmercury]	2	A
67561	Methanol	1,2	A
72435	Methoxychlor [POM]	1,2	D
96333	Methyl acrylate	7	D
75558	2-Methylaziridine [1,2-Propyleneimine]	1,2,3,4	A
74839	Methyl bromide [Bromomethane]	1,2,6	A
74873	Methyl chloride [Chloromethane]	1,2	D
71556	Methyl chloroform [1,1,1-Trichloroethane]	1,2,6	A
56495	3-Methylcholanthrene [PAH-Derivative, POM]	1,2,4	C
3697243	5-Methylchrysene [PAH-Derivative, POM]	1,2,3,4,5	A

CAS Number	Chemical Name	Source	Add Date
101144	4,4'-Methylene bis(2-chloroaniline) [MOCA] [POM]	1,2,3,4,5	A
838880	4,4'-Methylene bis(2-methylaniline) [POM]	1,2,3,4	B
101611	4,4'-Methylene bis(N,N-dimethyl) benzenamine [POM]	1,2,4,5	A
74953	Methylene bromide	7	D
75092	Methylene chloride [Dichloromethane]	1,2,3,4,5,6	A
101779	4,4'-Methylenedianiline (and its dichloride) [POM]	1,2,3,4,6	A
78933	Methyl ethyl ketone [2-Butanone]	1,2	D
60344	Methyl hydrazine	1,2	D
74884	Methyl iodide [Iodomethane]	1,2,4,6	A
108101	Methyl isobutyl ketone [Hexone]	1,2	D
80626	Methyl methacrylate	1,2,6	A
129157	2-Methyl-1-nitroanthraquinone (uncertain purity) [PAH Derivative, POM]	1,2,3,4	A
1634044	Methyl tert-butyl ether	1,2	D
90948	Michler's ketone [POM]	1,2,4,6	A
59467968	Midazolam hydrochloride [POM]	1,2,4	C
*	Mineral fibers (other than manmade)	2,7	A
	Including but not limited to:		
1332214	Asbestos	1,2,3,4,6	A
12510428	Erionite	2,3,4	A
*	Talc containing asbestiform fibers	2,3,4	A
*	Mineral Fibers (fine) (fine mineral fibers which are manmade and are airborne particles of a respirable size of greater than 5.0 microns in length, less than or equal to 3.5 microns in diameter, with a length to diameter ratio of 3:1)	1,2,7	D
	Including but not limited to:		
*	Ceramic fibers	1,2,3,4	B
*	Glasswool fibers	1,2,3,4	B
*	Rockwool fibers	1,2,3	B
*	Slagwool fibers	1,2,3	B
70476823	Mitoxantrone hydrochloride [PAH-Derivative, POM]	1,2,4	C
1313275	Molybdenum trioxide	1	D
86220420	Nafarelin acetate [PAH-Derivative, POM]	1,2,4	C
3771195	Nalanopin [POM]	1,2,3,4	A
-	Naphthalene [PAH, POM]	(see PAHs)	
134327	1-Naphthylamine [PAH-Derivative, POM]	1,2,4	C
91598	2-Naphthylamine [PAH-Derivative, POM]	1,2,3,4,6	A
7440020	Nickel	1,2,3,4,5	A

CAS Number	Chemical Name	Source	Add Date
*	Nickel compounds**	1,2,3,4,5	A
	Including but not limited to:		
373024	Nickel acetate	1,2,5	D
3333393	Nickel carbonate	1,2,5	D
13463393	Nickel carbonyl	1,2,4,5	A
12054487	Nickel hydroxide	1,2,5	D
1271289	Nickelocene	1,2,5	D
1313991	Nickel oxide	1,2,5	D
12035722	Nickel subsulfide	1,2,4,5	A
7697372	Nitric acid	1	D
139139	Nitrilotriacetic acid	1,4,5	A
602879	5-Nitroacenaphthene [PAH-Derivative, POH]	1,2,3,4	A
98953	Nitrobenzene	1,2	A
92933	4-Nitrobiphenyl [POH]	1,2,4	B
7496028	6-Nitrochrysene [PAH-Derivative, POH]	1,2,3,4	D
607578	2-Nitrofluorene [PAH-Derivative, POH]	1,2,3,4	D
55630	Nitroglycerin	7	D
88755	2-Nitrophenol	7	D
100027	4-Nitrophenol	7	D
79469	2-Nitropropane	1,2	D
5522430	1-Nitropyrene [PAH-Derivative, POH]	1,2,3,4,5	A
57835924	4-Nitropyrene [PAH-Derivative, POH]	1,2,3,4	D
156105	p-Nitrosodiphenylamine [POH]	1,2,3,4	D
86306	N-Nitrosodiphenylamine [POH]	1,2,4,5	A
59892	N-Nitrosomorpholine	1,2,4	B
684936	N-Nitroso-N-methylurea	1,2,3,4,5	A
303479	Ochratoxin A [POH]	1,2,4,5	A
2234131	Octachloronaphthalene [PAH-Derivative, POH]	1,2,4	C
2646175	Oil Orange SS [PAH-Derivative, POH]	1,2,7	D
20816120	Osmium tetroxide	1,2,3,4	A
*	#PAHs (Polycyclic aromatic hydrocarbons) [POH]	7	D
	Including but not limited to:	1,2	A
120127	Anthracene		
56553	Benz[a]anthracene	1,2,7	D
50328	Benzo[a]pyrene	1,2,3,4,5	A
205992	Benzo[b]fluoranthene	1,2,3,4,5	A
205823	Benzo[j]fluoranthene	1,2,3,4,5	A
207089	Benzo[k]fluoranthene	1,2,3,4,5	A
218019	Chrysene	1,2,3,4,5	A
		1,2,4	C

#PAH: (Polycyclic Aromatic Hydrocarbon) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The structure does not include any heteroatoms or substituent groups. The structure includes only carbon and hydrogen. PAHs are a subgroup of POH and have a boiling point of greater than or equal to 100°C.

CAS Number	Chemical Name	Source	Add Date
53703	Dibenz[a,h]anthracene	1,2,3,4,5	A
192654	Dibenzo[a,e]pyrene	1,2,3,4,5	A
189640	Dibenzo[a,h]pyrene	1,2,3,4,5	A
189559	Dibenzo[a,i]pyrene	1,2,3,4,5	A
191300	Dibenzo[a,l]pyrene	1,2,3,4,5	A
193395	Indeno[1,2,3,-cd]pyrene	1,2,3,4,5	A
91203	Naphthalene	1,2	A

(*) Dibenz[a,h]acridine, Dibenz[a,j]acridine, 7H-Dibenzo[c,g]carbazole, 7,12-Dimethylbenz[a]anthracene, 3-Methylcholanthrene, and 5-Methylchrysene are now alphabetized on the list.

*	#PAH-Derivatives (Polycyclic aromatic hydrocarbon-derivatives) [POH]	1,2,7	D
	(Including but not limited to those substances listed in Appendix A with the bracketed designation [PAH-Derivative, POH])		
56382	Parathion	1,2	D
1336363	PCBs (Polychlorinated biphenyls) [POH]	1,2,3,4,5,6	A
82688	Pentachloronitrobenzene (Quintobenzene)	1,2	D
79210	Peracetic acid	1	D
127184	Perchloroethylene (Tetrachloroethene)	1,2,3,4,5,6	A
108952	Phenol	1,2	A
59961	Phenoxybenzamine [POH]	1,2,4	B
63923	Phenoxybenzamine hydrochloride [POH]	1,2,3,4,6	C
106503	p-Phenylenediamine	1,2	D
90437	2-Phenylphenol [POH]	1,2	D
57410	Phenytoin [POH]	1,2,3,4,5	A
75445	Phosgene	1,2	A
7723140	Phosphorus	1,2	A
*	Phosphorus compounds:	2	B
7803512	Phosphine	1,2,7	A
7664382	Phosphoric acid	1,2	B

PAH-DERIVATIVE: (Polycyclic Aromatic Hydrocarbon Derivative) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The fused ring structure does not contain heteroatoms. The structure does contain one or more substituent groups. PAH-derivatives are a subgroup of POH and have a boiling point of greater than or equal to 100°C.

CAS Number	Chemical Name	Source	Add Date
10025873	Phosphorus oxychloride	2	B
10026138	Phosphorus pentachloride	2	B
1314563	Phosphorus pentoxide	2	B
7719122	Phosphorus trichloride	2	B
126738	Tributyl phosphate	2	B
78400	Triethyl phosphine	2	B
512561	Trimethyl phosphate	2	B
78308	Triorthocresyl phosphate [POH]	1,2	B
115866	Triphenyl phosphate [POH]	1,2	B
101020	Triphenyl phosphite [POH]	1,2	B
85449	Phthalic anhydride	1,2	A
88891	Picric acid	7	D
18378897	Plicamycin [PAH-Derivative, POH]	1,2,4	C
*	Polybrominated biphenyls [PBBs] [POH]	1,2,3,4,6	A
*	Polychlorinated dibenzo-p-dioxins [PCDDs] [POH]	1,2	A
	Including but not limited to:		
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin [TCDD] [POH]	1,2,3,4,6	A
40321764	1,2,3,7,8-Pentachlorodibenzo-p-dioxin [POH]	1,2	A
39227286	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [POH]	1,2,4	A
57653857	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [POH]	1,2	A
19408743	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [POH]	1,2	A
35822469	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [POH]	1,2	A
*	Polychlorinated dibenzofurans [PCDFs] [POH]	1,2	A
	Including but not limited to:		
51207319	2,3,7,8-Tetrachlorodibenzofuran [POH]	1,2	A
57117416	1,2,3,7,8-Pentachlorodibenzofuran [POH]	1,2	A
57117314	2,3,4,7,8-Pentachlorodibenzofuran [POH]	1,2	A
70648269	1,2,3,4,7,8-Hexachlorodibenzofuran [POH]	1,2	A
57117449	1,2,3,6,7,8-Hexachlorodibenzofuran [POH]	1,2	A
72918219	1,2,3,7,8,9-Hexachlorodibenzofuran [POH]	1,2	A
60851345	2,3,4,6,7,8-Hexachlorodibenzofuran [POH]	1,2	A
67562394	1,2,3,4,6,7,8-Heptachlorodibenzofuran [POH]	1,2	A
55673897	1,2,3,4,7,8,9-Heptachlorodibenzofuran [POH]	1,2	A
*	#POH (Polycyclic organic matter)	1,2	B
	(Including but not limited to those substances listed in Appendix A with the bracketed designation of [POH], [PAH, POH], or [PAH-Derivative, POH])		
3761533	Ponceau MX [PAH-Derivative, POH]	1,2,3,4	A
3564098	Ponceau 3R [PAH-Derivative, POH]	1,2,3,4	A
1120714	1,3-Propane sultone	1,2,3,4,5	A
57578	beta-Propiolactone	1,2,3,4,5	A
123386	Propionaldehyde	1,2	D
114261	Propoxur [Baygon]	1,2	D
115071	Propylene	1,2	A
-	1,2-Propyleneimine	(see 2-Methylaziridine)	
75569	Propylene oxide	1,2,3,4,5	A
110861	Pyridine	7	D
91225	Quinoline	1,2	D
106514	Quinone	1,2	D
*	Radionuclides	1,2,4	A
	Including but not limited to:		
24267669	Iodine-131	1,2,4	B
*	Radon and its decay products	1,4	B
50555	Reserpine [POH]	1,2,4,5	A
7782492	Selenium	2	A
*	Selenium compounds **	1,2	A
	Including but not limited to:		
7446346	Selenium sulfide	2,4,5	C
*	Silica, crystalline	1,3,4	A
7440224	Silver	7	D
*	Silver compounds**	1	D
1310732	Sodium hydroxide	1,2	A
132274	Sodium o-phenylphenate [POH]	1,2,3,4	A
10048132	Sterigmatocystin [POH]	1,2,3,4	A
100425	Styrene	1,2,3,6	A
96093	Styrene oxide	1,2,3,4	A
7664939	Sulfuric acid	1	D
54965241	Tamoxifen citrate [POH]	1,2,4	C
846504	Temazepam [POH]	1,2,4	C
100210	Terephthalic acid	1	D
79345	1,1,2,2-Tetrachloroethane	1,2,4	C
961115	Tetrachlorvinphos	7	D
7440280	Thallium	7	D
*	Thallium compounds**	7	D

POH: (Polycyclic Organic Matter) - Includes organic compounds with more than one benzene ring, and which have a boiling point of greater than or equal to 100°C.

CAS Number	Chemical Name	Source	Add Date
139651	4,4'-Thiodianiline [POM]	1,2,3,4	A
62566	Thiourea	1,3,4,6	A
7550450	Titanium tetrachloride	1,2	D
108883	Toluene	1,2,4,6	A
-	2,4-Toluenediamine (see 2,4-Diaminotoluene)		
*	Toluene diisocyanates	1,3	D
	Including but not limited to:		
584849	Toluene-2,4-diisocyanate	1,2,3,6	A
91087	Toluene-2,6-diisocyanate	1,2,3,6	A
95534	o-Toluidine	1,2,3,4,6	A
8001352	Toxaphene [Polychlorinated camphenes]	1,2,3,4,6	A
28911016	Triazolam [POM]	1,2,4	C
52686	Trichlorfon	7	D
-	1,1,1-Trichloroethane (see Methyl chloroform)		
79005	1,1,2-Trichloroethane	1,2,4	D
	(Vinyl trichloride)		
79016	Trichloroethylene	1,2,4	A
-	2,4,6-Trichlorophenol (see Chlorophenols)		
121448	Triethylamine	1,2	D
1582098	Trifluralin	1,2	D
95636	1,2,4-Trimethylbenzene	1	D
540841	2,2,4-Trimethylpentane	1,2	D
72571	Trypan blue [PAH-Derivative, POM]	1,2,3,4	A
51796	Urethane [Ethyl carbamate]	1,2,3,4,6	A
*	Vanadium (fume or dust)	7	D
143679	Vinblastine sulfate [POM]	1,2,4	C
2068782	Vincristine sulfate [POM]	1,2,4	C
108054	Vinyl acetate	1,2	D
593602	Vinyl bromide	1,2,3,4	A
75014	Vinyl chloride	1,2,3,4,6	A
75354	Vinylidene chloride	1,2	A
81812	Warfarin [POM]	1,2,4	A
*	Wood preservatives	6	B
	(containing arsenic and chromate)		
*	Xylenes (mixed xylenes)	1,2,6	A
	Including:		
108383	m-Xylene	1,2	D
95476	o-Xylene	1,2	D
106423	p-Xylene	1,2	D
7440666	Zinc	2	A
*	Zinc compounds **	1,2	A
	Including but not limited to:		
1314132	Zinc oxide	2	A

CATEGORY_2

Chemical abstract service (CAS) number	Chemical name	Source	Add Date
26148685	A-alpha-C [2-Amino-9H-pyrido[2,3-b] indole]	3,4	B
34256821	Acetochlor	4	B
546883	Acetohydroxamic acid	4	C
50760	Actinomycin D	4	C
3688537	AF-2	3,4	A
*	Aflatoxins	3,4,5	A
15972608	Alachlor	4	B
309002	Aldrin	4	B
39831555	Amikacin sulfate	4	C
125848	Aminoglutethimide	4	C
68006837	2-Amino-3-methyl-9H-pyrido[2,3-b]indole [MeA-alpha-C]	3,4	B
712685	2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	3,4	A
54626	Aminopterin	4	A
	2-Amino-9H-Pyrido[2,3-b]indole (see A-alpha-C)		
61825	Amitrole	3,4,5	A
*	Analgesic mixtures containing phenacetin	3,4,5	A
*	Androgenic (anabolic) steroids including but not limited to:	3,4	A
58184	Methyltestosterone	4	C
434071	Oxymetholone	4,5	A
58220	Testosterone and its esters including but not limited to:	4	B
315377	Testosterone enanthate	4	C
134292	o-Anisidine hydrochloride	4,5	A
140578	Aramite	3,4	A
50782	Aspirin	4	D
115026	Azaserine	3,4	A
446866	Azathioprine	3,4,5	A
271896	Benzofuran	4	D
*	Betel quid with tobacco	3,4	A
154938	Bischloroethyl nitrosourea	3,4	A
*	Bitumens, extracts of steam-refined and air-refined bitumens	3,4	A
*	Bleomycins	3	A
76274	Bromodichloromethane	4	C
1689845	Bromoxynil	4	D
55981	1,4-Butanediol dimethanesulfonate [Busulfan]/[Hyleran]	3,4,5	A
25013165	Butylated hydroxyanisole [BHA]	3,4	A
3068880	beta-Butyrolactone	3,4	A
2426061	Captafol	4	B
630080	Carbon monoxide	4	B
41575944	Carboplatin	4	C
*	Carrageenan (degraded)	3,4	A
474259	Chenodiol	4	C
305033	Chlorambucil	3,4,5	A
56757	Chloramphenicol	3,4	A
143500	Chlordecone [Kepone]	3,4	A
6164983	Chlordimeform	4	B
115286	Chlorendic acid	3,4,5	B
108171262	Chlorinated paraffins (Average chain length, C12; approx. 60% chlorine by weight)	3,4,5	B
124481	Chlorodibromomethane	4	C
13010474	1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea [CCNU]	3,4,5	A
13909096	1-(2-chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea [Methyl CCNU]	3	A
95830	4-Chloro-o-phenylenediamine	3,4,5	A
563473	3-Chloro-2-methylpropene	4,5	B
95692	p-Chloro-o-toluidine	3,4	A
*	p-Chloro-o-toluidine (strong acid salts)	3	D
*	Chlorophenoxy herbicides	3	A
1897456	Chlorothalonil	4	B
15663271	Cisplatin	3,4	A
8002462	Coal tars	3,4,5	B
120718	p-Cresidine	3,4,5	A
135206	Cupferron	4,5	A
21725462	Cyanazine	4	C
14901087	Cycasin	3,4	A
50180	Cyclophosphamide	3,4	A
13121705	Cyhexatin	4	B
147944	Cytarabine	4	B
4342034	Dacarbazine	3,4,5	A
1596845	Daminozide	4	C
17230885	Danazol	4	C
615054	2,4-Diaminoanisole	3,4	A
39156417	2,4-Diaminoanisole sulfate	4,5	A
764410	1,4-Dichloro-2-butene	4	C
60571	Dieldrin	4	B
1464535	Diepoxybutane	3,4,5	A
*	Diesel fuel (marine)	3	D
1615801	1,2-Diethylhydrazine	3,4	A
101906	Diglycidyl resorcinol ether [DGRE]	3,4,5	A
94586	Dihydrosafrole	3,4	A

CAS Number	Chemical Name	Source	Add Date
55738540	trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole	3,4	A
540738	1,2-Dimethylhydrazine	3,4	A
513371	Dimethylvinylchloride (DMVC)	4,5	B
39300453	Dinocap	4	C
88857	Dinoseb	4	B
564250	Doxycycline	4	C
*	Estrogens, nonsteroidal	3,5	A
*	Estrogens, steroidal	3,5	A
	Including but not limited to:		
*	Conjugated estrogens	4	C
50282	Estradiol 17 beta	4,5	A
53167	Estrone	4,5	A
57636	Ethinyl estradiol	4,5	A
72333	Mestranol	3,4,5	A
62500	Ethyl methanesulfonate	3,4	A
64350480	Etretinate	4	A
51218	Fluorouracil	4	B
76437	Fluoxymesterone	4	C
13311847	Flutamide	4	C
133073	Folpet	4	B
3570750	2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole	3,4	A
67458	Furazolidone	4	C
60568050	Furmecyclox	4	C
*	Gasoline engine exhaust	3	C
	Including but not limited to:		
*	Gasoline engine exhaust (condensates & extracts)	4	D
67730114	Glu-P-1 [2-Amino-6-methyldipyrido [1,2-a:3',2'-d]imidazole]	3,4	A
67730103	Glu-P-2 [2-Aminodipyrido [1,2-a:3',2'-d]imidazole]	3,4	A
765344	Glycidaldehyde	3,4	A
556525	Glycidol	4	C
126078	Griseofulvin	3,4	A
16568028	Gyromitrin [Acetaldehyde methylformylhydrazone]	4	A
2784943	HC Blue 1	4,5	B
1024573	Heptachlor epoxide	4	B
10034932	Hydrazine sulfate	4,5	A
3778732	Ifosfamide	4	C
76180966	IQ [2-Amino-3-methylimidazo [4,5-f]quinoline]	3,4	A
9004664	Iron dextran complex	3,4,5	A
120581	Isosafrole	4	C
4759482	Isotretinoin	4	A

CAS Number	Chemical Name	Source	Add Date
303344	Lasiocarpine	3,4	B
554132	Lithium carbonate	4	D
919164	Lithium citrate	4	D
*	Lubricant base oils and derived products, specifically vacuum distillates, acid treated oils, aromatic oils, mildly solvent-refined oils, mildly hydrotreated oils, and used engine oils	3,4,5	B
8018017	Mancozeb	4	C
12427382	Maneb	4	C
595335	Megestrol acetate	4	D
148823	Melphalan	3,4,5	A
9002680	Mepitropins	4	C
6112761	Mercaptopurine	4	C
531760	Merphalan	4	B
3963959	Methecycline hydrochloride	4	D
60560	Methimazole	4	C
59052	Methotrexate	4	B
15475566	Methotrexate sodium	4	C
484208	5-Methoxypsoralen	3	A
590965	Methylazoxymethanol	4	C
592621	Methylazoxymethanol acetate	3,4	B
66273	Methyl methanesulfonate	3,4	A
70257	N-Methyl-N'-nitro-N-nitrosoguanidine	3,4	A
615532	N-Methyl-N-nitrosourethane	3	A
924425	N-Methylolacrylamide	4	C
56042	Methylthiouracil	3,4	A
9006422	Metiram	4	C
443481	Metronidazole	3,4,5	A
*	Mineral oils (untreated and mildly treated oils; and those used in occupations such as mule spinning, metal machining, and jute processing)	3,4,5	A
2385855	Mirex	3,4,5	A
62016398	Misoprostol	4	C
50077	Mitomycin C	3,4	A
315220	Monocrotaline	3,4	A
139913	5-(Morpholinomethyl)-3-[(5-nitro furfurylidene)amino]-2-oxazolidinone	3,4	A
505602	Mustard gas (Sulfur mustard)	3,4,5	A
1405103	Neomycin sulfate	4	C
66391672	Netilmicin sulfate	4	C
*	Nickel refinery dust from the pyrometallurgical process	4	B
54115	Nicotine	4	C
61674	Nitridazole	3,4	A

CAS Number	Chemical Name	Source	Add Date
*	Nitrilotriacetic acid (salts) including but not limited to:	3	D
18662538	Nitrilotriacetic acid, trisodium salt monohydrate	4	D
99592	6-Nitro-o-anisidine	4,5	A
1836766	Nitrofen (technical grade)	3,4,6	A
67209	Nitrofurantoin	4	D
59870	Nitrofurazone	4	C
555840	1-[(6-Nitrofurfurylidene)amino]-2-imidazolidinone	3,4	A
531828	N-[4-(6-Nitro-2-furyl)-2-thiazolyl]acetamide	3,4	A
51752	Nitrogen mustard (Mechlorethamine)	3,4,5	A
55867	Nitrogen mustard hydrochloride	4,5	B
302706	Nitrogen mustard N-oxide	3,4	A
759739	N-Nitroso-N-ethylurea	4,5	A
60153493	3-(N-Nitrosomethylamino)propionitrile	3,4	B
64091914	4-(N-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK)	3,4	B
615532	N-Nitroso-N-methylurethane (N-Methyl-N-nitrosourethane)	3,4	A
4549400	N-Nitrosomethylvinylamine	3,4,5	A
16543558	N-Nitrosonornicotine	3,4,5	A
100754	N-Nitrosopiperidine	3,4,5	A
930552	N-Nitrosopyrrolidine	3,4,5	A
13256229	N-Nitrososarcosine	3,4,5	A
6533002	Norgestrel	4	C
79572	Oxytetracycline	4	D
794934	Panfuran S (Dihydroxymethylfuratrizine)	3,4	A
115673	Paramethadione	4	C
52576	Penicillamine	4	D
57330	Pentobarbital sodium	4	C
63989	Phenacemide	4	C
62442	Phenacetin	3,4,5	A
94780	Phenazopyridine hydrochloride	3,4,5	A
3546109	Phenesterin	4,5	B
50066	Phenobarbital	3,4	A
122601	Phenyl glycidyl ether	3,4	C
54911	Pipobroman	4	C
63971981	Polygeenan	4	B
366701	Procarbazine hydrochloride	3,4,5	A
*	Progestins including but not limited to:	3	A
71589	Hydroxyprogesterone acetate	3,4	A
68224	Norethisterone	4,5	A
57830	Progesterone	3,4,5	A
51525	Propylthiouracil	3,4,5	A
*	Residual (Heavy) Fuel Oils	3,4	D

CAS Number	Chemical Name	Source	Add Date
302794	all-trans-Retinoic acid	4	B
*	Retinol/retinyl esters	4	B
36791045	Ribavirin	4	C
81072	Saccharin	3,4,5	A
94597	Safrole	3,4,5	A
*	Shale oils	3,4	A
128449	Sodium saccharin	4	B
*	Soots	3,4	A
3810740	Streptomycin sulfate	4	D
18883664	Streptozotocin	3,4,5	A
95067	Sulfallate	3,4,5	A
5216251	p-alpha,alpha,alpha-Tetrachlorotoluene	4	C
64755	Tetracycline hydrochloride	4	D
509148	Tetranitromethane	4	C
50351	Thalidomide	4	A
62555	Thioacetamide	3,4,5	A
154427	Thioguanine	4	C
1314201	Thorium dioxide	4,5	A
*	Tobacco products, smokeless	3,4	A
49842071	Tobramycin sulfate	4	C
*	alpha-chlorinated toluenes	3	A
636215	o-Toluidine hydrochloride	4,5	A
106490	p-Toluidine	4	C
299752	Treosulfan	3,4	A
13647353	Trilostane	4	C
127480	Trimethadione	4	D
68768	Tris(aziridinyl)-p-benzoquinone [Triaziquone]	4	C
52244	Tris(1-aziridinyl) phosphine sulfide [Thiotepa]	3,4,5	A
126727	Tris(2,3-dibromopropyl)phosphate	4	B
62450060	Trp-P-1 [3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole]	3,4	A
62450071	Trp-P-2 [3-Amino-1-methyl-5H-pyrido[4,3-b]indole]	3,4	A
66751	Uracil mustard	3,4	A
26995915	Urofolitropin	4	C
99661	Valproate	4	A
106876	4-Vinyl-1-cyclohexene diepoxide [Vinyl cyclohexene dioxide]	4	C
87627	2,6-Xylidene	4	D
12122677	Zineb	4	C

Appendix BA

District Air Toxic
Inventories, Reports, and Surveys

Appendix BA

Air Pollution Control District
Air Toxic Inventories, Reports or Surveys

1. Bay Area Air Quality Management District "Current BAAQMD Air Toxics Inventory. October 27, 1990."

2. "Kern County Air Pollution Control District, "District's Toxic Use List, Southeast Desert Portion of Kern County, February 14, 1992."

3. Sacramento Metropolitan Air Quality Management District "Toxic Air Pollutant Emission Inventory For Sacramento County, (Revised). June 1990."

4. San Bernardino County Air Pollution Control District "Toxics Inventory List. June 27, 1990."

5. San Diego County Air Pollution Control District "List of Semiconductor Manufacturers Using Toxic Gases. May 1988."

6. San Joaquin Valley Unified Air Pollution Control District ~~"District's Toxics Use List, San Joaquin Valley Unified APCD, February 21, 1992."~~ "San Joaquin Valley Unified APCD Toxics List, March 3, 1993."

7. Current San Luis Obispo County Air Pollution Control District "Air Toxics Inventory List for AB 2588, May 3, 1990."

8. Santa Barbara County Air Pollution Control District "Current Santa Barbara County Air Pollution Control District List of Air Toxic Sources. May 27, 1992".

9. South Coast Air Quality Management District "Current SCAQMD Air Toxics Inventory for AB 2588. May 11, 1990."

10. Monterey Bay Unified Air Pollution Control District, "AB 2588 Facilities Affected FY 92/93 and FY 93/94." April 8, 1993.

(1) Notify the agency of its determination.

(2) Within 45 days of the notification pursuant to paragraph (1), hold a public hearing at which the agency may present information related to expenditure of the revenues from the fees.

(3) After the public hearing, if the district determines that the agency has expended the revenues from the fees in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to the California Clean Air Act of 1988 or the plan prepared pursuant to Article 5 (commencing with Section 40460) of Chapter 5.5 of Part 3, the district shall withhold these revenues from the agency in an amount equal to the amount which was inappropriately expended. Any revenues withheld pursuant to this paragraph shall be redistributed to the other agencies or, upon approval of the district board, to entities specified in the work programs developed by the mobile source advisory committee, to the extent the district determines that they have complied with this chapter.

(d) Any agency which receives fee revenues pursuant to Section 44243 or 44244 shall expend the funds within one year of the program or project completion date.

(Amended by Stats. 1992, Ch. 427, Sec. 108. Effective January 1, 1993.)

44245. The state board shall report to the Legislature on or before December 31, 1992, on the air pollution reduction programs funded pursuant to this chapter. The report shall include, but not be limited to, an analysis of the use of vehicle registration fees for air pollution programs, the efficacy and results of the programs funded by the fees and any conclusions and recommendations by the state board.

(Added by Stats. 1990, Ch. 1705, Sec. 1.)

44247. Local agencies imposing vehicle registration fees for air pollution programs pursuant to this chapter shall report to the state board on their use of the fees and the results of the programs funded by the fees and shall cooperate with the state board in the preparation of its report. These reports shall be submitted according to a schedule adopted by the state board to ensure compliance with the reporting requirements of Section 44245.

(Added by Stats. 1990, Ch. 1705, Sec. 1.)

PART 6. AIR TOXICS "HOT SPOTS" INFORMATION AND ASSESSMENT

(Part 6 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384. Note: Sections 44380 and 44384 became operative Jan. 1, 1988.)

CHAPTER 1. LEGISLATIVE FINDINGS AND DEFINITIONS

(Chapter 1 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44300. This part shall be known and may be cited as the Air Toxics "Hot Spots" Information and Assessment Act of 1987.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44301. The Legislature finds and declares all of the following:

(a) In the wake of recent publicity surrounding planned and unplanned releases of toxic chemicals into the atmosphere, the public has become increasingly concerned about toxics in the air.

(b) The Congressional Research Service of the Library of Congress has concluded that 75 percent of the United States population lives in proximity to at least one facility that manufactures chemicals. An incomplete 1985 survey of large chemical companies conducted by the Congressional Research Service documented that nearly every chemical plant studied routinely releases into the surrounding air significant levels of substances proven to be or potentially hazardous to public health.

(c) Generalized emissions inventories compiled by air pollution control districts and air quality management districts in California confirm the findings of the Congressional Research Service survey as well as reveal that many other facilities and businesses which do not actually manufacture chemicals do use hazardous substances in sufficient quantities to expose, or in a manner that exposes, surrounding populations to toxic air releases.

(d) These releases may create localized concentrations or air toxics "hot spots" where emissions from specific sources may expose individuals and population groups to elevated risks of adverse health effects, including, but not limited to, cancer and contribute to the cumulative health risks of emissions from other sources in the area. In some cases where large populations may not be significantly affected by adverse health risks, individuals may be exposed to significant risks.

(e) Little data is currently available to accurately assess the amounts, types, and health impacts of routine toxic chemical releases into the air. As a result, there exists significant uncertainty about the amounts of potentially hazardous air pollutants which are released, the location of those releases, and the concentrations to which the public is exposed.

(f) The State of California has begun to implement a long-term program to identify, assess, and control ambient levels of hazardous air pollutants, but additional legislation is needed to provide for the collection and evaluation of information concerning the amounts, exposures, and short- and long-term health effects of hazardous substances regularly released to the surrounding atmosphere from specific sources of hazardous releases.

(g) In order to more effectively implement control strategies for those materials posing an unacceptable risk to the public health, additional information on the sources of potentially hazardous air pollutants is necessary.

(h) It is in the public interest to ascertain and measure the amounts and types of hazardous releases and potentially hazardous releases from specific sources that may be exposing people to those releases, and to assess the health risks to those who are exposed.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44302. The definitions set forth in this chapter govern the construction of this part.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44303. "Air release" or "release" means any activity that may cause the issuance of air contaminants, including the actual or potential spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a substance into the ambient air and that results from the routine operation of a facility or that is predictable, including, but not limited to, continuous and intermittent releases and predictable process upsets or leaks.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44304. "Facility" means every structure, appurtenance, installation, and improvement on land which is associated with a source of air releases or potential air releases of a hazardous material.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44306. "Health risk assessment" means a detailed comprehensive analysis prepared pursuant to Section 44361 to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and populationwide health risks associated with those levels of exposure.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44307. "Operator" means the person who owns or operates a facility or part of a facility.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44308. "Plan" means the emissions inventory plan which meets the conditions specified in Section 44342.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44309. "Report" means the emissions inventory report specified in Section 44341.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

CHAPTER 2. FACILITIES SUBJECT TO THIS PART

(Chapter 2 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44320. This part applies to the following:

(a) Any facility which manufactures, formulates, uses, or releases any of the substances listed pursuant to Section 44321 or any other substance which reacts to form a substance listed in Section 44321 and which releases or has the potential to release total organic gases, particulates, or oxides of nitrogen or sulfur in the amounts specified in Section 44322.

(b) Except as provided in Section 44323, any facility which is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by a district. A district may, with the concurrence of the state board, waive the application of this part pursuant to this subdivision for any facility which the district determines will not release

any substance listed pursuant to Section 44321 due to a shutdown or a process change.

(Amended by Stats. 1989, Ch. 1254, Sec. 7.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 90700-90703, 90704, 93303, 93306

44321. For the purposes of Section 44320, the state board shall compile and maintain a list of substances that contains, but is not limited to, all of the following:

(a) Substances identified by reference in paragraph (1) of subdivision (b) of Section 6382 of the Labor Code and substances placed on the list prepared by the National Toxicology Program issued by the United States Secretary of Health and Human Services pursuant to paragraph (4) of Section 262 of Public Law 95-622 of 1978. For the purposes of this subdivision, the state board may remove from the list any substance which meets both of the following criteria:

(1) No evidence exists that it has been detected in air.

(2) The substance is not manufactured or used in California, or, if manufactured or used in California, because of the physical or chemical characteristics of the substance or the manner in which it is manufactured or used, there is no possibility that it will become airborne.

(b) Carcinogens and reproductive toxins referenced in or compiled pursuant to Section 25249.8, except those which meet both of the criteria identified in subdivision (a).

(c) The candidate list of potential toxic air contaminants and the list of designated toxic air contaminants prepared by the state board pursuant to Article 2 (commencing with Section 39660) of Chapter 3.5 of Part 2, including, but not limited to, all substances currently under review and scheduled or nominated for review and substances identified and listed for which health effects information is limited.

(d) Substances for which an information or hazard alert has been issued by the repository of current data established pursuant to Section 147.2 of the Labor Code.

(e) Substances reviewed, under review, or scheduled for review as air toxics or potential air toxics by the Office of Air Quality Planning and Standards of the Environmental Protection Agency, including substances evaluated in all of the following categories or their equivalent: preliminary health and source screening, detailed assessment, intent to list, decision not to regulate, listed, standard proposed, and standard promulgated.

(f) Any additional substances recognized by the state board as presenting a chronic or acute threat to public health when present in the ambient air, including, but not limited to, any neurotoxins or chronic respiratory toxins not included within subdivision (a), (b), (c), (d), or (e).

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 90700-90702, 93307, 93308, 93334, 93335

44322. This part applies to facilities specified in subdivision (a) of Section 44320 in accordance with the following schedule:

(a) For those facilities that release, or have the potential to release, 25 tons per year or greater of total organic gases, particulates, or oxides of nitrogen or sulfur, this part becomes effective on July 1, 1988.

(b) For those facilities that release, or have the potential to release, more than 10 but less than 25 tons per year of total organic gases, particulates, or oxides of nitrogen or sulfur, this part becomes effective July 1, 1989.

(c) For those facilities that release, or have the potential to release, less than 10 tons per year of total organic gases, particulates, or oxides of nitrogen or sulfur, the state board shall, on or before July 1, 1990, prepare and submit a report to the Legislature identifying the classes of those facilities to be included in this part and specifying a timetable for their inclusion.

(Amended by Stats. 1989, Ch. 1254, Sec. 8.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 90702, 90703, 93303-93305, 93308

44323. A district may prepare an industrywide emissions inventory and health risk assessment for facilities specified in subdivision (b) of Section 44320 and subdivisions (a) and (b) of Section 44322, and shall prepare an industrywide emissions inventory for the facilities specified in subdivision (c) of Section 44322, in compliance with this part for any class of facilities that the district finds and determines meets all of the following conditions:

(a) All facilities in the class fall within one four-digit Standard Industrial Classification Code.

(b) Individual compliance with this part would impose severe economic hardships on the majority of the facilities within the class.

(c) The majority of the class is composed of small businesses.

(d) Releases from individual facilities in the class can easily and generically be characterized and calculated.

(Amended by Stats. 1989, Ch. 1254, Sec. 9.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93304, 93306

44324. This part does not apply to any facility where economic poisons are employed in their pesticidal use, unless that facility was subject to district permit requirements on or before August 1, 1987. As used in this section, "pesticidal use" does not include the manufacture or formulation of pesticides.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44325. Any solid waste disposal facility in compliance with Section 41805.5 is in compliance with the emissions inventory requirements of this part.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

CHAPTER 3. AIR TOXICS EMISSION INVENTORIES

(Chapter 3 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44340. (a) The operator of each facility subject to this part shall prepare and submit to the district a proposed comprehensive emissions inventory plan in accordance with the criteria and guidelines adopted by the state board pursuant to Section 44342.

(b) The proposed plan shall be submitted to the district on or before August 1, 1989, except that, for any facility to which subdivision (b) of Section 44322 applies, the proposed plan shall be submited to the district on or before August 1, 1990. The district shall approve, modify, and approve as modified, or return for revision and resubmission, the plan within 120 days of receipt.

(c) The district shall not approve a plan unless all of the following conditions are met:

(1) The plan meets the requirements established by the state board pursuant to Section 44342.

(2) The plan is designed to produce, from the list compiled and maintained pursuant to Section 44321, a comprehensive characterization of the full range of hazardous materials that are released, or that may be released, to the surrounding air from the facility. Air release data shall be collected at, or calculated for, the primary locations of actual and potential release for each hazardous material. Data shall be collected or calculated for all continuous, intermittent, and predictable air releases.

(3) The measurement technologies and estimation methods proposed provide state-of-the-art effectiveness and are sufficient to produce a true representation of the types and quantities of air releases from the facility.

(4) Source testing or other measurement techniques are employed wherever necessary to verify emission estimates, as determined by the state board and to the extent technologically feasible. All testing devices shall be appropriately located, as determined by the state board.

(5) Data are collected or calculated for the relevant exposure rate or rates of each hazardous material according to its characteristic toxicity and for the emission rate necessary to ensure a characterization of risk associated with exposure to releases of the hazardous material that meets the requirements of Section 44361. The source of all emissions shall be displayed or described.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93300, 93301, 93303-93307, 93310-93315, 93320, 93321-93324, 93330-93340, 93345-93347

44341. Within 180 days after approval of a plan by the district, the operator shall implement the plan and prepare and submit a report to the district in accordance with the plan. The district shall transmit all monitoring data contained in the approved report to the state board.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93300, 93301, 93303-93306, 93310-93315, 93320-93324, 93330-93340, 93345-93347

44342. The state board shall, on or before May 1, 1989, in consultation with the districts, develop criteria and guidelines for site-specific air toxics emissions inventory plans which shall be designed to comply with the conditions specified in Section 44340 and which shall include at least all of the following:

(a) For each class of facility, a designation of the hazardous materials for which emissions are to be quantified and an identification of the likely source types within that class of facility. The hazardous materials for quantification shall be chosen from among, and may include all or part of, the list specified in Section 44321.

(b) Requirements for a facility diagram identifying each actual or potential discrete emission point and the general locations where fugitive emissions may occur. The facility diagram shall include any nonpermitted and nonprocess sources of emissions and shall provide the necessary data to identify emission characteristics. An existing facility diagram which meets the requirements of this section may be submitted.

(c) Requirements for source testing and measurement. The guidelines may specify appropriate uses of estimation techniques including, but not limited to, emissions factors, modeling, mass balance analysis, and projections, except that source testing shall be required wherever necessary to verify emission estimates to the extent technologically feasible. The guidelines shall specify conditions and locations where source testing, fence-line monitoring, or other measurement techniques are to be required and the frequency of that testing and measurement.

(d) Appropriate testing methods, equipment, and procedures, including quality assurance criteria.

(e) Specifications for acceptable emissions factors, including, but not limited to, those which are acceptable for substantially similar facilities or equipment, and specification of procedures for other estimation techniques and for the appropriate use of available data.

(f) Specification of the reporting period required for each hazardous material for which emissions will be inventoried.

(g) Specifications for the collection of useful data to identify toxic air contaminants pursuant to Article 2 (commencing with Section 39660) of Chapter 3.5 of Part 2.

(h) Standardized format for preparation of reports and presentation of data.

(i) A program to coordinate and eliminate any possible overlap between the requirements of this chapter and the requirements of Section 313 of the Superfund Amendment and Reauthorization Act of 1986 (Public Law 99-499).

The state board shall design the guidelines and criteria to ensure that, in collecting data to be used for emissions inventories, actual measurement is utilized whenever necessary to verify the accuracy of emission estimates, to the extent technologically feasible.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93300, 93301, 93303-93307, 93310-93315, 93320-93324, 93330-93340, 93345-93347

44343. The district shall review the reports submitted pursuant to Section 44341 and shall, within 90 days, review each report, obtain corrections and clarifications of the data, and notify the State Department of Health Services, the Department of Industrial Relations, and the city or county health department of its findings and determinations as a result of its review of the report.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44344. Emissions inventories developed pursuant to this chapter shall be updated biennially, in accordance with procedures established by the state board. These biennial updates shall take into consideration improvements in measurement techniques and advancing knowledge concerning the types and toxicity of hazardous materials released or potentially released.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93307, 93330

44345. (a) On or before July 1, 1989, the state board shall develop a program to compile and make available to other state and local public agencies and the public all data collected pursuant to this chapter.

(b) In addition, the state board, on or before March 1, 1990, shall compile, by district, emissions inventory data for mobile sources and area sources not subject to district permit requirements, and data on natural source emissions, and shall incorporate these data into data compiled and released pursuant to this chapter.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93330, 93345

44346. (a) If an operator believes that any information required in the facility diagram specified pursuant to subdivision (b) of Section 44342 involves the release of a trade secret, the operator shall nevertheless make

the disclosure to the district, and shall notify the district in writing of that belief in the report.

(b) Subject to this section, the district shall protect from disclosure any trade secret designated as such by the operator, if that trade secret is not a public record.

(c) Upon receipt of a request for the release of information to the public which includes information which the operator has notified the district is a trade secret and which is not a public record, the following procedure applies:

(1) The district shall notify the operator of the request in writing by certified mail, return receipt requested.

(2) The district shall release the information to the public, but not earlier than 30 days after the date of mailing the notice of the request for information, unless, prior to the expiration of the 30-day period, the operator obtains an action in an appropriate court for a declaratory judgment that the information is subject to protection under this section or for a preliminary injunction prohibiting disclosure of the information to the public and promptly notifies the district of that action.

(d) This section does not permit an operator to refuse to disclose the information required pursuant to this part to the district.

(e) Any information determined by a court to be a trade secret, and not a public record pursuant to this section, shall not be disclosed to anyone except an officer or employee of the district, the state, or the United States, in connection with the official duties of that officer or employee under any law for the protection of health, or to contractors with the district or the state and its employees if, in the opinion of the district or the state, disclosure is necessary and required for the satisfactory performance of a contract, for performance of work, or to protect the health and safety of the employees of the contractor.

(f) Any officer or employee of the district or former officer or employee who, by virtue of that employment or official position, has possession of, or has access to, any trade secret subject to this section, and who, knowing that disclosure of the information to the general public is prohibited by this section, knowingly and willfully discloses the information in any manner to any person not entitled to receive it is guilty of a misdemeanor. Any contractor of the district and any employee of the contractor, who has been furnished information as authorized by this section, shall be considered an employee of the district for purposes of this section.

(g) Information certified by appropriate officials of the United States as necessary to be kept secret for national defense purposes shall be accorded the full protections against disclosure as specified by those officials or in accordance with the laws of the United States

(h) As used in this section, "trade secret" and "public record" have the meanings and protections given to them by Section 6254.7 of the Government Code and Section 1060 of the Evidence Code. All information collected pursuant to this chapter, except for data used to calculate

emissions data required in the facility diagram, shall be considered "air pollution emission data," for the purposes of this section.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 93321, 93322, 93339

CHAPTER 4. RISK ASSESSMENT

(Chapter 4 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44360. (a) Within 90 days of completion of the review of all emissions inventory data for facilities specified in subdivision (a) of Section 44322, but not later than December 1, 1990, the district shall, based on examination of the emissions inventory data and in consultation with the state board and the State Department of Health Services, prioritize and then categorize those facilities for the purposes of health risk assessment. The district shall designate high, intermediate, and low priority categories and shall include each facility within the appropriate category based on its individual priority. In establishing priorities pursuant to this section, the district shall consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, day care centers, worksites, and residences, and any other factors that the district finds and determines may indicate that the facility may pose a significant risk to receptors. The district shall hold a public hearing prior to the final establishment of priorities and categories pursuant to this section.

(b) (1) Within 150 days of the designation of priorities and categories pursuant to subdivision (a), the operator of every facility that has been included within the highest priority category shall prepare and submit to the district a health risk assessment pursuant to Section 44361. The district may, at its discretion, grant a 30-day extension for submittal of the health risk assessment.

(2) Health risk assessments required by this chapter shall be prepared in accordance with guidelines established by the Office of Environmental Health Hazard Assessment. The office shall prepare draft guidelines which shall be circulated to the public and the regulated community and shall adopt risk assessment guidelines after consulting with the state board and the Risk Assessment Committee of the California Air Pollution Control Officers Association and after conducting at least two public workshops, one in the northern and one in the southern part of the state. The adoption of the guidelines is not subject to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The scientific review panel established pursuant to Section 39670 shall evaluate the guidelines adopted under this paragraph and shall recommend changes and additional criteria to reflect new scientific data or empirical studies.

(3) The guidelines established pursuant to paragraph (2) shall impose only those requirements on facilities subject to this subdivision that are necessary to ensure that a required risk assessment is accurate and complete and shall specify the type of site-specific factors that districts may take into account in determining when a single health risk assessment may be allowed under subdivision (d). The guidelines shall, in addition, allow the operator of a facility, at the operator's option, and to the extent that valid and reliable data are available, to include for consideration by the district in the health risk assessment any or all of the following supplemental information:

(A) Information concerning the scientific basis for selecting risk parameter values that are different than those required by the guidelines and the likelihood distributions that result when alternative values are used.

(B) Data from dispersion models, microenvironment characteristics, and population distributions that may be used to estimate maximum actual exposure.

(C) Risk expressions that show the likelihood that any given risk estimate is the correct risk value.

(D) A description of the incremental reductions in risk that occur when exposure is reduced.

(4) To ensure consistency in the use of the supplemental information authorized by subparagraphs (A), (B), (C), and (D) of paragraph (3), the guidelines established pursuant to paragraph (2) shall include guidance for use by the districts in considering the supplemental information when it is included in the health risk assessment.

(c) Upon submission of emissions inventory data for facilities specified in subdivisions (b) and (c) of Section 44322, the district shall designate facilities for inclusion within the highest priority category, as appropriate, and any facility so designated shall be subject to subdivision (b). In addition, the district may require the operator of any facility to prepare and submit health risk assessments, in accordance with the priorities developed pursuant to subdivision (a).

(d) The district shall, except where site specific factors may affect the results, allow the use of a single health risk assessment for two or more substantially identical facilities operated by the same person.

(e) Nothing contained in this section, Section 44380.5, or Chapter 6 (commencing with Section 44390) shall be interpreted as requiring a facility operator to prepare a new or revised health risk assessment using the guidelines established pursuant to paragraph (2) of subdivision (a) of this section if the facility operator is required by the district to begin the preparation of a health risk assessment before those guidelines are established.

(Amended by Stats. 1992, Ch. 1162, Sec. 1. Effective January 1, 1993.)

44361. (a) Each health risk assessment shall be submitted to the district. The district shall make the health risk assessment available for public review, upon request. After preliminary review of the emissions

impact and modeling data, the district shall submit the health risk assessment to the State Department of Health Services for review and, within 180 days of receiving the health risk assessment, the State Department of Health Services shall submit to the district its comments on the data and findings relating to health effects. The district shall consult with the state board as necessary to adequately evaluate the emissions impact and modeling data contained within the risk assessment.

(b) For the purposes of complying with this section, the State Department of Health Services may select a qualified independent contractor to review the data and findings relating to health effects. The State Department of Health Services shall not select an independent contractor to review a specific health risk assessment who may have a conflict of interest with regard to the review of that health risk assessment. Any review by an independent contractor shall comply with the following requirements:

(1) Be performed in a manner consistent with guidelines provided by the State Department of Health Services.

(2) Be reviewed by the State Department of Health Services for accuracy and completeness.

(3) Be submitted by the State Department of Health Services to the district in accordance with this section.

(c) The district shall reimburse the State Department of Health Services or the qualified independent contractor designated by the State Department of Health Services pursuant to subdivision (b), within 45 days of its request, for its actual costs incurred in reviewing a health risk assessment pursuant to this section.

(d) If a district requests the State Department of Health Services to consult with the district concerning any requirement of this part, the district shall reimburse the State Department of Health Services, within 45 days of its request, for the costs incurred in the consultation.

(e) Upon designation of the high priority facilities, as specified in subdivision (a) of Section 44360, the State Department of Health Services shall evaluate the staffing requirements of this section and may submit recommendations to the Legislature, as appropriate, concerning the maximum number of health risk assessments to be reviewed each year pursuant to this section.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44362. (a) Taking the comments of the State Department of Health Services into account, the district shall approve or return for revision and resubmission and then approve, the health risk assessment within 180 days of receipt. If the health risk assessment has not been revised and resubmitted within 60 days of the district's request of the operator to do so, the district may modify the health risk assessment and approve it as modified.

(b) Upon approval of the health risk assessment, the operator of the facility shall provide notice to all exposed persons regarding the results of the health risk assessment prepared pursuant to Section 44361 if, in the

judgment of the district, the health risk assessment indicates there is a significant health risk associated with emissions from the facility. If notice is required under this subdivision, the notice shall include only information concerning significant health risks attributable to the specific facility for which the notice is required. Any notice shall be made in accordance with procedures specified by the district.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44363. (a) Commencing July 1, 1991, each district shall prepare and publish an annual report which does all of the following:

(1) Describes the priorities and categories designated pursuant to Section 44360 and summarizes the results and progress of the health risk assessment program undertaken pursuant to this part.

(2) Ranks and identifies facilities according to the degree of cancer risk posed both to individuals and to the exposed population.

(3) Identifies facilities which expose individuals or populations to any noncancer health risks.

(4) Describes the status of the development of control measures to reduce emissions of toxic air contaminants, if any.

(b) The district shall disseminate the annual report to county boards of supervisors, city councils, and local health officers and the district board shall hold one or more public hearings to present the report and discuss its content and significance.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44364. The state board shall utilize the reports and assessments developed pursuant to this part for the purposes of identifying, establishing priorities for, and controlling toxic air contaminants pursuant to Chapter 3.5 (commencing with Section 39650) of Part 2.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44365. (a) If the state board finds and determines that a district's actions pursuant to this part do not meet the requirements of this part, the state board may exercise the authority of the district pursuant to this part to approve emissions inventory plans and require the preparation of health risk assessments.

(b) This part does not prevent any district from establishing more stringent criteria and requirements than are specified in this part for approval of emissions inventories and requiring the preparation and submission of health risk assessments. Nothing in this part limits the authority of a district under any other provision of law to assess and regulate releases of hazardous substances.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44366. (a) In order to verify the accuracy of any information submitted by facilities pursuant to this part, a district or the state board may proceed in accordance with Section 41510.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

CHAPTER 5. FEES AND REGULATIONS

(Chapter 5 added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44380. (a) The state board shall adopt a regulation which does all of the following:

(1) Sets forth the amount of revenue which the district must collect to recover the reasonable anticipated cost which will be incurred by the state board and the Office of Environmental Health Hazard Assessment to implement and administer this part.

(2) Requires each district to adopt a fee schedule which recovers the costs of the district and which assesses a fee upon the operator of every facility subject to this part. A district may request the state board to adopt a fee schedule for the district if the district's program costs are approved by the district board and transmitted to the state board by April 1 of the year in which the request is made.

(3) Requires any district that has an approved toxics emissions inventory compiled pursuant to this part by August 1 of the preceding year to adopt a fee schedule, as described in paragraph (2), which imposes on facility operators fees which are, to the maximum extent practicable, proportionate to the extent of the releases identified in the toxics emissions inventory and the level of priority assigned to that source by the district pursuant to Section 44360.

(b) Commencing August 1, 1992, and annually thereafter, the state board shall review and may amend the fee regulation.

(c) The district shall notify each person who is subject to the fee of the obligation to pay the fee. If a person fails to pay the fee within 60 days after receipt of this notice, the district, unless otherwise provided by district rules, shall require the person to pay an additional administrative civil penalty. The district shall fix the penalty at not more than 100 percent of the assessed fee, but in an amount sufficient in its determination, to pay the district's additional expenses incurred by the person's noncompliance. If a person fails to pay the fee within 120 days after receipt of this notice, the district may initiate permit revocation proceedings. If any permit is revoked, it shall be reinstated only upon full payment of the overdue fee plus any late penalty, and a reinstatement fee to cover administrative costs of reinstating the permit.

(d) Each district shall collect the fees assessed pursuant to subdivision (a). After deducting the costs to the district to implement and administer this part, the district shall transmit the remainder to the Controller for deposit in the Air Toxics Inventory and Assessment Account, which is hereby created in the General Fund. The money in the account is available, upon appropriation by the Legislature, to the state board and the Office of Environmental Health Hazard Assessment for the purposes of administering this part.

(Amended by Stats. 1992, Ch. 375, Sec. 1. Effective January 1, 1993.)

44380.5. In addition to the fee assessed pursuant to Section 44380, a supplemental fee may be assessed by the district, the state board, or the

Office of Environmental Health Hazard Assessment upon the operator of a facility that, at the operator's option, includes supplemental information authorized by paragraph (3) of subdivision (b) of Section 44360 in a health risk assessment, if the review of that supplemental information substantially increases the costs of reviewing the health risk assessment by the district, the state board, or the office. The supplemental fee shall be set by the state board in the regulation required by subdivision (a) of Section 44380 and shall be set in an amount sufficient to cover the direct costs to review the information supplied by an operator pursuant to paragraph (3) of subdivision (b) of Section 44360.

(Added by Stats. 1992, Ch. 1162, Sec. 2. Effective January 1, 1993.)

44381. (a) Any person who fails to submit any information, reports, or statements required by this part, or who fails to comply with this part or with any permit, rule, regulation, or requirement issued or adopted pursuant to this part, is subject to a civil penalty of not less than five hundred dollars ($500) or more than ten thousand dollars ($10,000) for each day that the information, report, or statement is not submitted, or that the violation continues.

(b) Any person who knowingly submits any false statement or representation in any application, report, statement, or other document filed, maintained, or used for the purposes of compliance with this part is subject to a civil penalty of not less than one thousand dollars ($1,000) or more than twenty-five thousand dollars ($25,000) per day for each day that the information remains uncorrected.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44382. Every district shall, by regulation, adopt the requirements of this part as a condition of every permit issued pursuant to Chapter 4 (commencing with Section 42300) of Part 4 for all new and modified facilities.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative July 1, 1988, pursuant to Section 44384.)

44384. Except for Section 44380 and this section, all provisions of this part shall become operative on July 1, 1988.

(Added by Stats. 1987, Ch. 1252, Sec. 1. Operative January 1, 1988, by its own provisions.)

CHAPTER 6. FACILITY TOXIC AIR CONTAMINANT RISK REDUCTION AUDIT AND PLAN

(Chapter 6 added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

44390. For purposes of this chapter, the following definitions apply:

(a) "Airborne toxic risk reduction measure" or "ATRRM" means those in-plant changes in production processes or feedstocks that reduce or eliminate toxic air emissions subject to this part. ATRRM's may include:

(1) Feedstock modification.
(2) Product reformulations.
(3) Production system modifications.
(4) System enclosure, emissions control, capture, or conversion.
(5) Operational standards and practices modification.

(b) Airborne toxic risk reduction measures do not include measures that will increase risk from exposure to the chemical in another media or that increase the risk to workers or consumers.

(c) "Airborne toxic risk reduction audit and plan" or "audit and plan" means the audit and plan specified in Section 44392.

(Added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

44391. (a) Whenever a health risk assessment approved pursuant to Chapter 4 (commencing with Section 44360) indicates, in the judgment of the district, that there is a significant risk associated with the emissions from a facility, the facility operator shall conduct an airborne toxic risk reduction audit and develop a plan to implement airborne toxic risk reduction measures that will result in the reduction of emissions from the facility to a level below the significant risk level within five years of the date the plan is submitted to the district. The facility operator shall implement measures set forth in the plan in accordance with this chapter.

(b) The period to implement the plan required by subdivision (a) may be shortened by the district if it finds that it is technically feasible and economically practicable to implement the plan to reduce emissions below the significant risk level more quickly or if it finds that the emissions from the facility pose an unreasonable health risk.

(c) A district may lengthen the period to implement the plan required by subdivision (a) by up to an additional five years if it finds that a period longer than five years will not result in an unreasonable risk to public health and that requiring implementation of the plan within five years places an unreasonable economic burden on the facility operator or is not technically feasible.

(d) (1) The state board and districts shall provide assistance to smaller businesses that have inadequate technical and financial resources for obtaining information, assessing risk reduction methods, and developing and applying risk reduction techniques.

(2) Risk reduction audits and plans for any industry subject to this chapter which is comprised mainly of small businesses using substantially similar technology may be completed by a self-conducted audit and checklist developed by the state board. The state board, in coordination with the districts shall provide a copy of the audit and checklist to small businesses within those industries to assist them to meet the requirements of this chapter.

(e) The audit and plan shall contain all the information required by Section 44392.

(f) The plan shall be submitted to the district, within six months of a district's determination of significant risk, for review of completeness. Operators of facilities that have been notified prior to January 1, 1993, that there is a significant risk associated with emissions from the facility shall submit the plan by July 1, 1993. The district's review of completeness shall include a substantive analysis of the emission reduction measures included in the plan, and the ability of those measures to achieve emission reduction goals as quickly as feasible as provided in subdivisions (a) and (b).

(g) The district shall find the audit and plan to be satisfactory within three months if it meets the requirements of this chapter, including, but not limited to, the requirements of subdivision (f). If the district determines the audit and plan does not meet those requirements, the district shall remand the audit and plan to the facility specifying the deficiencies identified by the district. A facility operator shall submit a revised audit and plan addressing the deficiencies identified by the district within 90 days of receipt of a deficiency notice.

(h) Progress on the emission reductions achieved by the plan shall be reported to the district in the biennial updates of emission inventories required pursuant to Section 44344.

(i) If new information becomes available after the initial risk reduction audit and plan, on air toxics risks posed by a facility, or emission reduction technologies that may be used by a facility that would significantly impact risks to exposed persons, the district may require the plan to be updated and resubmitted to the district.

(j) This section does not authorize the emission of a toxic air contaminant in violation of an airborne toxic control measure adopted pursuant to Chapter 3.5 (commencing with Section 39650) or in violation of Section 41700.

(Added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

44392. A facility operator subject to this chapter shall conduct an airborne toxic risk reduction audit and develop a plan which shall include at a minimum all of the following:

(a) The name and location of the facility.

(b) The SIC code for the facility.

(c) The chemical name and the generic classification of the chemical.

(d) An evaluation of the ATRRM's available to the operator.

(e) The specification of, and rationale for, the ATRRMs that will be implemented by the operator. The audit and plan shall document the rationale for rejecting ATRRMs that are identified as infeasible or too costly.

(f) A schedule for implementing the ATRRMs. The schedule shall meet the time requirements of subdivision (a) of Section 44391 or the time period for implementing the plan set by the district pursuant to subdivision (b) or (c) of Section 44391, whichever is applicable.

(g) The audit and plan shall be reviewed and certified as meeting this chapter by an engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code, by an individual who is responsible for the processes and operations of the site, or by an environmental assessor registered pursuant to Section 25570.3.

(Added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

44393. The plan prepared pursuant to Section 44391 shall not be considered to be the equivalent of a pollution prevention program or a source reduction program, except insofar as the audit and plan elements

are consistent with source reduction, as defined in Section 25244.14, or subsequent statutory definitions of pollution prevention.

(Added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

44394. Any facility operator who does not submit a complete airborne toxic risk reduction audit and plan or fails to implement the measures set forth in the plan as set forth in this chapter is subject to the civil penalty specified in subdivision (a) of Section 44381, and any facility operator who, in connection with the audit or plan, knowingly submits any false statement or representation is subject to the civil penalty specified in subdivision (b) of Section 44381.

(Added by Stats. 1992, Ch. 1162, Sec. 3. Effective January 1, 1993.)

PART 9. HALOGENATED REFRIGERANTS

(Part 9 added by Stats. 1991, Ch. 874, Sec. 1.)

44470. (a) The Legislature finds and declares the following:

(1) For the first time in human history, the use and disposal of certain manmade products are actively destroying a layer of the earth's atmosphere without which human life cannot continue to exist.

(2) These products, known as chlorofluorocarbons and halons, have already begun to deplete the ozone layer which protects human and other life forms from cancer-causing ultraviolet radiation. Above California, the ozone shield has been depleted about 3 percent over the last 20 years.

(3) On January 1, 1989, a 24-nation agreement (the Montreal Protocol) became effective, calling for the reduction in use of most CFCs and halons, and the Environmental Protection Agency has issued regulations designed to freeze production of these products at current levels.

(4) The Montreal Protocol was amended in 1990 calling for a reduction of CFC manufacturing to 50 percent of 1986 levels by 1995, further reduction to 15 percent of 1986 levels by 1997, and complete elimination by the year 2000. Due to the severity of the ozone depletion problem, however, this phaseout schedule is to be reviewed in 1992 with the objective of accelerating it still further.

(5) It is essential to the health and safety of all Californians to take such steps as are necessary to further decrease and halt the destruction of the ozone layer by CFCs and halons.

(b) The Legislature further finds and declares the following:

(1) CFCs and halons contribute actively to global warming trends which could dramatically affect the economy and stability of California, including the flooding of coastal lands, loss of crop winters, and destruction of coastal wetlands and forests.

(2) Twenty-five percent of the total amount of CFCs produced every year in the United States are needlessly released into the atmosphere through mobile air-conditioning servicing, maintenance, and leaking.

(3) CFC-12 accounts for 46 percent of California's contribution to ozone depletion from CFCs. Emissions from mobile air-conditioners are estimated to account for 27 percent of all of California's CFC-12 emissions.

EMISSION INVENTORY CRITERIA AND GUIDELINES REGULATION PURSUANT TO THE AIR TOXICS "HOT SPOTS" INFORMATION AND ASSESSMENT ACT OF 1987

(as amended June 1990, September 1990, and June 1991)

Titles 17 and 26, California Code of Regulations:

SUBCHAPTER 7.6. EMISSION INVENTORY CRITERIA AND GUIDELINES

Article 1. General

93300. Purpose.

This subchapter sets forth the criteria and guidelines for preparing emission inventory plans and reports to develop site-specific inventories of air emissions of toxic substances, as required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the "Act": Stats. 1987, ch. 1252; Health and Safety Code Section 44300 et seq.).

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44340, 44341, and 44342, Health and Safety Code.

93301. Definitions.

(a) **"Air emission", "emission", "air release", or "release"** has the same meaning as defined in Health and Safety Code Section 44303.

(b) **"ARB-adopted source test method" or "ARB-adopted method"** means a procedure for performing source testing as set forth in Title 17 California Code of Regulations, Section 94100 et seq.

(c) **"Device"** means any article, machine, equipment or other contrivance (whether or not operated under a permit from an air pollution control district or air quality management district) which may cause the emission of a listed substance.

(d) **"Emission inventory plan", "inventory plan", or "plan"** means the emission inventory plan required by Health and Safety Code Sections 44340 and 44342.

(e) **"Emission inventory report", "inventory report", or "report"** means the emission inventory report required by Health and Safety Code Section 44341.

(f) **"Emitting process"** means any fugitive source or any operation within a device that involves the manufacture, formulation, use, or release of one or more of the listed substances, when the substance is present in any capacity whatsoever, including but not limited to an ingredient, product, auxiliary, or catalyst.

(g) "Facility" means the same as defined in Health and Safety Code Section 44304. "Facility" shall not include any motor vehicle as defined in Section 415 of the Vehicle Code.

(1) Except for the oil production operations defined in subsection (2) below, for purposes of this regulation, the phrase "every structure, appurtenance, installation" shall mean all equipment, buildings, and other stationary items, or aggregations thereof, (A) which are associated with a source of air emission or potential air emission of a listed substance; (B) which involve activities that belong to the same two-digit Standard Industrial Classification code, or are part of a common operation; (C) which are located on a single site or on contiguous or adjacent sites; and (D) which are under common ownership, operation, or control, or which are owned or operated by entities which are under common ownership, operation, or control.

(2) For oil production operations in the counties of Kern and Fresno, the phrase "every structure, appurtenance, installation" shall mean the same as "stationary source" defined in Section I, "Definitions" in Kern County Rule 210.1 "Standards for an Authority to Construct Permit" as amended August 22, 1989, and Section 2, "Definitions"in Fresno County Rule 210.1 "Standards for Authority to Construct" as amended August 8, 1989, respectively, both of which rule sections are incorporated by reference herein.

(h) "Facility diagram" means a diagram submitted with the inventory report that shows all points of actual or potential air release of a listed substance, including fugitive emissions.

(i) "Fugitive emissions" means those emissions which do not pass through a stack, chimney, vent, or other functionally equivalent opening.

(j) "List of substances" means the list of chemical substances which may pose a threat to public health when present in the ambient air as set forth in Appendix A of Title 17 California Code of Regulations, Sections 90700 through 90704, and in Appendices A-I and A-II of this regulation; a "listed substance" is a substance included on this list.

(k) "Material Safety Data Sheet" ("MSDS") means printed material concerning a hazardous substance which is prepared by manufacturers and importers in accordance with Section 5194(g) of Title 8, California Code of Regulations, "Hazard Communication".

(l) "Operator" or "facility operator" means the same as defined in Health and Safety Code Section 44307.

(m) "Small business" means the same as defined in Government Code Section 11342(e).

(n) "Source" or "point of release" means the location of a facility activity, device or emitting process, including locations of fugitive emissions, which may be associated with air emissions of a listed substance or other air pollutant; or the location of any substance which may be associated with emissions of a listed substance or other air pollutant.

(o) "Total organic gases (TOG)" means all gases consisting of substances containing carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(p) "Trade secrets" means the same as defined in Government Code Section 6254.7(d).

(q) "Update plan" means an emission inventory plan which is revised and updated biennially as required by Health and Safety Code Section 44344.

(r) "Update report" means an emission inventory report which is revised and updated biennially as required by Health and Safety Code Section 44344.

(s) "Use" means any application, whether primary or secondary to the main facility operation, which may result in an air release of a listed substance, unless exempted pursuant to Section 93333.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44340, 44341, 44342, and 44344, Health and Safety Code.

Article 2. Applicability

93303. Facilities Covered.

(a) Except for facilities or activities exempted by Health and Safety Code Sections 44324 and 44325, as further defined in subsection (c), below, this regulation shall apply upon its effective date to any facility which:

(1) manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance, and releases 25 tons per year or more of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides; or

(2) is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by an air pollution control district or air quality management district (herein referred to as "district") and referenced in Appendix B of Title 17 California Code of Regulations, Sections 90700 through 90704.

(b) Effective July 1, 1989, this regulation shall also apply to any facility which manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance, and releases 10 or more but less than 25 tons per year of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides.

(c) For purposes of this subchapter, the phrase "in compliance with Section 41805.5" as used in Health and Safety Code Section 44325, regarding solid waste disposal facilities, shall refer only to those activities conducted at a solid waste disposal facility which are subject to the Calderon testing program described in Health and Safety Code Section 41805.5 and which have complied with its requirements. All other activities conducted at a solid waste disposal facility are subject to the requirements of this subchapter. A facility is deemed to have complied with the requirements of the Calderon testing program if the facility has performed the required testing or is on schedule, as determined by the district, to do so.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 41805.5, 44320, 44322, 44324, 44325, 44340, 44341, and 44342, Health and Safety Code.

93304. Plan Submittal.

(a) Every facility included in subsection 93303(a) shall submit an emission inventory plan to the appropriate district by August 1, 1989, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district pursuant to Health and Safety Code Section 44323.

(b) Every facility included in subsection 93303(b) shall submit an emission inventory plan to the appropriate district by August 1, 1990, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44322, 44323, 44340, 44341, and 44342, Health and Safety Code.

93305. New Facilities and Facilities whose Emissions Increase.

This regulation shall also apply to facilities commencing operation or increasing emissions of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides after June 1, 1989 which meet the conditions specified in Section 93303. The operator of every such facility commencing operation or increasing emissions on or before January 1 of a given year shall submit an emission inventory plan to the appropriate district by the following August 1, unless:

(a) The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district; or

(b) The facility is subject to earlier submission of an inventory plan pursuant to district requirements adopted in accordance with Health and Safety Code Sections 44365(b).

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44322, 44323, 44340, 44341, and 44342, Health and Safety Code.

93306. Facilities Added to District Surveys.

This regulation shall also apply to facilities added after July 1, 1988, to a toxics use or toxics air emission survey, inventory, or report released or compiled by a district and subsequently referenced in Appendix B of Title 17 California Code of Regulations, Sections 90700 through 90704. The operator of any such facility referenced in such Appendix B on or before April 1 of a given year shall submit an emission inventory plan to the appropriate district by the following August 1, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44320(b), 44323, 44340, 44341, and 44342, Health and Safety Code, and 17 CCR Sections 90700-90704, Appendix B.

93307. Updates to the List of Substances.

The operator of any facility which manufactures, formulates, uses, or releases any substance added to the list of substances on or before April 1 of a given year shall include such substance in any emission inventory plan required pursuant to this Article, or in the next biennial update of the emission inventory required pursuant to Health and Safety Code Section 44344 and to Article 6, beginning with Section 93350, unless the district notifies the facility in writing that the facility's emissions of the substance are or will be included in an industrywide emission inventory prepared by the district.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44321, 44323, 44340, 44342, and 44344, Health and Safety Code, and 17 CCR Sections 90700-90704, Appendix A.

93308. Facilities Emitting Less Than 10 Tons Per Year of Criteria Pollutants.

(a) This Section shall apply on its effective date to any facility which manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance; and which releases less than 10 tons per year of each of total organic gases, particulate matter, nitrogen oxides, and sulfur oxides; and which falls in any class listed in Appendix E-I or Appendix E-II, unless:

(1) The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district pursuant to Health and Safety Code Section 44323; or

(2) The facility is subject to earlier submission of an inventory plan pursuant to Sections 93304, 93305, or 93306 or pursuant to district requirements adopted in accordance with Health and Safety Code Section 44365(b).

(b) Unless exempted pursuant to subsection (a)(1) or (2), above, the operator of any such facility which falls in any class listed in Appendix E-I shall submit to the appropriate district an inventory plan and inventory report which meet all the requirements of this subchapter. The inventory plan shall be due August 1 of the year following the effective date of this subsection for any such facility in operation at the time of such effective date. For any such facility commencing operation after such effective date, the operator of every such facility commencing operation on or before January 1 of a given year shall submit an inventory plan to the appropriate district by the following August 1, unless exempted pursuant to subsection (a)(1) or (2), above. The schedule specified in Health and Safety Code Sections 44340(b), 44341, and 44343, and in Sections 93320 and 93347 herein shall apply to the review, approval, and implementation of the plan and submittal of the report.

(c) Unless exempted pursuant to subsection (a)(1) or (2), above, the operator of any such facility which does not fall in any class listed in Appendix E-I but falls in any class listed in Appendix E-II shall submit to the appropriate district, in lieu of a plan and a report, a completed copy of the Facility Description Form and a completed copy of Form S-UP which includes all applicable substances listed in both Appendix A-I and Appendix A-II. The operator shall include on Form S-UP or on an attachment a brief description regarding the nature and approximate quantity of the indicated use, production, or other presence of each applicable substance. These completed forms shall be submitted to the district on or before August 1 of the year following the effective date of this subsection for any such facility in operation at the time of such effective date. For any such facility commencing operation after such effective date, the operator of every such facility commencing operation on or before January 1 of a given year shall submit the required forms to the appropriate district by the following August 1,

unless exempted pursuant to subsection (a)(1) or (2), above. The district shall forward these forms to the ARB within sixty (60) days of receipt.

(d) Unless exempted pursuant to subsection (a)(1) or (2), above, this regulation shall also apply to any such facility which falls in any class which is subsequently added to Appendix E-I or Appendix E-II. The operator of any such facility within a class referenced in such Appendix E-I or E-II on or before April 1 of a given year shall submit the required emission inventory plan or the completed Facility Description Form and Form S-UP, respectively, to the appropriate district by the following August 1, unless:

(1) The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district pursuant to Health and Safety Code Section 44323; or

(2) The facility is subject to earlier submission of an inventory plan pursuant to Sections 93304, 93305, or 93306 or pursuant to district requirements adopted in accordance with Health and Safety Code Sections 44365(b).

NOTE: Authority cited: Sections 39600, 39601, 44322(c), and 44342, Health and Safety Code. Reference: Sections 44321, 44322, 44323, 44340, 44341, 44342, 44343, 44344, and 44365, Health and Safety Code, and 17 CCR Sections 90700-90704, Appendix A.

Article 3. Requirements for Preparing Emission Inventory Plans

93310. General.

The emission inventory plan shall provide a comprehensive and detailed description of the methods that will be used to quantify air releases or potential air releases of listed substances from all points of release. The plan shall include quantification methods which shall result in an accurate and comprehensive characterization of releases and shall comply with all other applicable requirements in this regulation.

NOTE: Authority cited: Sections 39600, 39601, and 44342, Health and Safety Code. Reference: Sections 44340, 44341, and 44342, Health and Safety Code.

93311. Flow Diagram.

Each inventory plan shall include a flow diagram consisting of a comprehensive schematic drawing of the process flows which affect the nature or quantity of emissions of listed substances. If necessary, a reference document shall be attached to the drawing to include any information needed to fulfill the flow diagram requirements which cannot be included on the drawing. An existing diagram which meets the

APPENDIX A

SUBSTANCES TO BE INVENTORIED

A-I
LIST OF SUBSTANCES FOR WHICH EMISSIONS MUST BE QUANTIFIED

A-II
LIST OF SUBSTANCES FOR WHICH PRODUCTION, USE, OR OTHER PRESENCE MUST BE REPORTED

Appendix A-I
Substances For Which Emissions Must Be Quantified

Chemical Abstract Service (CAS) Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
75070	c		Acetaldehyde	100
60355	c		Acetamide	100
67641		06/91	Acetone	100
75058		06/91	Acetonitrile	100
98862		06/91	Acetophenone	100
53963	c		2-Acetylaminofluorene [PAH-Derivative, POM]	100
107028			Acrolein	10
79061	c		Acrylamide	100
79107		06/91	Acrylic acid	100
107131	c		Acrylonitrile	100
107051	c		Allyl chloride	100
7429905		06/91	Aluminum	100
1344281		06/91	Aluminum oxide (fibrous forms)	100
117793	c		2-Aminoanthraquinone [PAH-Derivative, POM]	100
92671	c		4-Aminobiphenyl [POM]	100
61825	c		Amitrole	100
7664417			Ammonia	100
6484522		06/91	Ammonium nitrate	100
7783202		06/91	Ammonium sulfate	100
62533	c	09/90	Aniline	100
90040	c		o-Anisidine	100
-			Anthracene [PAH, POM], (see PAH)	
7440360		06/91	Antimony	100
*		06/91	Antimony compounds **	100
			including but not limited to:	
1327339	c	09/90	Antimony trioxide	100
7440382	c		Arsenic	1
*		06/91	Arsenic compounds (other than inorganic) **	100
*	c		Arsenic compounds (inorganic) **	1
			including but not limited to:	
7784421			Arsine	10
7440393		06/91	Barium	100
*		06/91	Barium compounds **	100
-			Benz[a]anthracene [PAH, POM], (see PAH)	
71432	c		Benzene	10
92875	c		Benzidine (and its salts) [POM]	10
*	c		Benzidine-based dyes [POM]	10
			including but not limited to:	
1937377	c		Direct Black 38 [PAH-Derivative, POM]	10
2602462	c		Direct Blue 6 [PAH-Derivative, POM]	10
16071866	c	09/89	Direct Brown 95 (technical grade) [POM]	10
-			Benzo[a]pyrene [PAH,POM], (see PAH)	
-			Benzo[b]fluoranthene [PAH, POM], (see PAH)	

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
271896	c	06/91	Benzofuran	100
98077	c		Benzoic trichloride [Benzotrichloride]	10
-			Benzo[j]fluoranthene [PAH, POM], (see PAH)	
-			Benzo[k]fluoranthene [PAH, POM], (see PAH)	
98884		06/91	Benzoyl chloride	100
94360		06/91	Benzoyl peroxide	100
100447	c		Benzyl chloride	10
7440417	c		Beryllium	1
*	c	09/89	Beryllium compounds **	1
92524		06/91	Biphenyl [POM]	100
111444	c	09/89	Bis(2-chloroethyl) ether [DCEE]	100
542881	c		Bis(chloromethyl) ether	10
103231		06/91	Bis(2-ethylhexyl) adipate	100
7726956			Bromine	100
*			Bromine compounds (inorganic) **	100
			including but not limited to:	
7758012			Potassium bromate	100
75252		06/91	Bromoform	100
106990	c		1,3-Butadiene	10
141322		06/91	Butyl acrylate	100
71363		06/91	n-Butyl alcohol	100
78922		06/91	sec-Butyl alcohol	100
75650		06/91	tert-Butyl alcohol	100
85687		06/91	Butyl benzyl phthalate	100
7440439	c		Cadmium	1
*	c		Cadmium compounds **	1
156627		06/91	Calcium cyanamide	100
105602		06/91	Caprolactam	100
2425061	c	09/89	Captafol	100
133062	c	09/90	Captan	100
63252		06/91	Carbaryl [PAH-Derivative, POM]	100
*	c		Carbon black extracts	100
75150		09/89	Carbon disulfide	100
56235	c		Carbon tetrachloride	10
463581		06/91	Carbonyl sulfide	100
*	c		Carrageenan (degraded)	100
120809		06/91	Catechol	100
133904		06/91	Chloramben	100
56757	c		Chloramphenicol	100
57749	c	09/89	Chlordane	10
108171262	c	09/89	Chlorinated paraffins (average chain length, C12; approximately 60% chlorine by weight)	100
7782505			Chlorine	10
10049044		06/91	Chlorine dioxide	100
79118		06/91	Chloroacetic acid	100
532274		06/91	2-Chloroacetophenone	100

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Substances_For_Which_Emissions_Must_Be_Quantified (cont.)

CAS_Number	See Note I	See Note II	Substance_Name	Applicable Degree of Accuracy (lbs/year)
*		06/91	Chlorobenzenes including but not limited to:	100
108907			Chlorobenzene	100
25321226		06/91	Dichlorobenzenes (mixed isomers) including:	100
95501		06/91	1,2-Dichlorobenzene	100
541731		06/91	1,3-Dichlorobenzene	100
106467	c		p-Dichlorobenzene [1,4-Dichlorobenzene]	100
120821		06/91	1,2,4-Trichlorobenzene	100
510156	c	09/90	Chlorobenzilate [POM] (Ethyl-4,4'-dichlorobenzilate)	100
13909096	c		1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea (Methyl CCNU)	100
67663	c		Chloroform	10
107302	c		Chloromethyl methyl ether (technical grade)	100
*	c		Chlorophenols including but not limited to:	100
120832	c	06/91	2,4-Dichlorophenol	100
87865	c	09/90	Pentachlorophenol	100
95954	c	06/91	2,4,5-Trichlorophenol	100
88062	c		2,4,6-Trichlorophenol	100
76062			Chloropicrin	10
126998			Chloroprene	100
95830	c		4-Chloro-o-phenylenediamine	100
95692	c		p-Chloro-o-toluidene	100
7440473		06/91	Chromium	100
*		06/91	Chromium compounds (other than hexavalent) **	100
18540299	c		Chromium, hexavalent (and compounds) ** including but not limited to:	0.1
10294403	c	06/91	Barium chromate	0.1
13765190	c	06/91	Calcium chromate	0.1
1333820	c	06/91	Chromium trioxide	0.1
7758976	c	06/91	Lead chromate	0.1
10588019	c	06/91	Sodium dichromate	0.1
7789062	c	06/91	Strontium chromate	0.1
-			Chrysene [PAH, POM], (see PAH)	
7440484		06/91	Cobalt	100
*		06/91	Cobalt compounds **	100
*	c		Coke oven emissions	100
7440508			Copper	100
*		09/89	Copper compounds **	100
*	c		Creosotes	100
120718	c		p-Cresidine	100

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Substances_For_Which_Emissions_Must_Be_Quantified (cont.)

CAS_Number	See Note I	See Note II	Substance_Name	Applicable Degree of Accuracy (lbs/year)
1319773			Cresols (mixtures of) [Cresylic acid] including:	100
108394		06/91	m-Cresol	100
95487		06/91	o-Cresol	100
106445		06/91	p-Cresol	100
98828		06/91	Cumene	100
80159		06/91	Cumene hydroperoxide	100
135206	c		Cupferron	100
*		06/91	Cyanide compounds ** including but not limited to:	100
74908			Hydrocyanic acid	10
110827		06/91	Cyclohexane	100
66819			Cycloheximide	100
1163195		06/91	Decabromodiphenyl oxide [POM]	100
*			Dialkylnitrosamines including but not limited to:	100
1116547	c		N-Nitrosodiethanolamine	100
55185	c		N-Nitrosodiethylamine	1
62759	c		N-Nitrosodimethylamine	1
924163	c		N-Nitrosodi-n-butylamine	1
1621647	c		N-Nitrosodi-n-propylamine	100
10595956	c		N-Nitrosomethylethylamine	100
615054	c		2,4-Diaminoanisole	100
*	c	09/90	Diaminotoluenes (mixed isomers) including but not limited to:	100
95807	c		2,4-Diaminotoluene [2,4-Toluenediamine]	100
334883	c	06/91	Diazomethane	100
226368	c		Dibenz[a,h]acridine [POM]	100
224420	c		Dibenz[a,j]acridine [POM]	100
-			Dibenz[a,h]anthracene [PAH, POM], (see PAH)	
194592	c		7H-Dibenzo[c,g]carbazole [POM]	100
132649		06/91	Dibenzofuran [POM]	100
-			Dibenzofurans (chlorinated) (see Polychlorinated dibenzofurans) [POM]	
-			Dibenzo[a,e]pyrene [PAH, POM], (see PAH)	
-			Dibenzo[a,h]pyrene [PAH, POM], (see PAH)	
-			Dibenzo[a,i]pyrene [PAH, POM], (see PAH)	
-			Dibenzo[a,l]pyrene [PAH, POM], (see PAH)	
96128	c		1,2-Dibromo-3-chloropropane [DBCP]	100
84742		06/91	Dibutyl phthalate	100
-			p-Dichlorobenzene [1,4-Dichlorobenzene] (see Chlorobenzenes)	
91941	c		3,3'-Dichlorobenzidine [POM]	10
72559	c	09/89	Dichlorodiphenyldichloroethylene [DDE] [POM]	100
75343	c	09/90	1,1-Dichloroethane [Ethylidene dichloride]	100
94757		06/91	Dichlorophenoxyacetic acid, salts and esters [2,4-D]	100

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Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
78875	c	09/90	1,2-Dichloropropane [Propylene dichloride]	100
542756	c		1,3-Dichloropropene	10
62737	c	09/89	Dichlorovos [DDVP]	100
115322		06/91	Dicofol [POM]	100
*	c	09/90	Diesel engine exhaust	100
*	c	06/91	Diesel fuel (marine)	100
111422		06/91	Diethanolamine	100
117817	c		Di(2-ethylhexyl) phthalate [DEHP]	100
64675	c		Diethyl sulfate	100
119904	c		3,3'-Dimethoxybenzidine [POM]	100
60117	c		4-Dimethylaminoazobenzene [POM]	100
121697		06/91	N,N-Dimethylaniline	100
57976	c	09/90	7,12-Dimethylbenz[a]anthracene [PAH-Derivative, POM]	1
119937	c		3,3'-Dimethylbenzidine [o-Tolidine] [POM]	10
79447	c		Dimethyl carbamoyl chloride	100
68122	c	09/90	Dimethyl formamide	100
57147	c		1,1-Dimethylhydrazine	100
131113		06/91	Dimethyl phthalate	100
77781	c		Dimethyl sulfate	100
534521		06/91	4,6-Dinitro-o-cresol and salts	100
51285		06/91	2,4-Dinitrophenol	100
42397648	c	06/91	1,6-Dinitropyrene [PAH-Derivative, POM]	100
42397659	c	06/91	1,8-Dinitropyrene [PAH-Derivative, POM]	100
25321146		06/91	Dinitrotoluenes (mixed isomers)	100
			including but not limited to:	
121142	c	09/89	2,4-Dinitrotoluene	100
606202		06/91	2,6-Dinitrotoluene	100
123911	c		1,4-Dioxane	100
-			Dioxins (Chlorinated dibenzodioxins) (see Polychlorinated dibenzo-p-dioxins) [POM]	
630933	c		Diphenylhydantoin [POM]	100
122667	c		1,2-Diphenylhydrazine [Hydrazobenzene] [POM]	100
*	c		Environmental tobacco smoke	100
106898	c		Epichlorohydrin	100
106887		06/91	1,2-Epoxybutane	100
*		09/89	Epoxy resins	100
140885	c		Ethyl acrylate	100
100414		06/91	Ethyl benzene	100
75003			Ethyl chloride [Chloroethane]	100
-			Ethyl-4,4'-dichlorobenzilate (see Chlorobenzilate)	
74851		06/91	Ethylene	100
106934	c		Ethylene dibromide [1,2-Dibromoethane]	1
107062	c		Ethylene dichloride [1,2-Dichloroethane]	10

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Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
107211		06/91	Ethylene glycol	100
151564		06/91	Ethyleneimine [Aziridine]	100
75218	c		Ethylene oxide	10
96457	c		Ethylene thiourea	100
*		09/89	Fluorides and compounds	100
			including but not limited to:	
7664393			Hydrogen fluoride	10
*			Fluorocarbons (brominated)	100
*			Fluorocarbons (chlorinated)	100
			including but not limited to:	
76131			Chlorinated fluorocarbon [CFC 113]	100
50000	c		Formaldehyde	100
*	c	09/90	Gasoline engine exhaust	100
			including but not limited to:	
*	c	06/91	Gasoline engine exhaust (condensates and extracts)	100
*	c		Gasoline vapors	100
111308			Glutaraldehyde	100
*			Glycol ethers and their acetates	100
			including but not limited to:	
111466		09/90	Diethylene glycol	100
111966		09/90	Diethylene glycol dimethyl ether	100
112345		09/90	Diethylene glycol monobutyl ether	100
111900		09/90	Diethylene glycol monoethyl ether	100
111773		09/90	Diethylene glycol monomethyl ether	100
25265718		09/90	Dipropylene glycol	100
34590948		09/90	Dipropylene glycol monomethyl ether	100
629141		09/90	Ethylene glycol diethyl ether	100
110714		09/90	Ethylene glycol dimethyl ether	100
111762		09/90	Ethylene glycol monobutyl ether	100
110805		09/89	Ethylene glycol monoethyl ether	100
111159		09/90	Ethylene glycol monoethyl ether acetate	100
109864		09/89	Ethylene glycol monomethyl ether	100
110496		09/90	Ethylene glycol monomethyl ether acetate	100
2807309		09/90	Ethylene glycol monopropyl ether	100
107982		09/90	Propylene glycol monomethyl ether	100
108656		09/90	Propylene glycol monomethyl ether acetate	100
112492		09/90	Triethylene glycol dimethyl ether	100
126078	c		Griseofulvin	100
76448	c	09/89	Heptachlor	100
87683		06/91	Hexachlorobutadiene	100
118741	c		Hexachlorobenzene	1
*	c		Hexachlorocyclohexanes	1
			including but not limited to:	
58899	c	09/90	Lindane	1
77474			Hexachlorocyclopentadiene	100

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Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
67721	c	09/90	Hexachloroethane	100
680319	c		Hexamethylphosphoramide	100
110543		06/91	Hexane	100
302012	c		Hydrazine	100
7647010			Hydrochloric acid	100
-			Hydrocyanic acid (see Cyanide compounds **)	
7783064			Hydrogen sulfide	100
123319		06/91	Hydroquinone	100
-			Indeno[1,2,3,-cd]pyrene [PAH, POM] (see PAH)	
*			Isocyanates	100
			including but not limited to:	
822060		06/91	Hexamethylene-1,6-diisocyanate	100
101688		06/91	Methylene diphenyl diisocyanate [MDI] [POM]	100
624839			Methyl isocyanate	100
-			Toluene-2,4-diisocyanate (see Toluene diisocyanates)	
-			Toluene-2,6-diisocyanate (see Toluene diisocyanates)	
78591		06/91	Isophorone	100
67630		06/91	Isopropyl alcohol	100
80057		06/91	4,4'-Isopropylidenediphenol [POM]	100
7439921	c		Lead	10
*	c		Lead compounds (inorganic) **	10
			including but not limited to:	
7446277	c		Lead phosphate	10
*		06/91	Lead compounds (other than inorganic) **	10
			including but not limited to:	
301042	c		Lead acetate	10
1335326	c	09/90	Lead subacetate	10
108316			Maleic anhydride	100
7439965			Manganese	100
*		09/89	Manganese compounds **	100
7439976			Mercury	10
*		09/89	Mercury compounds **	10
			including but not limited to:	
7487947			Mercuric chloride	10
593748			Methyl mercury (Dimethylmercury)	10
67561			Methanol	100
72436		06/91	Methoxychlor [POM]	100
75558	c		2-Methylaziridine (1,2-Propyleneimine)	100
74839			Methyl bromide (Bromomethane)	100
74873		06/91	Methyl chloride (Chloromethane)	100
71556			Methyl chloroform (1,1,1-Trichloroethane)	100
66495	c	09/90	3-Methylcholanthrene [PAH-Derivative, POM]	1
3697243	c		5-Methylchrysene [PAH-Derivative, POM]	100
101144	c		4,4'-Methylene bis(2-chloroaniline) (MOCA) [POM]	100

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
75092	c		Methylene chloride (Dichloromethane)	100
101779	c		4,4'-Methylenedianiline (and its dichloride) [POM]	100
78933		06/91	Methyl ethyl ketone (2-Butanone)	100
60344		06/91	Methyl hydrazine	100
74884	c		Methyl iodide (Iodomethane)	100
108101		06/91	Methyl isobutyl ketone (Hexone)	100
80626			Methyl methacrylate	100
1634044		06/91	Methyl tert-butyl ether	100
443481	c		Metronidazole	100
90948	c		Michler's ketone [POM]	100
*	c	06/91	Mineral fibers (fine) (fine mineral fibers which are manmade and are airborne particles of a respirable size greater than 5 microns in length, less than or equal to 3.5 microns in diameter, with a length to diameter ratio of 3:1) including but not limited to:	100
*	c	09/89	Ceramic fibers	100
*	c	09/89	Glasswool fibers	100
*	c	09/89	Rockwool fibers	100
*	c	09/89	Slagwool fibers	100
*			Mineral fibers (other than manmade) including but not limited to:	100
1332214	c		Asbestos	100
12510428	c		Erionite	100
*	c		Talc containing asbestiform fibers	100
1313275		06/91	Molybdenum trioxide	100
-			Naphthalene [PAH, POM] (see PAH)	
7440020	c		Nickel	1
*	c		Nickel compounds **	1
			including but not limited to:	
373024	c	06/91	Nickel acetate	1
3333393	c	06/91	Nickel carbonate	1
13463393	c		Nickel carbonyl	1
12054487	c	06/91	Nickel hydroxide	1
1271289	c	06/91	Nickelocene	1
1313991	c	06/91	Nickel oxide	1
12036722	c		Nickel subsulfide	1
*	c	09/89	Nickel refinery dust from the pyrometallurgical process	1
61574	c		Niridazole	100
7697372		06/91	Nitric acid	100
139139	c		Nitrilotriacetic acid	100
98953			Nitrobenzene	100
92933	c	09/89	4-Nitrobiphenyl [POM]	100

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Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
7496028	c	06/91	6-Nitrochrysene [PAH-Derivative, POM]	100
607578	c	06/91	2-Nitrofluorene [PAH-Derivative, POM]	100
302706	c		Nitrogen mustard N-oxide	100
100027		06/91	4-Nitrophenol	100
79469	c		2-Nitropropane	100
6522430	c	06/91	1-Nitropyrene [PAH-Derivative, POM]	100
156105	c		p-Nitrosodiphenylamine [POM]	100
59892	c		N-Nitrosomorpholine	100
684935	c		N-Nitroso-N-methylurea	100
100754	c		N-Nitrosopiperidine	100
930552	c		N-Nitrosopyrrolidine	1
*			#PAHs (Polycyclic aromatic hydrocarbons) [POM] including but not limited to:	100
120127		06/91	Anthracene	100
56553	c		Benz[a]anthracene	100
50328	c		Benzo[a]pyrene	1
205992	c		Benzo[b]fluoranthene	100
205823	c		Benzo[j]fluoranthene	100
207089	c		Benzo[k]fluoranthene	100
218019	c	09/90	Chrysene	1
53703	c		Dibenz[a,h]anthracene	100
192654	c		Dibenzo[a,e]pyrene	100
189640	c		Dibenzo[a,h]pyrene	100
189559	c		Dibenzo[a,i]pyrene	100
191300	c		Dibenzo[a,l]pyrene	100
193395	c		Indeno[1,2,3,-cd]pyrene	100
91203			Naphthalene	100

(*) Dibenz[a,h]acridine, Dibenz[a,j]acridine, 7H-Dibenzo[c,g]carbazole, 7,12-Dimethylbenz[a]anthracene, 3-Methylcholanthrene, and 5-Methylchrysene are now alphabetized on the list.

PAH: (Polycyclic Aromatic Hydrocarbon) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The structure does not include any heteroatoms or substituent groups. The structure includes only carbon and hydrogen. PAHs are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

Note I: The letter "c" preceding the substance name indicates that for purposes of this section the substance shall be treated as a human carcinogen or potential human carcinogen.

Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
*		06/91	#PAH-Derivatives (Polycyclic aromatic hydrocarbon derivatives) [POM] (including but not limited to those substances listed in Appendix A with the bracketed designation [PAH-Derivative, POM])	100
56382		06/91	Parathion	100
1336363	c		PCBs (Polychlorinated biphenyls) [POM]	1
82688		06/91	Pentachloronitrobenzene (Quintobenzene)	100
79210		06/91	Peracetic acid	100
127184	c		Perchloroethylene (Tetrachloroethene)	100
50066	c		Phenobarbital	100
108952			Phenol	100
106503		06/91	p-Phenylenediamine	100
90437		06/91	2-Phenylphenol [POM]	100
75445			Phosgene	100
7723140			Phosphorus	100
*		09/89	Phosphorus compounds:	100
7803512			Phosphine	10
7664382		09/89	Phosphoric acid	100
10025873		09/89	Phosphorus oxychloride	100
10026138		09/89	Phosphorus pentachloride	100
1314563		09/89	Phosphorus pentoxide	100
7719122		09/89	Phosphorus trichloride	100
126738		09/89	Tributyl phosphate	100
78400		09/89	Triethyl phosphine	100
512561		09/89	Trimethyl phosphate	100
78308		09/89	Triorthocresyl phosphate [POM]	100
115866		09/89	Triphenyl phosphate [POM]	100
101020		09/89	Triphenyl phosphite [POM]	100
85449			Phthalic anhydride	100

PAH-DERIVATIVE: (Polycyclic Aromatic Hydrocarbon Derivative) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The fused ring structure does not contain heteroatoms. The structure does contain one or more substituent groups. PAH-Derivatives are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

Note I: The letter "c" preceding the substance name indicates that for purposes of this section the substance shall be treated as a human carcinogen or potential human carcinogen.

Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
*	c		Polychlorinated dibenzo-p-dioxins [PCDDs] [POM]	0.1
			Including but not limited to:	
1746016	c		2,3,7,8-Tetrachlorodibenzo-p-dioxin [TCDD] [POM]	0.1
40321764	c		1,2,3,7,8-Pentachlorodibenzo-p-dioxin [POM]	0.1
39227286	c		1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [POM]	0.1
57653857	c		1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [POM]	0.1
19408743	c		1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [POM]	0.1
35822469	c		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [POM]	0.1
*	c		Polychlorinated dibenzofurans [PCDFs] [POM]	
			Including but not limited to:	
51207319	c		2,3,7,8-Tetrachlorodibenzofuran [POM]	0.1
57117416	c		1,2,3,7,8-Pentachlorodibenzofuran [POM]	0.1
57117314	c		2,3,4,7,8-Pentachlorodibenzofuran [POM]	0.1
70648269	c		1,2,3,4,7,8-Hexachlorodibenzofuran [POM]	0.1
57117449	c		1,2,3,6,7,8-Hexachlorodibenzofuran [POM]	0.1
72918219	c		1,2,3,7,8,9-Hexachlorodibenzofuran [POM]	0.1
60851346	c		2,3,4,6,7,8-Hexachlorodibenzofuran [POM]	0.1
67562394	c		1,2,3,4,6,7,8-Heptachlorodibenzofuran [POM]	0.1
55673897	c		1,2,3,4,7,8,9-Heptachlorodibenzofuran [POM]	0.1
*		09/89	#POM (Polycyclic organic matter) (including but not limited to those substances listed in Appendix A with the bracketed designation of [POM], [PAH, POM], or [PAH-Derivative, POM])	100
67830	c		Progesterone	100
1120714	c		1,3-Propane sultone	100
57578	c		beta-Propiolactone	10
123386		06/91	Propionaldehyde	100
114261		06/91	Propoxur [Baygon]	100
115071			Propylene	100
-			1,2-Propyleneimine (see 2-Methylaziridine)	
75569	c		Propylene oxide	100
110861		06/91	Pyridine	100
91225		06/91	Quinoline	100
106514		06/91	Quinone	100

POM: (Polycyclic Organic Matter) - Includes organic compounds with more than one benzene ring, and which have a boiling point of greater than or equal to 100° C.

Note I: The letter "c" preceding the substance name indicates that for purposes of this section the substance shall be treated as a human carcinogen or potential human carcinogen.

Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
*	c		Radionuclides	100
			Including but not limited to:	
24267669	c	09/89	Iodine-131	100
*	c	09/89	Radon and its decay products	100
50555	c		Reserpine [POM]	100
*	c	06/91	Residual (heavy) fuel oils	100
7782492			Selenium	100
*			Selenium compounds **	100
			Including but not limited to:	
7446346	c	09/90	Selenium sulfide	100
*	c		Silica, crystalline	100
7440224		06/91	Silver	100
*		06/91	Silver compounds **	100
1310732			Sodium hydroxide	100
100425	c		Styrene	100
96093	c		Styrene oxide	100
7664939		06/91	Sulfuric acid	100
100210		06/91	Terephthalic acid	100
79345	c	09/90	1,1,2,2-Tetrachloroethane	10
7440280		06/91	Thallium	100
*		06/91	Thallium compounds **	100
62555	c		Thioacetamide	100
62566	c		Thiourea	100
7550450		06/91	Titanium tetrachloride	100
108883			Toluene	100
-			2,4-Toluenediamine (see 2,4-Diaminotoluene)	
*	c	06/91	Toluene diisocyanates	10
			Including but not limited to:	
584849	c		Toluene-2,4-diisocyanate	10
91087	c		Toluene-2,6-diisocyanate	10
95534	c		o-Toluidine	10
8001352	c		Toxaphene [Polychlorinated camphenes]	100
-			1,1,1-Trichloroethane (see Methyl chloroform)	
79005	c	06/91	1,1,2-Trichloroethane [Vinyl trichloride]	100
79016	c		Trichloroethylene	100
-			2,4,6-Trichlorophenol (see Chlorophenols)	
121448		06/91	Triethylamine	100
1582098		06/91	Trifluralin	100
95636		06/91	1,2,4-Trimethylbenzene	100
540841		06/91	2,2,4-Trimethylpentane	100
51796	c		Urethane [Ethyl carbamate]	100
*		06/91	Vanadium (fume or dust)	100
108054		06/91	Vinyl acetate	100
593602	c		Vinyl bromide	10
75014	c		Vinyl chloride	100
75354			Vinylidene chloride	100

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Emissions Must Be Quantified (cont.)

CAS Number	See Note I	See Note II	Substance Name	Applicable Degree of Accuracy (lbs/year)
*		09/89	Wood preservatives (containing arsenic and chromate)	100
*			Xylenes (mixed xylenes)	100
			including:	
108383		06/91	m-Xylene	100
95476		06/91	o-Xylene	100
106423		06/91	p-Xylene	100
7440666			Zinc	100
*		09/89	Zinc compounds **	
			including but not limited to:	
1314132			Zinc oxide	100

* - single CAS number not applicable

** - metal compounds are to be reported as the metal atom equivalent in the compound, unless specific compounds are listed

PAH: (Polycyclic Aromatic Hydrocarbon) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The structure does not include any heteroatoms or substituent groups. The structure includes only carbon and hydrogen. PAHs are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

PAH-DERIVATIVE: (Polycyclic Aromatic Hydrocarbon Derivative) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The fused ring structure does not contain heteroatoms. The structure does contain one or more substituent groups. PAH-Derivatives are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

POM: (Polycyclic Organic Matter) - Includes organic compounds with more than one benzene ring, and which have a boiling point of greater than or equal to 100° C.

() - This designation indicates a synonym for the substance listed.

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

NOTE THAT REPORTING OF A TOTAL FOR A SUBSTANCE WHICH IS A SUBSTANCE GROUP HEADING DOES NOT SUPERCEDE THE REQUIRED REPORTING OF THE INDIVIDUAL SUBSTANCES WHICH ARE LISTED IN APPENDIX A UNDER THE GROUP HEADING.

Appendix A-II

Substances For Which Production, Use, or Other Presence Must Be Reported

Chemical Abstract Service (CAS) Number	See Note I	See Note II	Substance Name
26148685	c	09/89	A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole)
34256821	c	09/89	Acetochlor
546883		09/90	Acetohydroxamic acid
62476599	c	09/90	Acifluorfen [POM]
50760	c	09/90	Actinomycin D
23214928	c		Adriamycin [PAH-Derivative, POM]
3688537	c		AF-2
*	c		Aflatoxins
15972608	c	09/89	Alachlor
309002	c	09/89	Aldrin
107186		06/91	Allyl alcohol
28981977		09/90	Alprazolam [POM]
39831555		09/90	Amikacin sulfate
60093	c		p-Aminoazobenzene (4-Aminoazobenzene) [POM]
97563	c		o-Aminoazotoluene [POM]
6109973	c	09/89	3-Amino-9-ethylcarbazole hydrochloride [POM]
126848		09/90	Aminoglutethimide
82280	c		1-Amino-2-methylanthraquinone [PAH-Derivative, POM]
68006837	c	09/89	2-Amino-3-methyl-9H-pyrido(2,3-b) indole (MeA-alpha-C)
712685	c		2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole
54626			Aminopterin
-			2-Amino-9H-pyrido(2,3-b) indole (see A-alpha-C)
*	c		Analgesic mixtures containing phenacetin
*	c		Androgenic (anabolic) steroids
			including but not limited to:
58184		09/90	Methyltestosterone
434071	c		Oxymetholone
58220		09/89	Testosterone and its esters
			including but not limited to:
315377		09/90	Testosterone enanthate
134292	c		o-Anisidine hydrochloride
104949		06/91	p-Anisidine
140578	c		Aramite
50782		06/91	Aspirin
492808	c		Auramine [POM]
115026	c		Azaserine
446866	c		Azathioprine
103333	c	09/90	Azobenzene [POM]
98873		06/91	Benzal chloride
55210		06/91	Benzamide
5411223		09/90	Benzphetamine hydrochloride [POM]
1694093	c		Benzyl violet 4B [POM]
*	c		Betel quid with tobacco

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Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
494031	c		N-N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine) [PAH-Derivative, POM]
154938	c		Bischloroethyl nitrosourea
108601		06/91	Bis(2-chloro-1-methylethyl) ether
*	c		Bitumens, extracts of steam-refined and air-refined bitumens
*	c		Bleomycins
75274	c	09/90	Bromodichloromethane
1689845		06/91	Bromoxynil
55981	c		1,4-Butanediol dimethanesulfonate (Busulfen/Hyleran)
25013165	c		Butylated hydroxyanisole (BHA)
123728		06/91	Butyraldehyde
3068880	c		beta-Butyrolactone
630080		09/89	Carbon monoxide
41575944		09/90	Carboplatin
474259		09/90	Chenodiol
305033	c		Chlorambucil
1620219			Chlorcyclizine hydrochloride [POM]
143500	c		Chlordecone (Kepone)
6164983	c	09/89	Chlordimeform
115286	c	09/89	Chlorendic acid
124481	c	09/90	Chlorodibromomethane
13010474	c		1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)
563473	c	09/89	3-Chloro-2-methylpropene
*	c	06/91	p-Chloro-o-toluidine (strong acid salts)
*	c		Chlorophenoxy herbicides
1897456	c	09/89	Chlorothalonil
4680788		06/91	C. I. Acid Green 3 [POM]
569642		06/91	C. I. Basic Green 4 [POM]
989388		06/91	C. I. Basic Red 1 [POM]
569619	c	09/89	C. I. Basic Red 9 monohydrochloride [POM]
2832408		06/91	C. I. Disperse Yellow 3 [POM]
	(NOTE: "C. I." means "color index")		
87296	c	09/89	Cinnamyl anthranilate [POM]
15663271	c		Cisplatin
6358538	c		Citrus Red No. 2 [POM]
50419		09/90	Clomiphene citrate [POM]
8007452	c	09/89	Coal tars
21725462		09/90	Cyanazine
14901087	c		Cycasin
50180	c		Cyclophosphamide
13121705		09/89	Cyhexatin
147944		09/89	Cytarabine
3468631	c	09/90	D and C Orange No. 17 [PAH-Derivative, POM]
2092560	c	06/91	D and C Red No. 8 [PAH-Derivative, POM]

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Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
6160021	c	09/90	D and C Red No. 9 [PAH-Derivative, POM]
81889	c	09/90	D and C Red No. 19 [POM]
4342034	c		Dacarbazine
1596845	c	09/90	Daminozide
17230885		09/90	Danazol
20830813	c		Daunomycin [PAH-Derivative, POM]
23541506		09/90	Daunorubicin hydrochloride [PAH-Derivative, POM]
50293	c		DDT [1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane] [POM]
613354	c		N,N'-Diacetylbenzidine [POM]
2303164		06/91	Diallate
39156417	c		2,4-Diaminoanisole sulfate
101804	c		4,4'-Diaminodiphenyl ether [POM]
764410	c	09/90	1,4-Dichloro-2-butene
28434868	c	09/89	3,3'-Dichloro-4,4'-diaminodiphenyl ether [POM]
72548	c	09/89	Dichlorodiphenyldichloroethane [DDD] [POM]
540590		06/91	1,2-Dichloroethylene
78886		06/91	2,3-Dichloropropene
60571	c	09/89	Dieldrin
84173	c	09/90	Dienestrol [POM]
1464535	c		Diepoxybutane
1615801	c		1,2-Diethylhydrazine
84662		06/91	Diethyl phthalate
101906	c		Diglycidyl resorcinol ether [DGRE]
94586	c		Dihydrosafrole
20325400	c	06/91	3,3'-Dimethoxybenzidine dihydrochloride [POM]
55738640	c		trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole
540738	c		1,2-Dimethylhydrazine
105679		06/91	2,4-Dimethylphenol [2,4-Xylenol]
513371	c	09/89	Dimethylvinylchloride [DMVC]
25154545		09/90	Dinitrobenzenes (mixtures of) including:
99650		06/91	m-Dinitrobenzene
528290		06/91	o-Dinitrobenzene
100254		06/91	p-Dinitrobenzene
117840		06/91	n-Dioctyl phthalate
39300453		09/90	Dinocap
88857		09/89	Dinoseb
2475458	c	06/91	Disperse Blue 1 [PAH-Derivative, POM]
564250		09/90	Doxycycline
379793		09/90	Ergotamine tartrate [POM]
*	c		Estrogens, nonsteroidal including but not limited to:
56531	c		Diethylstilbestrol [POM]

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
*	c		Estrogens, steroidal
			including but not limited to:
*		09/90	Conjugated estrogens
50282	c		Estradiol 17 beta
53167	c		Estrone
57636	c		Ethinyl estradiol
72333	c		Mestranol
541413		06/91	Ethyl chloroformate
62500	c		Ethyl methanesulfonate
33419420		09/90	Etoposide [POM]
54350480			Etretinate
2164172		06/91	Fluometuron
51218		09/89	Fluorouracil
76437		09/90	Fluoxymesterone
13311847		09/90	Flutamide
133073	c	09/89	Folpet
3570750	c		2-(2-Formylhydrazino)-4-(5-nitro-2-furyl) thiazole
67458	c	09/90	Furazolidone
60568050	c	09/90	Furmecyclox
67730114	c		Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole)
67730103	c		Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)
765344	c		Glycidaldehyde
556525	c	09/90	Glycidol
16568028	c		Gyromitrin [Acetaldehyde methylformylhydrazone]
2784943	c	09/89	HC Blue 1
23092173		09/90	Halazepam [POM]
1024573	c	09/89	Heptachlor epoxide
1335871		06/91	Hexachloronaphthalene [PAH-Derivative, POM]
10034932	c		Hydrazine sulfate
3778732		09/90	Ifosfamide
76180966	c		IQ [2-Amino-3-methylimidazo[4,5-f]quinoline]
9004664	c		Iron dextran complex
78842		06/91	Isobutyraldehyde
120581	c	09/90	Isosafrole
4759482			Isotretinoin
77501634	c	09/89	Lactofen [POM]
303344	c	09/89	Lasiocarpine
554132		06/91	Lithium carbonate
919164		06/91	Lithium citrate
846491		09/90	Lorazepam [POM]
*	c	09/89	Lubricant base oils and derived products, specifically vacuum distillates, acid treated oils, aromatic oils, mildly solvent-refined oils, mildly hydrotreated-oils and used engine oils.

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Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
8018017	c	09/90	Mancozeb
12427382	c	09/90	Maneb
595335		06/91	Megestrol acetate
148823	c		Melphalan
9002680		09/90	Menotropins
6112761		09/90	Mercaptopurine
531760	c	09/89	Merphalan
3963959		06/91	Methacycline hydrochloride
60560		09/90	Methimazole
59052		09/89	Methotrexate
15475566		09/90	Methotrexate sodium
484208	c		5-Methoxypsoralen
96333		06/91	Methyl acrylate
590965	c	09/90	Methylazoxymethanol
592621	c	09/89	Methylazoxymethanol acetate
838880	c	09/89	4,4'- Methylene bis(2-methylaniline) [POM]
101611	c		4,4'- Methylene bis(N,N-dimethyl) benzenamine [POM]
74953		06/91	Methylene bromide
66273	c		Methyl methanesulfonate
129157	c		2-Methyl-1-nitroanthraquinone (uncertain purity) [PAH-Derivative, POM]
70257	c		N-Methyl-N'-nitro-N-nitrosoguanidine
615532		09/89	N-Methyl-N-nitrosourethane
924425	c	09/90	N-Methyloacrylamide
56042	c		Methylthiouracil
9006422		09/90	Metiram
59467968		09/90	Midazolam hydrochloride [POM]
*	c		Mineral oils (untreated and mildly treated oils; and those used in occupations such as mulespinning, metal machining, and jute processing).
2385855	c		Mirex
62015398		09/90	Misoprostol
50077	c		Mitomycin C
70476823		09/90	Mitoxantrone hydrochloride [PAH-Derivative, POM]
315220	c		Monocrotaline
139913	c		5-(Morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone
505602	c		Mustard gas [Sulfur mustard]
86220420		09/90	Nafarelin acetate [PAH-Derivative, POM]
3771195	c		Nafenopin [POM]
134327	c	09/90	1-Naphthylamine [PAH-Derivative, POM]
91598	c		2-Naphthylamine [PAH-Derivative, POM]
1405103		09/90	Neomycin sulfate
56391672		09/90	Netilmicin sulfate
54115		09/90	Nicotine

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Note II: The date the Board approved addition of the substance to the origina list. The original list was approved by the Board in July 1988.

Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
*	c	06/91	Nitrilotriacetic acid (salts) including but not limited to:
18662538	c	06/91	Nitrilotriacetic acid, trisodium salt monohydrate
602879	c		5-Nitroacenaphthene [PAH-Derivative, POM]
99592	c		5-Nitro-o-anisidine
1836755	c		Nitrofen (technical grade)
67209	c	06/91	Nitrofurantoin
59870	c	09/90	Nitrofurazone
555840	c		1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone
531828	c		N-[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide
51752	c		Nitrogen mustard [Hechlorethamine]
55867	c	09/89	Nitrogen mustard hydrochloride
55630		06/91	Nitroglycerin
88755		06/91	2-Nitrophenol
57835924	c	06/91	4-Nitropyrene [PAH-Derivative, POM]
86306	c	09/89	N-Nitrosodiphenylamine [POM]
759739	c		N-Nitroso-N-ethylurea
60153493	c	09/89	3-(N-Nitrosomethylamino)propionitrile
64091914	c	09/89	4-(N-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone [NNK]
615532	c		N-Nitroso-N-methylurethane [N-Methyl-N-nitrosourethane]
4549400	c		N-Nitrosomethylvinylamine
16543558	c		N-Nitrosonornicotine
13256229	c		N-Nitrososarcosine
6533002		09/90	Norgestrel
303479	c	09/90	Ochratoxin A [POM]
2234131		06/91	Octachloronaphthalene [PAH-Derivative, POM]
2646176	c		Oil Orange SS [PAH-Derivative, POM]
20816120		06/91	Osmium tetroxide
79572		06/91	Oxytetracycline
794934	c		Panfuran S [Dihydroxymethylfuratrizine]
115673		09/90	Parmethadione
52675		06/91	Penicillamine
57330		09/90	Pentobarbital sodium
63989		09/90	Phenacemide
62442	c		Phenacetin
94780	c		Phenazopyridine hydrochloride
3546109	c	09/89	Phenesterin
59961	c	09/89	Phenoxybenzamine [POM]
63923	c	09/90	Phenoxybenzamine hydrochloride [POM]
122601	c	09/90	Phenyl glycidyl ether
57410	c		Phenytoin [POM]
88891		06/91	Picric acid
54911		09/90	Pipobroman

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Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
18378897		09/90	Plicamycin [PAH-Derivative, POM]
*	c		Polybrominated biphenyls [PBBs] [POM]
53973981	c	09/89	Polygeenan
3761533	c		Ponceau MX [PAH-Derivative, POM]
3564098	c		Ponceau 3R [PAH-Derivative, POM]
366701	c		Procarbazine hydrochloride
*	c		Progestins including but not limited to:
71589	c		Hedroxyprogesterone acetate
68224	c		Norethisterone
51525	c		Propylthiouracil
302794		09/89	all-trans-Retinoic acid
*	c	09/89	Retinol/retinyl esters
36791045		09/90	Ribavirin
81072	c		Saccharin
94597	c		Safrole
*	c		Shale oils
132274	c		Sodium o-phenylphenate [POM]
128449	c	09/89	Sodium saccharin
*	c		Soots
10048132	c		Sterigmatocystin [POM]
3810740		06/91	Streptomycin sulfate
18883664	c		Streptozotocin
95067	c		Sulfallate
54965241		09/90	Tamoxifen citrate [POM]
846504		09/90	Temazepam [POM]
5216251	c	09/90	p-alpha,alpha,alpha-Tetrachlorotoluene
961115		06/91	Tetrachlorvinphos
64755		06/91	Tetracycline hydrochloride
509148	c	09/90	Tetranitromethane
50351			Thalidomide
139651	c		4,4'-Thiodianiline [POM]
154427		09/90	Thioguanine
1314201	c		Thorium dioxide
*	c		Tobacco products, smokeless
49842071		09/90	Tobramycin sulfate
*	c		alpha-chlorinated toluenes
636215	c		o-Toluidine hydrochloride
106490	c	09/90	p-Toluidine
299752	c		Treosulfan
28911015		09/90	Triazolam [POM]
52686		06/91	Trichlorfon
13647353		09/90	Trilostane
127480		06/91	Trimethadione
68768	c	09/90	Tris(aziridinyl)-p-benzoquinone [Triaziquone]
52244	c		Tris(1-aziridinyl) phosphine sulfide [Thiotepa]

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Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

Substances For Which Production, Use, Or Other Presence Must Be Reported (cont.)

CAS Number	See Note I	See Note II	Substance Name
126727	c	09/89	Tris(2,3-dibromopropyl)phosphate
62450060	c		Trp-P-1 (3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)
62450071	c		Trp-P-2 (3-Amino-1-methyl-5H-pyrido[4,3-b] indole)
72571	c		Trypan blue [PAH-Derivative, POM]
66751	c		Uracil mustard
26995915		09/90	Urofollitropin
99661			Valproate
143679		09/90	Vinblastine sulfate [POM]
2068782		09/90	Vincristine sulfate [POM]
106876	c	09/90	4-Vinyl-1-cyclohexene diepoxide [Vinyl cyclohexene dioxide]
81812			Warfarin [POM]
87627		06/91	2,6-Xylidene
12122677	c	09/90	Zineb

* = single CAS number not applicable

PAH: (Polycyclic Aromatic Hydrocarbon) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The structure does not include any heteroatoms or substituent groups. The structure includes only carbon and hydrogen. PAHs are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

PAH-DERIVATIVE: (Polycyclic Aromatic Hydrocarbon Derivative) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The fused ring structure does not contain heteroatoms. The structure does contain one or more substituent groups. PAH-derivatives are a subgroup of POM and have a boiling point of greater than or equal to 100° C.

POM: (Polycyclic Organic Matter) - Includes organic compounds with more than one benzene ring, and which have a boiling point of greater than or equal to 100° C.

() - This designation indicates a synonym for the substance listed.

Note I: The letter "c" preceding the substance name indicates that for purposes of this section the substance shall be treated as a human carcinogen or potential human carcinogen.

Note II: The date the Board approved addition of the substance to the original list. The original list was approved by the Board in July 1988.

NOTE THAT REPORTING OF A TOTAL FOR A SUBSTANCE WHICH IS A SUBSTANCE GROUP HEADING DOES NOT SUPERCEDE THE REQUIRED REPORTING OF THE INDIVIDUAL SUBSTANCES WHICH ARE LISTED IN APPENDIX A UNDER THE GROUP HEADING.

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APPENDIX E

REQUIREMENTS FOR CLASSES OF FACILITIES EMITTING LESS THAN 10 TPY OF CRITERIA POLLUTANTS

E-I

CLASSES OF FACILITIES EMITTING LESS THAN 10 TPY FOR WHICH THE FACILITY OPERATORS MUST PREPARE COMPLETE PLANS AND REPORTS

E-II

CLASSES OF FACILITIES EMITTING LESS THAN 10 TPY FOR WHICH THE FACILITY OPERATORS MUST COMPLETE A SURVEY OF PRODUCTION, USE, OR OTHER PRESENCE

NOTES TO APPENDIX E

a Except facilities using less than four pounds of ethylene oxide per year.

b Except facilities using solvents for cold cleaning and vapor degreasing in the following quantities:

(1) less than 55-gallon (drum) quantities per year of a listed substance which is designated as a human carcinogen or potential human carcinogen; and

(2) less than 55-gallon (drum) quantities per month of a listed substance which is not designated as a human carcinogen or potential human carcinogen.

c Any facility at which asbestos removal occurs on a routine and predictable basis for a period of at least one year.

d Any treatment, storage, disposal, and recycling facility (as defined by "hazardous waste facility" in Health and Safety Code, Section 25117.1 and in Title 22, California Code of Regulations (CCR), Section 66096) except:

(1) transfer stations (as defined in Title 22, CCR, Section 66212) that do not pump or package hazardous waste; and

(2) storage facilities (as defined in Health and Safety Code, Section 25123.3) that store only containerized waste.

e Only the described portions of the SIC are included.

f [ ] Indicates an SIC formerly used by the Executive Office of the President, Office of Management and Budget, which has been reassigned.

APPENDIX E-I

Classes of Facilities Emitting Less Than 10 tpy of Criteria Pollutants for Which the Facility Operators Must Prepare Complete Emission Inventory Plans and Reports

Standard Industrial Classification Code (SIC)	Description of Class
Any SIC	Metal platers using cadmium or chromium
Any SIC	Facilities using ethylene oxide for sterilization[a]
Any SIC	Facilities with cooling towers using hexavalent chromium
Any SIC	Facilities that perform degreasing[b]
Any SIC	Facilities using incinerators that burn hazardous, municipal, or biomedical waste, or burning tires
Any SIC	Long term asbestos removal (over one year)[c]
Any SIC	Treatment, storage, disposal, and recycling facilities (TSDFs; TSDR facilities)[d]
2221[e],3229[e]	Fiberglass and various fiberglass materials and products manufacturing facilities within SICs 2221 and 3229
2611,2621,[2631][f]	Pulp and paper mills
2711-2771, 2782	Printing and publishing including printshops and miscellaneous commercial printing
2812-2899	Chemicals and allied products manufacturing
2911-2999	Petroleum refining and related industries
3011-3089, [3293][f],[3555][f]	Rubber and miscellaneous plastics products manufacturing
3471-3479	Miscellaneous plating, polishing, coating, engraving, and allied services
3674	Semiconductors and related devices manufacturing
3731-3732	Boat and ship building and repair
4952	Wastewater treatment facilities (including publicly owned treatment works, POTWs)
5171-5172	Petroleum bulk stations and terminals and related
5511-5521, [7531][f],7532, [7535][f]	Auto body shops (including new and used car dealers where body work occurs)
5541	Gasoline stations
7216	Dry cleaners
7261[e]	Funeral services with crematories

APPENDIX E-II

Classes of Facilities Emitting Less Than 10 tpy of Criteria Pollutants for Which the Facility Operators Must Complete a Survey of Production, Use, or Other Presence of Listed Substances

Standard Industrial Classification Code (SIC)	Description of Class
0723,[0729][f]	Crop preparation services for market
0724,[0729][f]	Cotton ginning
1311	Crude petroleum and natural gas extraction
1321	Natural gas liquids plants
1381	Drilling oil and gas wells
1422-1429	Miscellaneous crushed and broken stone mining
1442-1446	Construction sand and gravel mining
2033-2034	Canned and dehydrated fruits and vegetables
2041,2044,2046, 4221	Grain mill products manufacturing and warehousing
2434-2439	Veneer, plywood, structural wood members, and related manufacturing
2441-2499	Miscellaneous wood containers, buildings, and products manufacturing
2511-2599,7641	Furniture or cabinet manufacturing and repair
3241	Hydraulic cement manufacturing
3292-3296	Asbestos and miscellaneous nonmetallic mineral products manufacturing
3312-3325	Blast furnaces and steel mills
3341-3369	Primary metal industries and secondary smelting
3411-3469, 3482-3499	Miscellaneous fabricated metal products manufacturing
3511-3537	Various industrial machinery manufacturing
3612-3672, [3673][f], 3675-3699	Electronic and other electrical equipment and components, except computer equipment
3721-3728	Aircraft and parts
3761-3769	Guided missile and space vehicle propulsion units and propulsion unit parts
7218	Industrial launderers
7533-7534, 7537-7539	General automotive repair shops and related
8062	General medical and surgical hospitals
8731,8733-8734, [7391][f],[7397][f], [8922][f]	Research, development, and testing services

Appendix IV

Announcement of Public Consultation Meetings

(Enclosures to the Announcement of Public Consultation Meetings are available upon request from ARB staff)

STATE OF CALIFORNIA PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

July 1, 1992

Dear Sir or Madam:

This letter will notify you of a public workshop to discuss changing the way the fees for the Air Resources Board's Air Toxics "Hot Spots" Fee Regulation (Title 17 and 26, Sections 90700-90705, California Code of Regulations) are determined for fiscal year 1993-94.

Background

The Air Toxics "Hot Spots" Fee Regulation is required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588; Health and Safety Code sections 44300-44384). The Act requires the Air Resources Board (ARB) to provide for collecting fees to recover costs incurred by state and local agencies that must implement the Air Toxics "Hot Spots" Program. These agencies are the ARB, the Office of Environmental Health Hazard Assessment, and local Air Pollution Control Districts. The fees are assessed upon the operators of all facilities subject to the Act.

Since the ARB's Air Toxics "Hot Spots" Fee Regulation was first adopted in 1988, fees have been based on the amount of criteria pollutants facilities emit. For purposes of the Act, criteria pollutants are nitrogen oxides, sulfur oxides, total organic gases, and particulate matter.

Purpose

This workshop is being held to elicit comments and suggestions on alternatives to relying on the criteria pollutant inventory as the basis of the Air Toxics "Hot Spots" Fee Regulation. For fiscal year 1993-94, sufficient information may be available to begin to base fees on a facility's emissions of toxic air pollutants or some other basis.

At the workshop, representatives from the ARB staff will present a brief summary of possible options which we have identified, and will solicit your ideas and recommendations on modifications to the regulation for fiscal year 1993-94.

The public workshop will be held at the time and place listed below:

Date: July 22, 1992
Time: 10:00 to 1:00 PM
Place: Air Resources Board
2020 L Street
Board Hearing Room, Lower Level
Sacramento, California

For participants arriving by automobile, on-street parking is available in the neighborhood surrounding 2020 L. For participants arriving by public transportation, the nearest Light Rail station is at 23rd and R streets. Bus service is provided by routes 30, 31, 32, 34, 61, 62, 63, and 64.

Future Public Workshops

After the July 22, 1992 public workshop, ARB staff will work closely with the California Air Pollution Control Officers Association's Air Toxics "Hot Spots" Fee Regulation Committee to prepare draft modifications to the regulation for fiscal year 1993-94.

A second group of public workshops will be held in a few months to elicit comments on the draft modifications.

Mailing List Update

We are in the process of updating our mailing list. We apologize if you have received duplicate copies of this notice.

If you have any questions about this notice, or if you wish to make a presentation at the workshop, please contact Janette Brooks, Manager, Special Projects Section, (916) 322-9148, or Roger Korenberg of her staff at (916) 327-5634.

Sincerely,

Peter D. Venturini, Chief
Stationary Source Division

cc: Air Pollution Control Officers
CAPCOA Air Toxics "Hot Spots"
Fee Regulation Committee
Stewart J. Wilson, CAPCOA
Janette Brooks, ARB
Roger Korenberg, ARB

STATE OF CALIFORNIA PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

November 10, 1992

Dear Sir or Madam:

This letter notifies you of three public workshops which will be held to discuss proposed changes to the Air Toxics "Hot Spots" Fee Regulation. The Fee Regulation, authorized by the Air Toxics "Hot Spots" Information and Assessment Act of 1987, recovers the state and local agency costs of implementing the Air Toxics Hot Spots Act requirements. At the workshops, Air Resources Board (ARB) staff will discuss alternative proposals to relying on the criteria pollutant inventory as the basis for Hot Spots fees.

The staff workshops will be held at the following times and locations:

December 15, 1992
11:00 AM
3rd Floor Meeting Room
San Joaquin Valley Unified APCD
1999 Tuolumne
Fresno, California

December 16, 1992
10:30 AM
Room 150, 1st Floor
State Personnel Board
801 Capitol Mall
Sacramento, California

December 17, 1992
1:30 PM
Auditorium, Room 1138
Junipero Serra State Building
107 South Broadway
Los Angeles, California

After evaluating the comments received at these workshops, the ARB staff will draft specific proposed regulation changes. We will hold another series of workshops in March 1993, to receive comments on the specific proposed regulation changes.

Background

The Air Toxics "Hot Spots" Fee Regulation is required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (Act) (AB 2588; Health and Safety Code sections 44300-44384). The Act requires the Air Resources Board to provide for collecting fees to recover costs incurred by state and

local agencies that must implement the Air Toxics Hot Spots Program. These agencies are the ARB, the Office of Environmental Health Hazard Assessment (OEHHA), and local Air Pollution Control Districts (districts). The fees are assessed upon the operators of all facilities subject to the Act.

Since the ARB's Air Toxics "Hot Spots" Fee Regulation was first adopted in 1988, fees have been based on the amount of criteria pollutants facilities emit. For purposes of the Act, criteria pollutants are nitrogen oxides, sulfur oxides, total organic gases, and particulate matter.

For fiscal year 1993-94, sufficient information is available to begin to allocate fees on some alternative basis to the criteria pollutant inventory. A variety of alternatives were identified through a series of meetings between ARB staff and representatives from other California Environmental Protection Agency departments and from Air Pollution Control Districts. A public workshop was also held on July 22, 1992, to elicit ideas. The various alternatives were analyzed and discussed with the Air Toxics Hot Spots Fee Regulation Committee. Specific methods were selected for discussion as proposed bases for the Fee Regulation for fiscal year 1993-94.

Purpose

These workshops are being held to present and discuss the proposed alternatives to the criteria pollutant inventory for determining Hot Spots fees. In addition to the proposals presented below, we solicit your suggestions for alternative methods of determining fees. These methods may be incorporated into future amendments to the Air Toxics "Hot Spots" Fee Regulation. New legislation related to the Air Toxics Hot Spots program will also be discussed. The new legislation, Senate Bill 1378, McCorquodale, requires that the Air Toxics Hot Spots fees be proportionate, to the extent practicable, to each facility's level of toxic emissions and priority rating.

Summary of Proposals

Two primary areas are considered for change. The two areas are: (1) the method for distributing state costs among districts, and (2) the method for determining facility fees. The proposed changes are as follows:

Distribution of State Costs Among Districts

Current Method: State costs are distributed among the districts in proportion to the amount of criteria pollutants emitted by stationary source facilities in the district.

Proposed Method: Distribute state costs in proportion to the total number of stationary source facilities in the district in various program categories.

Explanation: The total state cost would first be divided into two categories proportionate to the state workload in those categories. The two categories are: (1) risk assessment related work, and (2) non-risk assessment work. The risk assessment category cost is divided by the number of facilities required to do risk assessments statewide to arrive at a per-facility state cost. The remaining state cost for the non-risk assessment category is divided by the number of non-risk assessment facilities statewide to arrive at a second classification of per-facility state cost. The number of facilities in an individual district in each of the two categories is multiplied by the respective per-facility fee, and the two products are added to compute that district's share of state costs.

State cost = risk assessment cost + non-risk assessment cost

State cost per-facility (a) = $\frac{\text{risk assessment cost}}{\text{number of risk assessment facilities}}$ or

(b) = $\frac{\text{non-risk assessment cost}}{\text{number of non-risk assessment facilities}}$

District share = [(a) x number of district risk assessment facilities] + [(b) x number of district non-risk assessment facilities]

Facility Fees

Current Method: Facilities emitting greater than 10 tons per year of criteria pollutants, and located in districts having the Air Resources Board adopt their fee schedules, are assessed fees using one of three approaches: cost-per-ton, graduated fee, or a flat fee.

Proposed Method: Establish flat fees based on the facility program phase.

Explanation: Flat fees would be specified for facilities in the following two categories: (1) facilities emitting less than 10 tons per year of criteria pollutants for which the operator must complete a survey of production, use or other presence of listed substances (Phase III, E-II), and (2) facilities emitting less than 10 tons per year of criteria pollutants for which the district is preparing industrywide inventories.

A district workload ratio would be established for facilities in the following program categories: (1) Plans and Reports, (2) Risk Assessment, (3) Public Notification, and (4) Risk Reduction Audits and Plans. The district share of state costs and the district cost would be summed, and that sum apportioned among all the facilities in the four categories according to the workload ratio. The fees would be additive, so a facility required to do a notification, for example, would pay the Plans and Reports fee, plus the Risk Assessment fee, plus the Public Notification fee.

Consideration would also be given to a maximum fee for small businesses.

How to Comment on Proposals

You may provide either written or oral comments. You may present oral comments at the staff workshops listed in this announcement. If you wish to submit written comments, please address them to Genevieve Shiroma, Chief, Toxic Air Contaminant Identification Branch, Air Resources Board, Stationary Source Division, P.O. Box 2815, Sacramento, CA 95814.

Mailing List Update

If you have received more than one copy of this letter or wish to have your name removed from the mailing list, please complete and return the attached "Mailing List Update" form.

For Further Information

If you have questions regarding the staff workshops or the proposed alternative methods for fee bases, please call Roger Korenberg, Special Projects Section, at (916) 327-5634.

Sincerely,

Donald J. Ames for

Peter D. Venturini, Chief
Stationary Source Division

Attachment

cc: Air Pollution Control Officers
Fee Regulation Committee Members
Roger Korenberg, ARB

| Place |
| Stamp |
| Here |

Roger Korenberg
California Air Resources Board
Stationary Source Division
P.O. Box 2815
Sacramento, CA 95814

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STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

March 29, 1993

Dear Madam or Sir:

The purpose of this letter is to notify you of three public workshops which will be held by the Air Resources Board (ARB) staff to discuss proposed changes to the Air Toxics "Hot Spots" Fee Regulation. The Fee Regulation, authorized by the Air Toxics "Hot Spots" Information and Assessment Act of 1987, recovers the costs state and local agencies incur in implementing the "Hot Spots" Act requirements. At the public workshops, staff will discuss revisions which are proposed to update the Fee Regulation for fiscal year 1993-94, Enclosure 1.

The public workshops will be held at the following times and locations:

April 15, 1993
1:30 PM
Room 1122
Junipero Serra State Building
107 South Broadway
Los Angeles, California

April 16, 1993
11:00 AM
Room 150, 1st Floor
State Personnel Board
801 Capitol Mall
Sacramento, California

April 22, 1993
11:00 AM
Room 1036
Fresno State Building
2550 Mariposa Mall
Fresno, California

Background

The Air Toxics "Hot Spots" Fee Regulation is required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588 or the Act; Health and Safety Code sections 44300-44394). The Act establishes a program to inventory emissions of toxic air pollutants and to assess the potential risk to public health caused by these emissions. The Act also requires the ARB to provide by regulation for the collection of fees to recover costs incurred by the state and local agencies that are required to implement the "Hot Spots" program. These agencies are the ARB, the Office of Environmental Health Hazard Assessment (OEHHA), and the local Air Pollution Control Districts (districts). Annual amendments to the Fee Regulation are necessary to reflect changing program costs and fees, as well as changes in the inventory of facilities which are assessed fees.

The Act was amended in 1992 by Senate Bill 1378, McCorquodale, Chapter 375, Statutes of 1992, and Senate Bill 1731, Calderon, Chapter 1162, Statutes of 1992. Senate Bill 1378, McCorquodale, requires each district that has an approved toxics emissions inventory to adopt fee schedules based to the maximum extent practicable, proportionate to the extent of the releases identified in the toxics emissions inventory and the level of priority assigned to that source by the district. Senate Bill 1731, Calderon, requires the Office of Environmental Health Hazard Assessment to develop new risk assessment guidelines which include provisions for the submission of supplemental health risk assessment information. Senate Bill 1731 also requires some facilities to implement airborne toxic risk reduction measures, and it requires the state to assist small businesses to comply with the program.

FEATURES OF THE PROPOSAL

- o Low fee for facilities in Survey and Industrywide categories.
  - Fees range from $20 to $250, depending on district (see Table 4).
  - Provision for waiver of fees (see Section 90704(d)).
- o Cap on fee for small business (see Section 90704(e)(2).
- o Flat fees for various program categories (see Table 3).
  - Program categories defined (see Section 90701).
- o Complies with Senate Bill 1378, McCorquodale
  - Program categories consider toxicity of emissions and level of priority assigned to the facility.
- o Flat fee established for facilities submitting supplemental risk assessment information as required under the provisions of Senate Bill 1731, Calderon (see Section 90704(e)(1).

Previous Workshops on Proposed Changes

The three workshops scheduled for April 15, 16, and 22 are a continuation of a series of public workshops which have been held concerning the Air Toxics Hot Spots Fee Regulation for 1993-94. In July 1992, a workshop was held to elicit comments and suggestions on alternatives to relying on the criteria pollutant inventory as the basis for the Fee Regulation. Based on comments and suggestions received at the July workshop, and numerous comments from district and industry representatives following the workshop, specific proposals for an alternative fee basis were selected. Those specific proposals for a new fee base were presented in three public workshops in December 1992. At the December workshops, the requirements of new legislation (Senate Bill 1378, McCorquodale and Senate Bill 1731, Calderon) were also discussed.

Summary of Proposed Changes

Enclosure 1 provides a discussion of the proposed changes to the fiscal year 1993-94 Fee Regulation. Enclosure 2 is the text of the proposed regulation.

How to Comment on Proposed Amendments

You may provide written or oral comments or both. You may present oral comments at the staff workshops listed in this announcement. If you wish to submit written comments, please address them to Genevieve Shiroma, Chief, Toxic Air Contaminant Identification Branch, Stationary Source Division, P.O. Box 2815, Sacramento, CA 95812.

The proposed regulation may be revised further before the regulation is considered by the ARB at a noticed public hearing. However, please note that comments received outside of the 45-day public availability period prior to the Board's hearing on this regulation need not be included in the official Board record for this item.

For Further Information:

If you have questions regarding the staff workshops or the proposed amendments to the regulation, please call Roger Korenberg or Carla Takemoto of the Special Projects Section at (916) 327-5634 or (916) 327-0647.

Sincerely,

Donald J. Ames for

Peter D. Venturini, Chief
Stationary Source Division

Enclosures

cc: Air Pollution Control Officers (w/enclosure)
Fee Regulation Committee Members (w/enclosure)
Stewart J. Wilson, CAPCOA (w/enclosure)
Genevieve Shiroma, ARB
Roger Korenberg, ARB
Carla Takemoto, ARB

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

April 14, 1993

NOTICE OF RESCHEDULED LOS ANGELES FEES WORKSHOP

Dear Madam or Sir:

The purpose of this letter is to notify you that the Air Resources Board's public workshop to discuss proposed changes to the Air Toxics "Hot Spots" Fee Regulation has been rescheduled. The workshop was originally scheduled for April 15 in the Junipero Serra building in Los Angeles. We apologize for any inconvenience this may cause you, but given the uncertainty of the situation in Los Angeles this week, we felt it would be best to reschedule the workshop.

The new date and location of the workshop are as follows:

April 23, 1993
1:00 p.m.
Board Hearing Chambers, 1st floor
San Bernardino County Government Center
385 North Arrowhead Avenue
San Bernardino, California

If you have questions regarding the workshop or the proposed amendments to the fee regulation, please call Roger Korenberg or Carla Takemoto of the Special Projects Section at (916) 327-5634 or (916) 327-0647.

Sincerely,

Donald J. Ames

Donald J. Ames, Assistant Chief
Stationary Source Division

cc: Air Pollution Control Officers
Fee Regulation Committee Members
Stewart J. Wilson, CAPCOA
Genevieve Shiroma, ARB
Roger Korenberg, ARB
Carla Takemoto, ARB

Fee Basis and Calculations

This appendix contains descriptions and definitions of the facility program categories and resource indexes used as the fee basis. The methodology for calculating the distribution of the state's cost and facility fees is also described with examples.

A. Program Categories

The proposed fee basis uses the number of facilities in program categories. Facilities are classified into a program category according to the Air Toxics Hot Spots Program requirements and the Source Classification Codes (SCC) for that facility. The basic program categories are as follows: Survey, Industrywide, Plan and Report, Risk Assessment, Notification, and Audit and Plan.

The Fee Regulation Committee agreed that the fee basis should have a relationship to the workload and time expended by the government, both local and state, on that facility. Based on the districts' and state's experience, the range of complexity and the time required to accomplish the Hot Spots Program requirements varies, even among facilities in the same program category. There is a significant range of effort required based primarily on the complexity of the facility. For example, the time and resources required by the district to carry out program requirements and review documents for a facility submitting a plan and report for a small number of emission points is much less than the effort required to carry out the program requirements and to review documents for a facility submitting a plan and report for multiple processes and multiple emission points. The same relationship holds true for facilities completing health risk assessment requirements.

Recognizing this range of complexity and in response to public comment, we divided the Plan and Report and Risk Assessment Categories into subcategories to account for complexity. Based on districts' experience and the staff's analysis of facilities, a correlation between the number of different SCCs at a facility and the complexity of the facility was found. Any operation that causes air pollution can be classified by one or more of these SCCs. Each SCC represents a specific process or function that is logically associated with a point source of air pollution within a given source category.

For the fee categories, as identified by different SCCs, we defined a facility with one or two processes as simple; a facility with three, four,

or five processes as intermediate, and a facility with more than five processes as complex. Based on the criteria pollutant emission inventory, 79 percent of the facilities in the state are simple having one or two SCCs; 15 percent of the facilities are intermediate having three, four, or five SCCs; and six percent of the facilities are complex having more than five SCCs. Although the initial distribution of facilities by SCCs was determined from the Emission Data System, the final SCC count was established by a survey of the districts. (The category term "intermediate" with respect to SCCs and fees does not relate to the term "intermediate" used with respect to prioritization for health risk assessment.)

To account for whether a risk assessment is under review at the OEHHA or at a district, we propose to further subdivide the risk assessment category into Risk Assessment-District and Risk Assessment-State. During the early stages of the risk assessment review, the resources are expended at the district as the air dispersion modeling is reviewed. Much of the state's resource effort occurs when the OEHHA reviews the health risk assessment. Following the OEHHA's review, the resource effort is again concentrated at the district, until the health risk assessment is approved. For the Risk Assessment-State category, we propose to use the risk assessments that were submitted to the OEHHA from April 1, 1992, through ~~March 31, 1993. By specifying a one year period for the state category, a~~ facility would not be assessed a fee for the Risk Assessment-State category more than once. For the Risk Assessment-District category, we propose to include facilities who have been notified by the district by April 1, 1993, that they must prepare a risk assessment.

The use of program categories as the basis for fees is in accordance with both the direction of the Board and the mandate of Senate Bill 1378, McCorquodale. The proposed basis of program categories meets these requirements, because the program categories are determined by toxics releases and priority.

The complete definitions for the program categories are included below.

Definitions

(a) "Audit and Plan Facility" means a facility that is required by the district, by April 1 of the calendar year prior to the fiscal year, to prepare a Risk Reduction Audit and Plan in accordance with sections 44390 through 44394 of the Health and Safety Code.

(b) "Facility Program Category" means a list of facilities provided to the Air Resources Board by the districts by April 1 of the calendar year prior to the fiscal year, which lists the

facilities which meet the definitions in section 90701 of the Fee Regulation.

(c) "Industrywide Facility" means a facility included in an industrywide emission inventory prepared by an air pollution control district pursuant to Health and Safety Code section 44323, or an individual facility which emits less than ten tons per year of each criteria pollutant, falls within a class composed of primarily small businesses, and whose emissions inventory report was prepared by the air pollution control district.

(d) "Notification Facility" means a facility that has been notified by the district by April 1 of the calendar year prior to the fiscal year, that it must notify the public of the potential health risk associated with the air toxics emissions from that facility pursuant to Health and Safety Code section 44362(b).

(e) "Plan and Report Facility" means a facility that by April 1 of the calendar year prior to the fiscal year, has been required by the district to prepare an individual plan and report in accordance with sections 44340 and 44341 of the Health and Safety Code.

(f) "Plan and Report Facility (Complex)" means a facility that meets the criteria set forth in section 90701, and has more than five processes as determined by six-digit SCC.

(g) "Plan and Report Facility (Intermediate)" means a facility that meets the criteria set forth in section 90701, and has three to five processes as determined by six-digit SCC.

(h) "Plan and Report Facility (Simple)" means a facility that meets the criteria set forth in section 90701, and has one or two processes as determined by six-digit SCC.

(i) "Risk Assessment-District Facility" means a facility that by April 1 of the calendar year prior to the fiscal year, has been required by the district to prepare a health risk assessment in accordance with section 44360(b) of the Health and Safety Code, and whose risk assessment has not yet been approved by the district.

(j) "Risk Assessment-District Facility (Complex)" means a facility that meets the criteria set forth in section 90701, and has more than five different processes as determined by six-digit SCC.

(k) "Risk Assessment-District Facility (Intermediate)" means a facility that meets the criteria set forth in section 90701, and has three to five different processes as determined by six-digit SCC.

(l) "Risk Assessment-District Facility (Simple)" means a facility that meets the criteria set forth in section 90701, and has one or two different processes as determined by six-digit SCC.

(m) "Risk Assessment-State Facility" means a facility, covered by section 90702, whose risk assessment was received by the Office between April 1, 1992, and March 31, 1993.

(n) "Risk Assessment-State Facility (Complex)" means a facility that meets the criteria set forth in section 90701, and has more than five different processes as determined by six-digit SCC.

(o) "Risk Assessment-State Facility (Intermediate)" means a facility that meets the criteria set forth in section 90701, and has three to five different processes as determined by six-digit SCC.

(p) "Risk Assessment-State Facility (Simple)" means a facility that meets the criteria set forth in section 90701, and has one or two different processes as determined by six-digit SCC.

(q) "Survey Facility" means a facility which emits less than ten tons per year of criteria pollutants, and which falls in any class listed in Appendix E-II to section 93300 to 93354 of Title 17 of the California Code of Regulations.

B. Resource Indexes

The three types of per facility costs (state core program, state risk assessment, and district) are based on unit costs which are calculated using resource indexes. The resource indexes account for the different resource requirements and varying complexity of facilities in the different categories. The resource indexes are a method of balancing workload, toxicity of emissions, priority, and complexity among facility categories. A different set of indexes is used for each type of unit cost. Table V-1 shows the resource indexes for the three types of costs.

The resource index is used as a weighting factor or ratio in the fee calculations. To obtain each of the three divisions of unit costs, the numbers of facilities in the appropriate program categories are multiplied

by the appropriate indexes. The sum of these products is divided into the total cost associated with that division to arrive at a unit cost. The unit cost is multiplied again by each index to arrive at the per facility cost.

The resource indexes for the state's costs reflect the resource requirements of both the ARB and OEHHA. Chapter IV of this report contains a detailed description of the state's activities. Indexes were established based on the state's experience with the program since it implementation. We also considered the relative toxicity of emissions and the priority of facilities in the program as indicated by the category. The resource indexes used for district costs were based on information received from the districts and are a statewide average.

1. State Core Program Indexes

In developing resource indexes to distribute state core program costs, we considered facility complexity, workload, and economic impact. In general, the resources required to review emission data and other documents from the more complex facilities are greatest. However, the state core program costs are generally programmatic in nature (i.e. developing and implementing regulations). State administrative costs indirectly affect all facilities, and the core program indexes reflect this.

To account for differences in workload, we assigned an index of one to the simple facilities (Plan and Report (Simple) and Risk Assessment (Simple)). For the intermediate facilities (Plan and Report (Intermediate) and Risk Assessment (Intermediate)), we assigned a core program ratio of one and a half. These facilities require more of the state's resources based on complexity than do simple facilities. We assigned a resource index of two to the most complex facilities (Plan and Report (Complex) and Risk Assessment (Complex), Notification, and Audit and Plan). We assume that many of these facilities are larger businesses and will be less impacted by being assessed these fees. The proposed resource indexes for core program cost distribution are shown in Table V-1

Table V-1

Resource Indexes

Program Category	State Core Program Index	State Risk Assessment Index	District Index
Survey			Flat
Industrywide			Flat
Plan and Report			
Simple	1		1
Intermediate	1.5		3
Complex	2		10
Risk Assessment - Under Review by the District*			
Simple	1		$500 **
Intermediate	1.5		5
Complex	2		15
Risk Assessment - Under Review by the State***			
Simple	1	1	$500 **
Intermediate	1.5	10	5
Complex	2	25	15
Notification	2	8	20
Audit and Plan	2	8	25

* Facilities whose risk assessment is being reviewed by the district. The risk assessment was not submitted to the state between April 1, 1992, and March 31, 1993.

** The $500 flat fee for this category was set by the ARB to lessen the economic burden on these smaller facilities.

*** Facilities whose risk assessment was submitted to OEHHA for review between April 1, 1992, and March 31, 1993.

2. State Risk Assessment Indexes

In developing the resource indexes for state risk assessment related work, we considered the following: complexity, workload, facility priority, and economic impact. We assigned a score to each of these categories, ranging from zero to ten. The scores were summed to arrive at a facility category total score. We solicited input from the Fee Regulation Committee, the OEHHA, and the districts in developing these factors.

A simple risk assessment facility is a facility having one or two different processes. This type of risk assessment, because of the small number of processes, requires considerably less of the state's resources. Because many of these facilities have only a single process, the review of the risk assessment, is straight forward, in general. In light of these considerations, these facilities were assigned scores for complexity and workload of one each. These facilities received a priority score of one because of the small number of processes. We assumed that most of these simple risk assessment facilities are small businesses. In light of this, a score of zero was assigned for economic impact. This brings the total score for Risk Assessment-State (Simple) facilities to three.

An intermediate risk assessment facility is defined as having three to five different processes. These risk assessments require a significant amount of the state's resources. Each process may emit different toxic pollutants and must be reviewed individually. The facility's total risk from the aggregate emissions of all processes must also be reviewed. These facilities received scores for complexity and workload of three and four, respectively. Because these facilities have been required to prepare a health risk assessment, they are high priority facilities. With fewer processes, however, we have assigned them a priority score of two. We assumed that many of these facilities may be small or medium-sized businesses. For economic impact, these facilities received a score of one. The total aggregate score is ten for Risk Assessment-State (Intermediate) facilities.

A facility with more than five processes is defined as complex. Therefore, these facilities were assigned a score of eight for complexity. In ranking workload, the greatest cost incurred by the state is in reviewing a complex risk assessment. For workload, these complex facilities received a score of nine. These facilities have more than five different processes, each of which may emit different toxic air pollutants and cause different or cumulative adverse impacts on human health. The calculations for each individual process are reviewed to verify the overall potential to cause acute and chronic health effects. For priority, complex risk assessment facilities received a score of three. Due to complexity it is assumed that these facilities may pose a greater potential health risk than other risk assessment facilities in other categories. It is also assumed that these complex facilities will be least burdened by paying these fees. Therefore, a score of three was assigned for economic impact. The total aggregate score for Risk Assessment-State (Complex) facilities is 23.

Notification facilities in the state received a zero for complexity and a score of one for workload. We assigned these because at this time the state's cost for notification and guidance is not directed at specific facilities. The state's resources are currently employed in assisting districts develop notification procedures. Because the state's involvement is more administrative in nature, the cost at this time is low. These facilities were assigned a score for priority of four because these are facilities whose emissions are significant enough that the public is being notified. Many of these facilities are larger businesses which should be least burdened by these fees and were, therefore, assigned a score of three for economic impact. This yields a total score of eight for Notification facilities.

Facilities required to prepare audits and plans to lower their emissions below a level which pose no potential significant health risks received a score for complexity of zero and were assigned a workload score of one. For priority, a score of five was assigned to Audit and Plan facilities. These are the most significant facilities in the state in terms of potential health risk. As such, they are being required to reduce their emissions. Information received from the districts indicates that a number of smaller businesses may be required to submit audits and plans to lower toxic emissions. Based on this information, we assigned a score of two for economic impact. This yields a total score of eight for Audit and Plan facilities. The state's risk assessment cost for the audit and plan facilities is to provide technical assistance to the districts in reviewing and interpreting the individual plans submitted by these facilities. However, with the proposed cost reductions for Senate Bill 1731 implementation, the resources for evaluating audits and plans are being redirected to assist with the risk assessment guidelines development. For fiscal year 1993-94, for distribution of the state's cost, the Audit and Plan facilities will be assessed the same cost as a notification facility. We are also required to assist smaller businesses in obtaining information, assessing risk reduction methods, and developing and applying risk reduction techniques. These are programmatic requirements and are not directed at individual facilities.

3. Final Indexes

In finalizing the proposed indexes, we gave further consideration to the economic impact on small businesses. The cost to be assessed to small, simple facilities required to prepare a risk assessment may be an economic burden. In consideration of this, the Risk Assessment-State (Simple) score was reduced from three to one and the index for Risk Assessment-State (Complex) facilities was increased from 23 to 25. The resource indexes for distribution of state risk assessment costs are shown in Table V-1.

The five categories of facilities that were assigned a resource index for risk assessment cost also receive a core program cost resource index. In addition to the costs incurred for reviewing risk assessments, notification proceedings development, and reviewing audits and plans, these facilities also contribute to state workload for core program work. Therefore, the

resulting unit costs from applying the two indexes are summed to determine the state's total cost for these facilities.

Small businesses may be found in the categories assigned higher indexes for economic impact. However, these facilities may qualify to have their fees reduced if they meet the definition for small business contained in the Fee Regulation. The small business fee cap is proposed to be $700.

Another fee cap is proposed for the Plan and Report (Simple) facilities. At the district's option, this fee is proposed to be no more than $1,000. This cap is proposed to ensure that the Plan and Report (Simple) fee is less than the Risk Assessment (Simple) fee.

4. District Indexes

We also developed resource indexes to distribute district costs to facilities for those districts requesting the ARB to adopt their fee schedules. Surveys were sent to these districts requesting them to assign an index for each category of facility based on workload, complexity, toxicity, and priority. In light of the economic burden that high fees may impose on simple facilities required to perform a health risk assessment, we assigned a flat fee of $500 for district costs for these facilities. All of the information received for each category was averaged to arrive at the resource index in each program category. These averaged indexes are shown in Table V-1.

C. Fee Calculation Methodology

The methodology used to calculate fees for the Air Toxics Hot Spots Program for fiscal year 1993-94 is described below with sample calculations. This method represents a significant change from previous years' fee calculations, in that the criteria pollutant inventory will not be employed. In the previous Fee Regulations, a cost per ton value was calculated based on a district's percentage of total state criteria pollutant emissions. New legislation, Senate Bill 1378 (McCorquodale), mandates the ARB to advance towards a toxics based method to calculate fees. Because the statewide toxics inventory is not yet complete, we propose to apportion the state's costs based on the number of facilities a district has in each Hot Spots Program category. For districts requesting to have the ARB adopt facility fee schedules, the Hot Spots Program category of each facility will also be used. This proposal to use the same method for allocation of the state's costs and for facility fees allows for greater consistency and equity.

The facility numbers used to distribute the state's cost and calculate facility fees are based on information the districts have supplied to the ARB. The examples calculated here may differ slightly from values shown in Tables 1-4 of the Fee Regulation due to rounding. In the sample calculations that follow, the equations used are notated numerically (in parentheses) for easy reference. The facility program categories used for calculating fees in the equations below are defined in section A of this appendix. Unless otherwise noted, the sections cited refer to the proposed Fee Regulation for fiscal year 1993-94.

1. Distribution of State and District Costs

The state's costs to be recovered are the total amount reasonably anticipated by the ARB and the OEHHA to implement and administer the Air Toxics Hot Spots Program for the specified fiscal year. The districts' costs are used only in calculating facility fees for the districts requesting the ARB to adopt their fee schedules. The Health and Safety Code directs that the Fee Regulation provide for the recovery of these costs.

For districts requesting the ARB to adopt fee schedules for them, flat fees would be established for facilities in the thirteen program categories. Districts would specify the fee amounts for the facilities in two of the categories, Survey and Industrywide. Fees for facilities in the other eleven categories would be calculated by adding the appropriate state costs per facility for the category to the district cost per facility. The district program cost to be recovered by the regulation is distributed among facilities in all of the eleven categories by means of a flat district cost per facility for each of the program categories.

The total state cost would first be separated into two divisions proportionate to the state resource effort in those divisions. The two divisions are: (1) core program related costs and (2) risk assessment costs. The total state cost per facility is the sum of the core program cost per facility and the risk assessment cost per facility if applicable. The district allocation of state costs is the sum of the individual state costs per facility for all the facilities in the district.

The core program division includes costs associated with method development, emission inventory, and regulatory development; health guidance value, noncancer risk assessment methods and acute toxicity database development; risk assessment guideline development; and risk reduction guidance to small businesses. The two positions proposed for audit and plan evaluation are being redirected to the risk assessment guidelines development for fiscal year 1993-94. Therefore these costs are distributed as core program costs. These tasks are generally programmatic in nature and affect all facilities. In eleven of the thirteen program categories the core program cost is distributed among all facilities by means of a flat core program cost per facility for each category. State costs are not distributed among facilities in the Survey and Industrywide categories, because many of these facilities have just become subject to the requirements of the Act, and the exact numbers of facilities are not known.

The state risk assessment division includes costs associated with health risk assessment review, risk assessment assistance and public notification. These tasks are more directly related to the individual facilities required to prepare risk assessments, so the associated costs are allocated only among those facilities. Facilities in the Notification and Audit and Plan categories are included as "risk assessment" facilities. The state risk assessment cost is distributed among the following five program categories: Risk Assessment-State (Simple), Risk Assessment-State (Intermediate), Risk Assessment-State (Complex), Notification, and Audit and Plan. The risk assessment cost is distributed among the five categories by means of a flat risk assessment cost per facility for each of the five categories.

2. Table 1 of the Fee Regulation: Revenues to be Remitted to Cover State Costs

The state's costs to be recovered are the total amount reasonably anticipated by the ARB and the OEHHA to implement and administer the Air Toxics "Hot Spots" Information and Assessment Act for the specified fiscal year. For fiscal year 1993-94 the proposed state costs are $5,428,500 (including a five percent adjustment factor). The state's cost is divided into two categories: 1) $3,991,050 for core program related work, and, 2) $1,437,450 for risk assessment related work (adjustment factor included).

a. Core Program State Cost

The cost for core program related work is divided among the total number of facilities (includes risk assessment facilities but not Survey and Industrywide facilities) to arrive at a state cost per facility in each program category. For fiscal year 1993-94 the total number of facilities is 5810. The number of facilities in each program category is multiplied by the appropriate index. The sum of these products is divided into the state core program cost to arrive at a core program unit cost of $474. This unit cost is multiplied by each index to arrive at a flat state cost for each facility in a program category. The core program categories, the indexes, and the calculations to arrive at a cost per facility are shown below.

(1) Calculation of the core program unit cost and non-risk assessment cost per facility:

A Program Category	B Total Facilities	C Index	D Product	E Cost/Facility
PRs	2350	1	2350	$474
PRi	1371	1.5	2056	$711
PRc	1436	2	2872	$948
RAs D	34	1	34	$474
RAs S	44	1	44	$474
RAi D	60	1.5	90	$711
RAi S	97	1.5	146	$711
RAc D	216	2	432	$948
RAc S	188	2	376	$948
NOT	13	2	26	$948
AP	1	2	2	$948
Total	5810		8428	

Where:

PRs = Plan and Report (Simple) PRi = Plan and Report (Intermediate)

PRc = Plan and Report (Complex) RAs = Risk Assessment (Simple)

RAi = Risk Assessment (Intermediate) RAc = Risk Assessment (Complex)

NOT = Notification AP = Audit and Plan

D = District S = State

a) Facilities (Column B) X Index (Column C) = Product (Column D)

Example: Total PRc facilities = 1436
Index = 2
Product = 2872

b) Core Program Cost / sum of column D = Unit Cost for Core Program
$3,991,050 / 8428 = $474

c) Core Program Unit Cost X Index = Cost per Facility

$474 X 1 = $474

$474 X 1.5 = $711

$474 X 2 = $948

b. Risk Assessment State Cost

The cost for risk assessment related work is divided among Notification facilities, Audit and Plan facilities and by the total number of facilities whose risk assessment was submitted to the OEHHA between April 1, 1992, and March 31, 1993. During this time period a total of 329 simple, intermediate, and complex risk assessments were submitted to the OEHHA. To obtain a flat state cost for each of the five risk assessment facility categories a resource index was developed that accounts for facility complexity, workload, and priority, and economic impact. Each index is multiplied by the number of facilities in the corresponding category. These five products are summed and are divided into the state's cost for risk assessment ($1,437,450) to arrive at a risk assessment unit cost. The unit cost for state risk assessment work is $247. This unit cost is then multiplied by each index to arrive at a state risk assessment cost for each facility in a program category. The risk assessment program categories, the indexes, and the calculations to arrive at a risk assessment cost per facility are shown below.

(2) Calculation of state risk assessment unit cost and a state risk assessment cost per facility.

A Program Category	B Total Facilities	C Index	D Product	E Cost/Facility
RAs S	44	1	44	$247
RAi S	97	10	970	$2470
RAc S	188	25	4700	$6175
NOT	13	8	104	$1976
AP	1	8	8	$1976
Total	343		5826	

a) Facilities (Column B) X Index (Column C) = Product (Column D)

Example: Total RAi S Facilities = 97
Index = 10
Product = 970

b) Risk Assessment Cost / sum of column D = Risk Assessment Unit Cost

$1,437,450 / 5826 = $247

c) Risk Assessment Unit Cost X Index = Risk Assessment Cost per Facility

$247 X 1 = $247

$247 X 10 = $2470

$247 X 25 = $6175

$247 X 8 = $1976

A risk assessment submitted by a facility may be being reviewed at the district level only and therefore incurs no state risk assessment cost. For purposes of distributing state cost, these facilities are counted as Plan and Report facilities. Only those risk assessments submitted to the OEHHA by a district within the previously mentioned time period, as well as Notification and Audit and Plan facilities, will incur state risk assessment cost.

For the five risk assessment facility categories, the state cost per facility is obtained by adding the risk assessment facility cost to the core program facility cost. The total cost per risk assessment facility is shown below.

c. Calculation of Total State Cost per Risk Assessment Facility

(3) Core Program Cost per Facility + Risk Assessment Cost per Facility = Risk Assessment Facility Cost

Risk Assessment Program Category	Core Program Cost/Facility	Risk Assessment Cost/Facility	Total *
RAs S	$474	$ 247	$ 721
RAi S	$711	$2470	$3181
RAc S	$948	$6175	$7123
NOT	$948	$1976	$2924
AP	$948	$1976	$2924

a) RAs S = $474 + $247
= $721

b) RAi S = $711 + $2470
= $3181

c) RAc S = $948 + $6175
= 7123

d) NOT = $948 + $1976
= $2924

e) AP = $948 + $1976
= $2924

* THESE COSTS MAY VARY SLIGHTLY FROM THOSE SHOWN IN TABLE 3 DUE TO ROUNDING

d. Total District Share of State Cost

The total state cost for a district is obtained by multiplying the number of facilities in each program category by the state cost per facility. These products are summed to arrive at a district's portion of the state's cost.

(4) Total District Portion of State Cost = (# PRs X PRs uc) + (# PRi X PRi uc) + (# PRc X PRc uc) + (# RAs D X RAs D uc) + (# RAi D X RAi D uc) + (# RAc D X RAc D uc) + (# RAs S X RAs S uc) + (# RAi S X RAi S uc) + (# RAc S X RAc S uc) + (# NOT X NOT uc) + (# AP X AP uc)

Where:

= Number Facilities uc = unit cost

Example: Santa Barbara Air Pollution Control District has the following number of facilities in the various program categories:

Program Category	Facilities	Cost/Facility	Total *
PRs	20	$ 474	$ 9480
PRi	19	$ 711	$13509
PRc	43	$ 948	$40764
RAs D	0	$ 474	$ 0
RAs S	1	$ 721	$ 721
RAi D	0	$ 711	$ 0
RAi S	0	$3181	$ 0
RAc D	27	$ 948	$25596
RAc S	1	$7123	$ 7123
NOT	0	$2924	$ 0
AP	0	$2924	$ 0
Total State Cost			$97,193

* THESE COSTS MAY VARY SLIGHTLY FROM THOSE SHOWN IN TABLE 3 DUE TO ROUNDING

3. Table 2 of the Fee Regulation: District Costs to be recovered Through the Fee Regulation

The district program costs shown in Table 2 of the Fee Regulation are provided by each district. The amounts shown indicate only that portion of district cost that is to be recovered through the Fee Regulation. Any fees Survey and/or Industrywide facilities will pay are not included. A five percent adjustment factor is added by the ARB to the district costs shown in Table 2 of the Fee Regulation.

4. Table 3 of the Fee Regulation: Calculation of District Cost per Facility

For those districts requesting the ARB to adopt their fee schedule, a fee is assigned based on the program category of a facility. All facilities in a district in the same program category will pay the same flat fee. The following calculations are based on numbers each district supplied to the ARB by April 1.

In determining the flat fee schedule, indexes were developed from information received from the districts which account for workload, priority, complexity, and toxicity. From this information, the state calculated an average index for each program category. These averaged indexes are shown next:

Program Category Indexes (District)

Plan & Report (Simple)	1
Plan & Report (Intermediate)	3
Plan & Report (Complex)	10
Risk Assessment (Simple)	$500
Risk Assessment (Intermediate)	5
Risk Assessment (Complex)	15
Notification	20
Audit & Plan	25

A district cost for review of a simple risk assessment has been set at a flat rate of $500. To calculate district facility fees, the number of simple risk assessments in a district is multiplied by $500. This amount is subtracted from the district cost shown in Table 2 of the Fee Regulation. The number of facilities in each other program category is multiplied by the corresponding index. These products are summed and the district cost shown in Table 2 of the Fee Regulation is divided by this sum to arrive at a unit cost (Equation 5). The unit cost is the district cost for a Plan and Report (Simple) facility. All other facility fees are a multiple of the Plan and Report (Simple) unit cost. The Plan and Report (Simple) unit cost is multiplied by each index to arrive at a cost per facility in the other program categories (Equations 6-13).

(5) Unit Cost = DISTRICT COST / (1 X # PRs) + (3 X # PRi) + (10 X # PRc) + (5 X # RAi D) + (5 X # RAi S) + (15 X # RAc D) + (15 X # RAc S) + (20 X # NOT) + (25 X # AP)

Once the unit cost is calculated, other facility program category fees are calculated by multiplying the appropriate index by the unit cost, which is the PRs cost, as shown in the equations below:

(6) PRi = 3 X PRs

(7) PRc = 10 X PRs

(8) RAi D = 5 X PRs

(9) RAi S = 5 X PRs

(10) RAc D = 15 X PRs

(11) RAc S = 15 X PRs

(12) NOT = 20 X PRs

(13) AP = 25 X PRs

EXAMPLE: South Coast AQMD lists 1135 PRs, 754 PRi, 573 PRc, 14 RAs D, 17 RAs S, 21 RAi D, 80 RAi S, 114 RAc D, 129 RAc S, 0 NOT, and 0 AP facilities. This district's cost to be recovered is $4,465,609 (includes a five percent adjustment factor). The flat cost of $500 for the 31 simple risk assessments is subtracted from this total, to arrive at a cost of $4,450,109 to apportion to the other facilities. Applying these facility numbers into equation (5), the cost for a Plan and Report (Simple) facility (unit cost) is:

PRs = $4,450,109 / [(1 X 1135 PRs) + (3 X 754 PRi) + (10 X 573 PRc) + (5 X 21 RAi D) + (5 X 80 RAi S) + (15 X 114 RAc D) + (15 X 129 RAc S) + (20 X 0 NOT) + (25 X 0 AP)]

= $4,450,109 / 13277

= $335

The cost per facility for the other program categories is calculated by multiplying the appropriate index by the PRs unit cost of $335 as follows:

PRi	= 3 X $335	PRc	= 10 X $335
	= $1,005		= $3,350
RAi D	= 5 X $335	RAi S	= 5 X $335
	= $1,675		= $1,675
RAc D	= 15 X $335	RAc S	= 15 X $335
	= $5,025		= $5,025
NOT	= 20 X $335	AP	= 25 X $335
	= $6,700		= $8,375

5. Facility Fees

For each district the ARB is adopting fees for, the total cost per facility is the sum of the flat district program category cost added to the flat state program category cost.

(14) Facility Fee = District (Column C) + State Cost (Column D)

Example: PRs Facility Fee = $335 + $474

= $809

Example: Using the district facility fees calculated for the South Coast AQMD above and the flat state cost per facility, the following facility fees are obtained.

A Program Category	B Number of Facilities	C District Cost	D State Cost	E Facility Fee Total	F Total *
PRs	1135	$ 335	$ 474	$ 809	$ 918215
PRi	754	$ 1005	$ 711	$ 1716	$1293864
PRc	573	$ 3350	$ 948	$ 4298	$2462754
RAs D	14	$ 500	$ 474	$ 974	$ 13636
RAs S	17	$ 500	$ 721	$ 1221	$ 20757
RAi D	21	$ 1675	$ 711	$ 2386	$ 50106
RAi S	80	$ 1675	$3181	$ 4856	$ 388480
RAc D	114	$ 5025	$ 948	$ 5973	$ 680922
RAc S	129	$ 5025	$7123	$12148	$1567092
NOT	0	$ 6700	$2924	$ 9624	$ 0
AP	0	$ 8375	$2924	$11299	$ 0
Total cost					$7,395,826

*THESE COSTS MAY VARY SLIGHTLY FROM THOSE SHOWN IN TABLE 3 DUE TO ROUNDING

To calculate the total cost a district is to recover for both state and district costs, the number of facilities (Column B) is multiplied by the total facility cost (Column E). These products are summed to obtain the total cost recovered, as shown in Column F.

Appendix VI

Current and Proposed Budget for the Air Toxics Hot Spots Program

Current and Proposed Budget for the Air Toxics Hot Spots Program

BASE ACTIVITIES	ARB PYs	ARB STAFF DOLLARS	ARB CONTRACTS	ARB TOTAL	OEHHA PYs	OEHHA STAFF DOLLARS	OEHHA CONTRACTS	OEHHA TOTAL	TOTAL ARB & OEHHA PYs	TOTAL ARB & OEHHA STAFF DOLLARS	TOTAL ARB & OEHHA CONTRACTS	TOTAL ARB & OEHHA TOTAL
METHODS DEVELOPMENT/EMISSION INVENTORY/ REGULATORY DEVELOPMENT & IMPLEMENTATION												
Regulatory Development & Implementation	3.0	207	0	207	0.0	0	0	0	3.0	207	0	207
Methods Development & Review	5.0	345	0	345	0.0	0	0	0	5.0	345	0	345
Air Toxics Emission Database	4.0	276	175	451	0.0	0	0	0	4.0	276	175	451
Emission Data Collection, Validation	5.0	348	164 a/	510	0.0	0	0	0	5.0	348	164	510
Subtotal	17.0	1,174	339	1,513	0.0	0	0	0	17.0	1,174	339	1,513
HEALTH RISK ASSESSMENT												
Health Risk Assessment Review	0.0	0	0	0	5.0	379	500	879	5.0	379	500	879
Develop Health Guidance Values, Noncancer Methods, Acute Effects Database	0.0	0	0	0	6.0	455	370	825	6.0	455	370	825
Risk Assessment Assistance	3.0	207	0	207	0.0	0	0	0	3.0	207	0	207
Subtotal	3.0	207	0	207	11.0	834	870	1,704	14.0	1,041	870	1,911
PUBLIC NOTIFICATION												
Assist Districts & Facilities with Public Notification Procedures & Public Meetings	3.0	207	0	207	0.0	0	0	0	3.0	207	0	207
Participate in Public Notification Hearings	0.0	0	0	0	1.0	76	0	76	1.0	76	0	76
Subtotal	3.0	207	0	207	1.0	76	0	76	4.0	283	0	283
TOTAL, BASE ACTIVITIES	23.0	1,588	339	1,927	12.0	910	870	1,780	35.0	2,498	1,209	3,707
SB 1731, CALDERON ACTIVITIES												
HEALTH RISK ASSESSMENT												
Develop/Maintain/Administer New Facility Risk Assessment Guidelines	1.0 b/	78	0	78	6.0	618	250	868	7.0	696	250	946
RISK REDUCTION												
Develop Risk Reduction Guidelines and Checklists	5.0	391	0	391	0.0	0	0	0	5.0	391	0	391
Evaluate Risk Reduction Audits & Plans	0.0	0	0	0	2.0 c/	126	0	126	2.0	126	0	126
Subtotal	5.0	391	0	391	2.0	126	0	126	7.0	517	0	517
TOTAL, BCP ACTIVITIES	6.0	469	0	469	8.0	744 d/	250	994	14.0	1,213	250	1,463
TOTAL PROGRAM COSTS	29.0	2,057	339	2,396	20.0	1,654	1,120	2,774	49.0	3,711	1,459	5,170

a/ $105,000 one-time for backlog, thereafter $59,000 ongoing level.
b/ Position is one year limited-term.
c/ These positions will be redirected to Risk Assessment Guidelines Development for Fiscal Year 1993/94.
d/ $125,000 one-time computer costs.

Economic Impact Analysis

Introduction

Districts have the option to either adopt district Air Toxics Hot Spots fee rules or to request that ARB adopt a fee schedule for them. Twenty-two of the 34 districts have elected to adopt district fee rules. For the 22 districts adopting their own fee schedules, fees were estimated using their draft or adopted fee rules. For the 12 districts for which the ARB is calculating fees, the fees are based on the proposed program category in which the facilities are included.

This Appendix evaluates the potential economic impact on California businesses of the proposed amendments to the Fee Regulation. A recent amendment to section 11346.53 of the Government Code requires that, in proposing to adopt or amend any administrative regulation, state agencies shall assess the potential for adverse economic impact on California business enterprises and individuals.

This economic impact analysis is based on a comparison of the return on owners' equity (ROE) for affected businesses before and after the inclusion of the amended fees. The results are intended to provide an indication of the potential economic impact of the amended fees on businesses in California.

Affected Business

Any business which manufactures, formulates, uses, or releases any listed substance (or substance which reacts to form a listed substance) and emits ten or more tons per year of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides is affected by the amended regulation. Also affected are businesses listed on a district toxic inventory, report, or survey as referenced in Appendix B (proposed Appendix A) to the Fee Regulation or any business which releases less than ten tons per year of criteria pollutants and falls within a class listed in Appendix E to the Emission Inventory Criteria and Guidelines Regulation (Appendix III to this report). Table VII-1 of this appendix provides a list of industries with affected businesses.

Table VII-1

List of Industries with Affected Businesses

SIC Code	Industry
0723	Crop Preparation Services for Market, Except Cotton Ginning
0724	Cotton Ginning
1041	Gold Ores
1311	Crude Petroleum and Natural Gas
1381	Drilling Oil and Gas Wells
1422	Crushed and Broken Limestone
1429	Crushed and Broken Stone, Not Elsewhere Classified
1442	Construction Sand and Gravel
1446	Industrial Sand
1499	Miscellaneous Nonmetallic Minerals, Except Fuels
1541	General Contractor-Industrial Buildings and Warehouses
1542	General Contractors--Nonresidential Buildings, Other Than Industrial Buildings and Warehouses
1611	Highway and Street Construction, Except Elevated Highways
1623	Water, Sewer, Pipeline, Communications and Power Line Construction
1629	Heavy Construction, Not Elsewhere Classified
1721	Painting and Paper Hanging
1791	Structural Steel Erection
1799	Special Trade Contractors, Not Elsewhere Classified
2023	Dry, Condensed, and Evaporated Dairy Products
2026	Fluid Milk
2032	Canned Specialties
2033	Canned Fruits, Vegetables, Preserves, Jams, & Jellies
2034	Dried and Dehydrated Fruits, Vegetables, and Soup Mixes
2041	Flour and Other Grain Mill Products
2044	Rice Milling
2048	Prepared Feeds and Feed Ingredients for Animals and Fowl, Except Dogs and Cats
2051	Bread and Other Bakery Products, Except Cookies and Crackers
2063	Beet Sugar
2077	Animal and Marine Fats and Oils
2082	Malt Beverages
2084	Wines, Brandy, and Brandy Spirits
2086	Bottled and Canned Soft Drinks and Carbonated Waters

2096	Potato Chips, Corn Chips and Similar Snacks
2099	Food Preparations, Not Elsewhere Classified
2221	Broadwoven Fabric Mills, Manmade Fiber and Silk
2261	Finishers of Broadwoven Fabrics of Cotton
2262	Finishers of Broadwoven Fabrics of Manmade Fiber and Silk
2273	Carpets and Rug
2295	Coated Fabrics, Not Rubberized
2299	Textile Goods, Not Elsewhere Classified
2421	Sawmills and Planing Mills, General
2426	Hardwood Dimension and Flooring Mills
2431	Millwork
2434	Wood Kitchen Cabinets
2435	Hardwood Veneer and Plywood
2436	Softwood Veneer and Plywood
2439	Structural Wood Members, Not Elsewhere Classified
2441	Nailed and Lock Corner Wood Boxes and Shook
2449	Wood Containers, Not Elsewhere Classified
2491	Wood Preserving
2499	Wood Products, Not Elsewhere Classified
2511	Wood Household Furniture, Except Upholstered
2512	Wood Household Furniture, Upholstered
2514	Metal Household Furniture
2515	Mattresses, Foundations, and Convertible Beds
2519	Household Furniture, Not Elsewhere Classified
2521	Wood Office Furniture
2522	Office Furniture, Except Wood
2531	Public Building and Related Furniture
2541	Wood Office and Store Fixtures, Partitions, Shelving, and Lockers
2542	Office and Store Fixtures, Partitions, Shelving, and Lockers, Except Wood
2591	Drapery Hardware and Window Blinds and Shades
2599	Furniture and Fixtures, Not Elsewhere Classified
2621	Paper Mills
2631	Paperboard Mills
2653	Corrugated and Solid Fiber Boxes
2657	Folding Paperboard Boxes, Including Sanitary
2672	Coated and Laminated Paper, Not Elsewhere Classified
2679	Converted Paper and Paperboard Products, Not Elsewhere Classified
2711	Newspapers: Publishing, or Publishing and Printing
2721	Periodicals: Publishing, or Publishing and Printing
2752	Commercial Printing, Lithographic
2759	Commercial Printing, Not Elsewhere Classified
2761	Manifold Business Forms
2819	Industrial Inorganic Chemicals, Not Elsewhere Classified

2821	Plastics Materials, Synthetic Resins, and Non-vulcanizable Elastomers
2822	Synthetic Rubber (Vulcanizable Elastomers)
2833	Medicinal Chemicals and Botanical Products
2834	Pharmaceutical Preparations
2841	Soap and Other Detergents, Except Specialty Cleaners
2842	Specialty Cleaning, Polishing & Sanitation Preparations
2844	Perfumes, Cosmetics, and Other Toilet Preparations
2851	Paints, Varnishes, Lacquers, Enamels & Allied Products
2865	Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments
2869	Industrial Organic Chemicals, Not Elsewhere Classified
2873	Nitrogenous Fertilizers
2875	Fertilizers, Mixing Only
2879	Pesticides and Agricultural Chemicals, Not Elsewhere Classified
2891	Adhesives and Sealants
2892	Explosives
2893	Printing Ink
2899	Chemicals and Chemical Preparations, Not Elsewhere Classified
2911	Petroleum Refining
2951	Asphalt Paving Mixtures and Blocks
2952	Asphalt Felts and Coatings
~~2992~~	~~Lubricating Oils and Greases~~
3011	Tires and Inner Tubes
3061	Molded, Extruded, and Lathe-Cut Mechanicals Rubber Goods
3069	Fabricated Rubber Products, Not Elsewhere Classified
3081	Unsupported Plastics Film and Sheet
3082	Unsupported Plastics Profile Shapes
3083	Laminated Plastics Plate, Sheet, and Profile Shapes
3086	Plastics Foam Products
3087	Custom Compounding of Purchased Plastics Resins
3088	Plastics Plumbing Fixtures
3089	Plastics Products, Not Elsewhere Classified
3211	Flat Glass
3229	Pressed and Blown Glass and Glassware, Not Elsewhere Classified
3231	Glass Products, Made of Purchased Glass
3241	Cement, Hydraulic
3251	Brick and Structural Clay Tile
3255	Clay Refractories
3269	Pottery Products, Not Elsewhere Classified
3271	Concrete Block and Brick
3272	Concrete Products, Except Block and Brick
3295	Minerals and Earths, Ground or Otherwise Treated

3312	Steel Works, Blast Furnaces, and Rolling Mills
3315	Steel Wiredrawing and Steel Nails and Spikes
3321	Gray and Ductile Iron Foundries
3324	Steel Investment Foundries
3325	Steel Foundries, Not Elsewhere Classified
3341	Secondary Smelting and Refining of Non-ferrous Metals
3354	Aluminum Extruded Products
3357	Drawing and Insulating of Non-ferrous Wire
3363	Aluminum Die-Castings
3365	Aluminum Foundries
3366	Copper Foundries
3369	Non-ferrous Foundries, Except Aluminum and Copper
3398	Metal Heat Treating
3411	Metal Cans
3412	Metal Shipping Barrels, Drums, Kegs, and Pails
3423	Hand and Edge Tools, Except Machine Tools and Handsaws
3429	Hardware , Not Elsewhere Classified
3431	Enameled Iron and Metal Sanitary Ware
3432	Plumbing Fixture Fittings and Trim
3433	Heating Equipment, Except Electric & Warm Air Furnaces
3441	Fabricated Structural Metal
3442	Metal Doors, Sash, Frames, Molding, and Trim
3443	Fabricated Plate Work (Boiler Shops)
3444	Sheet Metal Work
3446	Architectural and Ornamental Metal Work
3448	Prefabricated Metal Buildings and Components
3449	Miscellaneous Structural Metal Work
3452	Bolts, Nuts, Screws, Rivets, and Washers
3462	Iron and Steel Forgings
3469	Metal Stampings, Not Elsewhere Classified
3471	Electroplating, Plating, Polishing, Anodizing and Coloring
3479	Coating, Engraving, and Allied Services, Not Elsewhere Classified
3489	Ordnance and Accessories, Not Elsewhere Classified
3494	Valves and Pipe Fittings, Not Elsewhere Classified
3496	Miscellaneous Fabricated Wire Products
3498	Fabricated Pipe and Pipe Fittings
3499	Fabricated Metal Products, Not Elsewhere Classified
3511	Steam, Gas, and Hydraulic Turbines, and Turbine Generator Set Units
3519	Internal Combustion Engines, Not Elsewhere Classified
3523	Farm Machinery and Equipment
3531	Construction Machinery and Equipment
3533	Oil and Gas Field Machinery and Equipment
3537	Industrial Trucks, Tractors, Trailers, and Stackers
3545	Cutting Tools, Machine Tool Accessories, and Machinists' Precision Measuring Devices

3548	Electric and Gas Welding and Soldering Equipment
3569	General Industrial Machinery and Equipment, Not Classified Elsewhere
3585	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment
3589	Service Industry Machinery, Not Elsewhere Classified
3599	Industrial and Commercial Machinery and Equipment, Not Elsewhere Classified
3612	Power, Distribution, and Specialty Transformers
3613	Switchgear and Switchboard Apparatus
3621	Motors and Generators
3625	Relays and Industrial Controls
3629	Electrical Industrial Apparatus, Not Elsewhere Classified
3639	Household Appliances, Not Elsewhere Classified
3643	Current-Carrying Wiring Devices
3645	Residential Electric Lighting Fixtures
3646	Commercial, Industrial, and Institutional Electric Lighting Fixtures
3651	Household Audio and Video Equipment
3661	Telephone and Telegraph Apparatus
3663	Radio and Television Broadcasting and Communications Equipment
3669	Communications Equipment, Not Elsewhere Classified
3672	Printed Circuit Boards
3674	Semiconductors and Related Devices
3675	Electronic Capacitors
3679	Electronic Components, Not Elsewhere Classified
3691	Storage Batteries
3695	Magnetic and Optical Recording Media
3699	Electrical Machinery, Equipment, and Supplies, Not Elsewhere Included
3711	Motor Vehicles and Passenger Car Bodies
3713	Truck and Bus Bodies
3714	Motor Vehicle Parts and Accessories
3715	Truck Trailers
3716	Motor Homes
3721	Aircraft
3724	Aircraft Engine and Engine Parts
3728	Aircraft Parts and Auxiliary Equipment, Not Elsewhere Classified
3731	Ship Building and Repairing
3732	Boat Building and Repairing
3825	Instruments for Measuring and Testing of Electricity and Electrical Signals
3829	Measuring and Controlling Devices, Not Elsewhere Classified
3841	Surgical and Medical Instruments and Apparatus

3842	Orthopedic, Prosthetic, and Surgical Appliances and Supplies
3845	Electromedical and Electrotherapeutic Apparatus
3861	Photographic Equipment and Supplies
3931	Musical Instruments
3944	Games, Toys, and Children's Vehicles, Except Dolls and Bicycles
3949	Sporting and Athletic Goods, Not Elsewhere Classified
3999	Manufacturing Industries, Not Elsewhere Classified
4212	Local Trucking Without Storage
4491	Marine Cargo Handling
4581	Airports, Flying Fields, and Airport Terminal Services
4612	Crude Petroleum Pipelines
4613	Refined Petroleum Pipelines
4911	Electric Services
4923	Natural Gas Transmission and Distribution
4924	Natural Gas Distribution
4931	Electric and Other Services Combined
4961	Steam and Air-Conditioning Supply
5032	Brick, Stone, and Related Construction Materials
5039	Construction Materials, Not Elsewhere Classified
5065	Electronic Parts and Equipment, Not Elsewhere Classified
5093	Scrap and Waste Materials
5113	Industrial and Personal Service Paper
5153	Grain and Field Beans
5171	Petroleum Bulk Stations and Terminals
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals
5231	Paint, Glass, and Wallpaper Stores
5511	Motor Vehicle Dealers (New and Used)
5541	Gasoline Service Stations
6531	Real Estate Agents and Managers
6552	Land Subdividers and Developers, Except Cemeteries
7216	Drycleaning Plants, Except Rug Cleaning
7218	Industrial launderers
7261	Funeral Service and Crematories
7353	Heavy Construction Equipment Rental and Leasing
7389	Business Services, Not Elsewhere Classified
7532	Top, Body, and Upholstery Repair Shops and Paint Shops
7534	Tire Retreading and Repair Shops
7538	General Automotive Repair Shops
7539	Automotive Repair Shops, Not Elsewhere Classified
7542	Carwashes
7812	Motion Picture and Video Tape Production
7819	Services Allied to Motion Picture Production
7996	Amusement Parks

7999	Amusement and Recreation Services, Not Elsewhere Classified
8062	General Medical and Surgical Hospitals
8069	Specialty Hospitals, Except Psychiatric
8731	Commercial Physical and Biological Research
8734	Testing Laboratories

Study Approach

The approach used in evaluating the potential economic impact of the amended regulation on California businesses is outlined as follows:

(1) A sample of one to three businesses from each affected industry was selected from the ARB's 1990 list of facilities reporting emissions of criteria pollutants.

(2) Fees were estimated for each of these businesses.

(3) The estimated fees were adjusted for taxes.

(4) These adjusted fees were then subtracted from net profit data. The results were used to calculate the Return on Owners' Equity (ROE). The resulting ROE was then compared with the ROE before the subtraction of the adjusted fees to determine the impact on the profitability of the small businesses. A reduction of more than 10 percent in profitability is considered to indicate a potential for significant adverse economic impacts.

This study covers 246 industries with a variety of products. For some industries with affected businesses; however, no analysis of the potential impact of the amended fees could be performed due to lack of financial data.

Assumptions

Since financial data for individual businesses were not available, this study used 1992 Dun and Bradstreet financial data for a nationwide typical business in each industry. Using the 1992 nationwide financial data, the ROEs before and after the subtraction of the adjusted fees were calculated for industries listed in Table VII-1. The calculations were based on the following assumptions:

1. A typical business on a nationwide basis in each industry is representative of a typical California business in that industry.

2. All affected businesses are subject to federal and state tax rates of 34 percent and 9.3 percent respectively.

3. Affected businesses do not increase the prices of their products or lower their costs of doing business through short run cost-cutting measures.

These assumptions, though reasonable, might not be applicable to all businesses.

Potential Impact On Businesses

Typical California businesses are affected by the amended fees to the extent that the implementation of the amended fees would reduce their profitability. Using ROE to measure profitability, we found that the average ROE of sample businesses in the industries listed in Table 1 declined by 0.82 percent from an average of 16.6 percent to 16.4 percent. This represents a miniscule decline in the average profitability of typical businesses in California.

The decline in profitability of individual industries with affected businesses; however, varied widely from the industry averages. For the 246 industries listed in Table 1, for example, the reduction in profitability ranged from a high of 9.19 percent to a low of 0.003 percent. This variation in the impact of the amended fees can be attributed mainly to two factors. First, some businesses are subject to higher fees due to the type of industry in which they are involved, the type and number of their devices and emitting processes, and the location of the business. For instance, the estimated fees for sample businesses in the industries listed in Table 1 range from a high of $12,206 to a low of $100. Second, the performance of businesses may differ from year to year. Hence, the 1992 nationwide financial data used may not be representative of a typical-year performance for some businesses.

The potential impacts estimated here might be on the high side for the following reasons. First, because we used 1992 data, a generally poor year for most businesses due to the nationwide sluggish economic growth, the impact of the regulation as estimated here is likely to be more severe than what it would be in a more typical year. Second, affected businesses probably would not absorb all of the increase in their costs of doing business. They might be able to either pass some of the cost on to consumers in the form of higher prices, reduce their costs, or both.

Conclusion

Overall, California businesses would seem to be able to absorb the costs of the amended fees without significant adverse impacts on their profitability. Although some businesses would potentially experience a greater reduction in their profitability than others, the fee impact still seems to be absorbable. In addition, the actual impacts of the amended fees on the profitability of California businesses is most likely to be less than estimated in this analysis for the reasons described above. Given the current adverse economic conditions in California, nevertheless, the imposition of the amended fees may have a significant adverse impact on some businesses operating with little or no margin of profitability.