

FINANCING AIR POLLUTION CONTROL

October 1983

83-11

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INTRODUCTION

Current state law provides that local air pollution control districts have primary authority for the control of pollution from stationary sources, while the state Air Resources Board has the authority for the control of pollution from mobile sources. Both are involved in ambient air activities. In general, this partnership has worked well.

At times, however, disagreements have arisen regarding two issues: the stationary source control work performed by the Air Resources Board and the appropriate level of state subventions to the districts. The Legislature has taken several steps intended to address these issues.

BACKGROUND STUDIES

The Supplemental Report of the 1977 Budget Act directed the Air Resources Board to "organize a study group composed of representatives of the board and representatives of the local districts to delineate the respective responsibilities of the board and local districts for stationary source emissions." The study group was directed to "submit a factual report which sets forth areas of agreement and specifies by exception or dissenting statements any areas of differing views." The report was issued on February 2, 1978.

Resolution Chapter 100, Statutes of 1979 (SCR 32), directed the Legislative Analyst's office to hire a consultant to study the system of federal, state, and local activities related to air quality management, to determine areas of overlap, duplication, and conflict, and to recommend improvements in the program. The report prepared in response to this directive, Air Quality Control in California, was issued in December 1980.

The Supplemental Report of the 1981 Budget Act directed the Air Resources Board and the California Air Pollution Control Officers Association to submit a report containing (1) a definition of appropriate state "oversight" and "local assistance" functions regarding stationary source control, and (2) agreed-upon operating procedures to diminish Air Resources Board and district friction in the implementation of the agreed-upon functions. The report was issued in January 1982.

Most of the work on funding for air quality control activities completed to date has tended to focus either on the districts or the state. For example, our analysis of the Air Resources Board's annual budget request deals only with state expenditures. The Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts, prepared for the U.S. Environmental Protection Agency and used as a data source for this report, deals only with local finances. Of course, any review of district budgets undertaken by district staff is limited to the activities of an individual district.

REDUCTION OF SUBVENTIONS

Since fiscal year 1973-74, when the state first subvented monies to local air pollution control districts, the activities of these districts have been financed by a combination of local funds and state subventions. The 1982-83 Governor's Budget, as introduced, proposed to reduce the subvention to the districts by \$5,776,000, or approximately 80 percent. The budget proposed that this reduction be offset by increased local fees on stationary sources of air pollution.

In our analysis of the 1982-83 Governor's Budget, we noted that implementation of increased local fees could not be achieved as quickly as the budget assumed. Legislation authorizing the districts to charge fees

would have to be enacted and then a fee structure would have had to be put in place by most districts. This would require several months, at a minimum. In response to these concerns and to objections raised by the local districts, the administration later proposed, and the Legislature approved, restoration of most of the subvention funding. The subvention was also continued in the 1983 Budget Act.

CHAPTER 1638, STATUTES OF 1982

In addition to restoring the subvention, the Legislature adopted Ch 1638/82 (SB 1477). Chapter 1638 contained a legislative finding that "because districts vary greatly in their dependence on state and federal subvention programs, county and district property tax support, and permit fees, it is necessary to provide a transition period to develop an equitable funding mechanism for local districts." Chapter 1638 also (1) expanded the purposes for which permit fee revenue may be used and (2) authorized local districts to adopt fee schedules to offset the loss of any state and federal subvention funds in the fiscal years ending before July 1, 1984. (Because the statutory authority for funding the South Coast Air Quality Management District is contained in other provisions of law, Chapter 1638 does not apply to the South Coast District.)

Finally, Chapter 1638 directed the Legislative Analyst's office to (1) review district fee systems established pursuant to the chapter and determine their adequacy to finance the activities of local air pollution control districts, (2) evaluate the overall equity and reasonableness of the fees as they affect segments of industry and agriculture which pay the fees, and (3) report its findings with any recommended changes to the Legislature. (Codified as Section 42311 of the Health and Safety Code.)

SCOPE OF REPORT

It should be noted that local fee systems and funding arrangements--the focus of Chapter 1638--tell only part of the story. The state plays an important role in financing district activities. In fact, roughly 17 percent of the revenue received by the districts comes directly from the state in the form of subvention payments. In addition, the state performs many activities on behalf of the districts. For this reason, a study limited to local funding would have provided an incomplete picture of the state's relationship with local districts in controlling air pollution and could be misleading.

We concluded that district fees could not be evaluated meaningfully unless funding from the state was also taken into account. Accordingly, we expanded the scope of this study to include the financing of all air quality control activities--both state and local--in California.

The general understanding of the Legislature and the districts during consideration of Chapter 1638 appears to have been that the districts would adopt "emission" fees. Because the Legislature continued funding for subventions last year, however, only two districts exercised their authority to establish fees. Therefore, the prime purpose of this report--to analyze the fee systems developed by the districts--became moot.

The type of fees authorized in Chapter 1638 is not defined. Moreover, our preliminary work on this report indicated that the nature of emission fees and the role of these fees in financing air pollution activities is not clear from a conceptual standpoint.

In recognition of this, we have attempted in this report to refine the concept of emission fees and incorporate it in a system for financing state and local air quality activities.

In summary, this report (1) describes the current funding system for state and local air pollution control activities in California, (2) evaluates the system on the basis of three criteria--consistency, efficiency, and stability, and (3) proposes an alternative financing system for legislative consideration.

Portions of this report draw upon information contained in a working paper distributed by this office in March 1983. We wish to thank staff of the Air Resources Board, the local air pollution control districts, and other interested parties who reviewed and commented on the concepts and data contained in that paper.

This report was prepared by Chuck Shulock, under the supervision of Donald W. Benedict.

EXECUTIVE SUMMARY

The Governor's Budget for 1982-83 proposed an 80 percent reduction in state subventions to local air pollution control districts for stationary source control work. In submitting his budget, Governor Brown also proposed that legislation be enacted authorizing the districts to charge fees for stationary source emissions in order to replace the revenues lost as a result of the cut in subventions.

Eventually, the Legislature and Governor continued the funding for the subventions. In addition, the Legislature enacted Ch 1638/82 (SB 1477) authorizing districts to impose emission fees. Chapter 1638 also directed the Legislative Analyst to:

1. Review local air pollution control district fee schedules to determine their adequacy to finance the districts' activities;
2. Evaluate the overall equity and reasonableness of the fees as they affect segments of industry and agriculture which pay the fees; and
3. Report his findings and any recommended revisions to the Legislature.

With two exceptions, the air pollution control districts have not established the fees and, as a consequence, the specific study called for by Chapter 1638 has become moot. Nevertheless, we found that the broader issue of financing air pollution control activities in California warranted review by the Legislature. Accordingly, we altered the scope of the study to include an evaluation of the existing structure for funding air pollution control activities at both the state and local levels. Based on

this evaluation, we have developed what we believe is a better structure for financing air pollution control, a structure which relies on the type of fees authorized by Chapter 1638.

EXISTING REVENUE AND EXPENDITURE AUTHORITY

The funding structure for air pollution control activities is both complex and illogical, having been developed in a "piecemeal" fashion over a period of many years. The Health and Safety Code gives local districts authority to charge various fees to cover the cost of specified district operations. For example, fees may be charged to cover the cost of processing and issuing permits and variances and enforcement-related source testing, as well as to replace lost subventions. The districts also are authorized to receive tax support from counties.

The state is authorized to charge fees for the registration of motor vehicles, for motor vehicle inspection, for acid deposition research and monitoring, and for enforcement-related stationary source testing. As a result, the Air Resources Board receives money from the state General Fund, the Motor Vehicle Account, and a number of special sources.

CURRENT REVENUE AND EXPENDITURE PATTERNS

We found that both the sources of state and local revenues and the activities for which these revenues are expended can be grouped into three categories. Revenues are obtained from stationary sources, mobile sources, and general taxes. Expenditures are made for stationary source work, mobile source work, and work related to ambient air quality management.

We reviewed the budgets and other documents covering the activities of the Air Resources Board and the local air pollution control districts. With the assistance of these entities, we were able to group their revenues

and expenditures into the categories listed above. The results are shown in Tables 1 and 2. (See Chapter II for sources of data used in these tables.)

Table 1
Sources of Air Pollution Control Revenues
(in thousands)

Category	State		Local		Totals	
	Amount	Percent	Amount	Percent	Amount	Percent
Stationary Sources	\$1,618	2.8%	\$25,150	60.2%	\$26,768	26.8%
Mobile Sources	50,480	86.9	7,131	17.1	57,611	57.7
General Taxes	5,958	10.3	9,520	22.8	15,478	15.5
Totals	\$58,056	100.0%	\$41,801	100.0%	\$99,857	100.0%

Table 2
Air Pollution Control Expenditures, By Category
(in thousands)

Category	State		Local		Totals	
	Amount	Percent	Amount	Percent	Amount	Percent
Stationary Source Control	\$8,591	14.8%	\$29,649	68.3%	\$38,240	37.7%
Mobile Source Control	34,359	59.2	--	--	34,359	33.9
Ambient Air Quality Management	15,106	26.0	13,750	31.7	28,856	28.4
Totals	\$58,056	100.0%	\$43,399	100.0%	101,455	100.0%

EVALUATION

We evaluated the current system for financing air pollution control activities using three criteria: consistency, efficiency, and stability. Our evaluation indicates that a logical connection between expenditures and revenues does not exist. Specific problems resulting from the current financing arrangements include the following:

Consistency. Significant inconsistencies can be found in the current funding arrangements:

- Several activities are performed at local expense in some districts (usually the larger ones) and at state expense in other districts.
- On a statewide basis, fees paid by mobile sources of pollution exceed the state and local costs of regulating those sources by more than \$23 million. Conversely, fees paid by stationary sources fall about \$11 million short of the state and local costs associated with regulating those sources.
- Some significant stationary sources of pollution do not pay any fees.
- Agricultural burning in general pays significantly less in fees than industrial sources producing comparable emissions.
- All types of motor vehicles contribute the same amount (approximately \$1.54 per vehicle in 1983-84) toward air pollution control, even though the emissions from different types of vehicles differ greatly.

Efficiency. The current funding arrangements do not provide incentives for the polluters to minimize the amount of pollution they generate or for the regulatory agencies to minimize the cost of controlling pollution.

Stability. Although the funding arrangements for air pollution control worked reasonably well in the 1970s, the continued availability of funding for state and local programs has come into question. Specifically,

the level of support for the ARB's stationary source control work has been cut sharply, and continued funding for state subventions to the districts is uncertain.

A NEW FUNDING AND EXPENDITURE STRUCTURE IS NEEDED

Given the deficiencies in the existing arrangements for financing air pollution control in California, we conclude that improvements in these arrangements are warranted. Specifically, we conclude that the financing structure for air pollution control should be revised along the following lines:

1. Stationary source control is largely the responsibility of the local air pollution control districts and should be financed by these districts. The districts should obtain funds for this work primarily from permit and emission fees and secondarily from other local funding sources determined by the district to be appropriate.

2. Mobile source control is the responsibility of the state and should continue to be financed from vehicle registration fees. A portion of these fees should be designated by statute for that purpose. In addition, the level of fees imposed on different types of vehicles should reflect the extent to which vehicles in these categories contribute to air pollution. Financing for the vehicle emission inspection program should continue to come from the inspection fees established for that purpose.

3. Ambient air quality management should be funded primarily by emissions fees assessed against both stationary and vehicular sources. The Legislature should establish a statewide stationary source emissions fee of the type contemplated by Chapter 1638. This fee would be collected by the districts from all stationary sources of pollution and would be used by the

districts in lieu of state subventions to stationary source work (not covered by existing fees) and ambient air quality work. In addition, the districts would collect a surcharge on the emissions fee set by the Legislature, which would be forwarded to the state (after deducting administrative costs) to pay that portion of the ARB's costs for ambient air quality work attributable to stationary sources.

That portion of the state's costs for ambient air quality work relating to vehicular emissions should be financed from vehicular emissions fees. These fees would be a designated portion of the vehicle registration fees now placed in the Motor Vehicle Account and used for air pollution control. Because vehicular and stationary sources contribute approximately equal levels of emissions to the ambient air, the portion of the ARB's ambient air quality work financed from the surcharge on stationary sources and the vehicle registration (emission) fees should be approximately equal. This funding pattern would be consistent with the funding mechanism for the acid deposition fees that the Legislature established in Ch 1473/82.

4. Whenever the state desires assistance from the districts, it should reimburse the districts for their services. Similarly, whenever a district needs assistance from the ARB, the district should reimburse the ARB for the cost of providing this assistance. Currently, such reimbursements are not provided in all cases.

Separating the question of "who does the work" from "who pays for the work" and providing for reimbursement of services would more explicitly recognize that (a) districts need services from the state--services that the state can provide on a more cost-effective basis than the districts can themselves, (b) the ARB needs services from some districts, and (c) the ARB

and the districts have certain basic responsibilities regardless of who actually performs the various activities involved in air pollution control.

The major differences between our suggested funding arrangement and the current arrangement involve (1) the concept of emissions fees secured from stationary and mobile sources and (2) the creation of a "reimbursement relationship" between the state and the districts.

FISCAL IMPACT OF A NEW FUNDING SYSTEM

We have not attempted to develop fee schedules and a chart showing what the distribution of revenues would be under a funding system such as we propose. It is clear, however, that this system would cause funding from stationary sources to increase, while use of Motor Vehicle Account revenues (registration fees) for air pollution control purposes would decrease.

In practice, the distinction between the various types of air pollution control work and between the various sources of funding used to support this work is not always easy to make. Despite the fact that this and other problems associated with the revised funding structure we propose have not been resolved, we believe that the general features outlined above provide a logical basis to both sort out responsibilities and resolve a number of funding issues concerning air pollution control in California.

CHAPTER I

EXISTING REVENUE AND EXPENDITURE AUTHORITY

This chapter describes the statutory basis for existing air pollution control revenues and expenditures. Many pieces of legislation enacted during the last two decades comprise the existing authority, particularly with regard to revenue collection. Because the relationship between these statutes is loose at best, California's air pollution control program lacks the consistency that an underlying logic would give it.

DISTRICT REVENUE AUTHORITY

The Health and Safety Code gives local air pollution control districts authority to charge fees to cover the cost of various district operations. The fees authorized by the code can be divided into four general categories.

1. Fees for Evaluating and Issuing Permits and Variances

For the South Coast District:

- Section 40506 authorizes fees for (a) the filing of applications for permits and (b) the modification, revocation, extension, or annual renewal of permits.
- Section 40500 authorizes fees for the filing of applications for variances. The fees are based on the number of sources the variances apply to and the extent to which emissions from the sources exceed the district's limitations on the emissions.
- Section 40510 authorizes fees for the issuance of variances and permits to cover the district's costs of

related planning, inspection, and monitoring. These fees may vary according to the quantity of emissions expected to result from the variances and permits and the anticipated effect of the emissions on ambient air quality.

For other districts:

- o Section 42311 authorizes fees for the evaluation, issuance, and renewal of permits to cover the cost of district programs that are "not otherwise funded." The amount of fees that can be collected under this authorization, however, is limited to the actual cost of district programs in the preceding fiscal year, adjusted for the change in the California Consumer Price Index.
- o Section 42364 authorizes fees for the filing of applications for variances to cover the districts' costs of administering variance procedures.

Of the 44 districts in the state, 36 charge a permit fee of some type, 31 districts charge fees to evaluate a permit application, 33 charge fees to issue an authority to construct, 34 charge fees to issue a permit to operate, and 31 charge annual renewal fees for a permit to operate.

The schedule of fees is set by the district governing board. Usually, fees for a permit to operate an emission source are set at a level intended to cover the district's costs incurred in ensuring that the source will comply with permit terms and conditions.

As is the case with respect to most other aspects of district operations, however, the extent to which individual district's fee

schedules relate to the workload resulting from individual permit applications varies. The San Diego district, for example, maintains a computerized "Labor Cost Tracking System." Under this system, district employees charge their time to specific "activity codes" and "employee classification task codes." This system enables the district to record both the actual costs associated with individual permit units and the average cost of handling various types of permits. Under this system, the permit applicant has the option to pay either the actual cost for the application or the average cost for the type of application (as expressed in approximately 150 fee schedules).

More commonly, districts use a schedule of fees based on the periodic assessment of the average cost of handling various types of permits. The fees typically are based on measurable characteristics of the source (such as horsepower, fuel-burning capacity in BTUs per hour, or holding capacity in gallons) that serve as surrogate measures for the size and complexity of the source and, therefore, the amount of work needed to process a permit.

2. Fees for Enforcement-Related Source Testing

For all districts:

- Section 41512 authorizes fees to cover the estimated cost of planning, preliminary evaluation, sampling, sample analyses, calculations, and report preparation for emission sources sampled. These fees may be imposed, however, only when samples are required to determine compliance with permit conditions or any state or local air pollution law, rule, or regulation.

- Section 42707 authorizes fees to cover the districts' cost of inspecting continuous monitoring devices installed in major sources of pollution.

3. Fees to Replace Lost Subventions

For all districts other than the South Coast District:

- Section 42311, as amended by Chapter 1638, authorizes, through the end of June 30, 1984, unspecified fees to offset any loss of federal or state subventions.

4. County Tax Support for District Activities

California has three different types of local air pollution control districts--county, unified, and regional. Each type is authorized to receive county funds to support its activities. The funds come from the counties from general revenues.

For county districts:

- Section 40101 authorizes the county board of supervisors to appropriate funds to support a county district.

For unified districts:

- Section 40158 directs the board of supervisors of each county included in a unified district to appropriate such funds as are necessary to support the district, as determined by the district board. An individual county's contribution is based on its proportion of the district's population.

For regional districts:

- Section 40371 directs the regional district governing board to determine the amount of money required for the

regional district and apportion this amount to the counties included within the district, one-half according to the relative value of real property in each county and one-half according to county population.

- Section 40372 directs the board of supervisors of each county in the district to levy an ad valorem tax on property sufficient to secure the amount required from the county.

For the Bay Area Air Quality Management District:

- Sections 40271 and 40272 provide authority to the district identical to that granted to regional districts in Sections 40371 and 40372 described above, except that the amount apportioned to each county may not exceed 2 cents for each \$100 of assessed value.

For the South Coast Air Quality Management District:

- Section 40520 directs the district governing board to determine the amount needed from the counties to support the district's activities and apportion that amount to the counties based on each county's share of the district's population.

Chapter 324, Statutes of 1976, which established the South Coast District, originally contained Section 40525 which directed the district to report on its efforts to reduce the district's reliance on property tax revenues. Among the methods to be evaluated were permit fees, emission fees, a motor vehicle fuel tax, an in-lieu motor vehicle tax, and increased penalties. The study was completed and this section was subsequently

repealed. The South Coast District currently does not receive any tax support from the counties.

ARB REVENUE AUTHORITY

Various provisions of law give the Air Resources Board broad authority to charge fees for vehicle-related activities. The fees authorized by these provisions can be divided into four categories.

1. Fees for Registration of Motor Vehicles

- Section 9250 of the Vehicle Code authorizes the Department of Motor Vehicles to charge a fee of \$22 annually for the registration of each vehicle plus a \$1 surcharge for the California Highway Patrol. These fees, which produce about \$500 million annually, are deposited in the Motor Vehicle Account in the State Transportation Fund. This money is used primarily to finance the California Highway Patrol and the Department of Motor Vehicles. Approximately 5 percent of the money is used to finance about 50 percent of the ARB's operations and to pay the entire state subvention to local air pollution districts.

Article XIX, Section 2, of the California Constitution provides that authorized uses of revenue from fees and taxes imposed by the state on motor vehicles or their use or operation include "the mitigation of the environmental effects of motor vehicle operation due to air and sound emissions."

The sum of \$23,455,000 was appropriated in the 1983 Budget Act from the Motor Vehicle Account to support Air Resources Board operations in

1983-84, and an additional \$6,609,000 was appropriated to provide subventions to the local air pollution control districts. Based on the Department of Motor Vehicles' estimate of 19,477,400 vehicle registrations in 1983-84, the total appropriation of \$30,064,000 from the Motor Vehicle Account for air quality-related activities represents a contribution of approximately \$1.54 per registered vehicle.

2. Fees for Motor Vehicle Inspections

- Section 9889.1 of the Business and Professions Code authorizes the Department of Consumer Affairs to charge a fee sufficient to cover the cost of administering and operating the "change-of-ownership" inspection of motor vehicles in the South Coast Air Basin. The current fees are \$11 for each initial test and \$7 for each retest. These fees, which produced approximately \$15 million in 1982-83, are deposited in the Vehicle Inspection Fund. The money is used primarily to pay a contractor to operate 17 inspection stations until March 1984.
- Section 44060 of the Health and Safety Code authorizes the Department of Consumer Affairs to charge a fee for certificates of compliance furnished to licensed test and repair stations to cover the cost of administering the biennial vehicle emission inspection program to be implemented in 1984 in the urban areas of the state. These fees, which are expected to yield approximately \$25 million per year when the program is in full operation, also are to be deposited in the Vehicle Inspection Fund. The money will

be used by the Bureau of Automotive Repair to supervise the operation of private emission test and repair stations.

(This program is not conducted by the ARB or the districts.)

3. Fees for Acid Deposition Research and Monitoring

- Section 39910 of the Health and Safety Code authorizes the Air Resources Board to require districts, beginning July 1, 1983, to impose additional variance and permit fees on nonvehicular sources within the district's jurisdiction. The money is to be used, in conjunction with money from the Motor Vehicle Account, to finance a comprehensive acid deposition research and monitoring program.

The fees may be imposed on sources of sulfur and nitrogen oxides which, under district permits, emit 1,000 tons or more per year. The fees may not exceed \$0.0025 per pound (\$5 per ton).

4. Fees for Enforcement-Related Source Testing

- As noted above, Section 41512 of the Health and Safety Code authorizes districts to charge fees to cover the estimated cost of planning, preliminary evaluation, sampling, sample analyses, calculations, and report preparation for the purpose of securing emissions data from stationary sources for enforcement purposes. This section provides the same authority to the board when it does similar testing.

The dual authority under this section and the lack of a precise division of responsibility between local districts and the board for enforcement testing of stationary sources has led to inconsistencies in the

current funding arrangements for air pollution control. This problem is discussed in more detail in Chapter III.

The ARB will also receive approximately \$3.5 million from the state General Fund in 1983-84. The portion of the ARB's costs secured from the General Fund has been decreasing steadily in recent years. In 1972-73, the General Fund provided 50 percent of the board's budget, while in 1982-83 the General Fund provided only 6 percent. This reduction in General Fund support has been offset, for the most part, by increases in funding derived from the Motor Vehicle Account.

ARB AND DISTRICT EXPENDITURE AUTHORITY

The Air Resources Board and the air pollution control districts have general authority to expend funds to accomplish the purposes specified in their enabling legislation. The ARB is responsible for control of emission from motor vehicles and for the coordination, encouragement, and review of the efforts of all levels of government as they affect air quality. The districts have the primary responsibility for controlling pollution from all sources other than motor vehicles.

CHAPTER II

CURRENT REVENUE AND EXPENDITURE PATTERNS

Chapter I described the authority of the Air Resources Board and the local air pollution control districts to raise revenues. This existing authority will allow a total of approximately \$100 million to be raised for all air pollution control activities in 1983-84. This chapter describes these revenues in more detail and the activities for which the revenues are expended.

REVENUE AND EXPENDITURE CATEGORIES

In order to evaluate current funding arrangements, we reviewed the budgets of the state Air Resources Board, the South Coast, Bay Area, and San Diego air pollution control districts, and the subvention applications submitted by all districts to the ARB for 1983-84. Based on that review, we determined that state and local revenues can be grouped into three related categories, as can state and local expenditures. Specifically, state and local revenues are obtained from (1) stationary source fees, (2) mobile source fees, or (3) general taxes. State and local expenditures can be assigned to (1) stationary source control work, (2) mobile source control work, or (3) work related to ambient air quality management.

These expenditure and revenue categories and the amounts assigned to each category were first developed in a "working paper" dated March 4, 1983. This paper was distributed to the Air Resources Board, the California Air Pollution Control Officers Association, a number of local

districts, and other interested parties. We distributed the paper in order to obtain comments on the validity of the categories, the accuracy of the data used, and the way specific state and local revenues and expenditures were assigned to the defined categories.

These categories, which are described in more detail below, appear to provide a simple but meaningful grouping of activities at both the state and local level. This grouping can be used to evaluate funding and expenditures, as well as to develop a more logical and coherent approach to air pollution funding.

Although the data have been generally validated, the assignment of specific activities and revenue sources to one category or another is not precise in all cases. Detailed information on district expenditures is lacking, particularly for the smaller districts. Certain activities or funding sources are difficult to categorize. In addition, in order to complete the categorization, we have had to make some assumptions and exercise some judgment. Even with these limitations, however, we believe the data represent the best available picture of the current funding arrangements for air pollution control and are sufficiently accurate for the purposes of this report.

DESCRIPTION OF REVENUE CATEGORIES

1. Stationary Source Revenues. At the district level, stationary source revenues include (a) permit fees, (b) emission fees, and (c) miscellaneous locally derived sources of air pollution control revenues other than general taxes.

At the state level, stationary source revenues include (a) the emission-based acid rain fees established pursuant to Ch 1173/82 (AB 2752), (b) fees for stationary source activities conducted by the ARB, and (c) a portion of the miscellaneous fees, fines, and other revenues deposited in the Air Pollution Control Fund. We have arbitrarily assigned one-half of the current revenues in the Air Pollution Control Fund to this category.

2. Mobile Source Revenues. At the district level, the mobile source category consists of the state subvention from the Motor Vehicle Account and a portion of the money received from the ARB for "special projects."

At the state level, mobile source revenues include funding from (a) the Motor Vehicle Account, (b) the Vehicle Inspection Fund, (c) the Automotive Repair Fund, (d) reimbursements, and (e) the balance of funds from the miscellaneous fees, fines, and other revenues to the Air Pollution Control Fund.

3. General Tax Revenues. At the district level, county tax contributions and federal funds received by the districts comprise the funds in the general tax revenue category.

At the state level, money from the state General Fund, money from the Energy Resource Programs Account (obtained from an excise tax on utility bills), and federal funds received by the state are included in this category.

DESCRIPTION OF EXPENDITURE CATEGORIES

1. Stationary Source Expenditures. At the district level, the stationary source expenditure category includes expenditures for activities such as permit issuance, rule development, and enforcement.

At the state level, this category includes enforcement work, development of stationary source control measures, review of district programs, and research directed at the control of emissions from specific stationary sources (for example, a research contract for assessment of controls for NOx emitted from small gas turbines).

2. Mobile Source Expenditures. At the district level, only district costs associated with vehicle emission inspection programs would fall into the mobile source expenditures category. Because these costs are minor they have not been included.

At the state level, this category includes all mobile source control activities performed by the ARB (including relevant research projects), and vehicle emission inspection activities performed by the Bureau of Automotive Repair.

3. Ambient Air Quality Expenditures. At the district level, ambient air quality monitoring, emissions inventories, and air quality implementation planning account for the expenditures in the ambient air quality expenditure category.

At the state level, this category includes air quality monitoring, implementation planning, air quality modeling, and general research (effects of air pollution on people and crops, atmospheric processes, meteorology, air quality forecasting and modeling, and development of air quality measurement and data analysis techniques).

Allocated overhead costs are included in each category as appropriate.

RESULTS OF REVENUE AND EXPENDITURE CATEGORIZATION

Table 1 shows state, local, and total revenues assigned to the three defined categories. Information on state revenues is taken from the 1983

Budget Act. Information on local revenues comes from Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts, a report prepared for the Environmental Protection Agency.

Table 1
Categories of Air Pollution Control Revenues
(in thousands)

Category	State		Local		Totals	
	Amount	Percent	Amount	Percent	Amount	Percent
Stationary Sources	\$1,618	2.8%	\$25,150	60.2%	\$26,768	26.8%
Mobile Sources	50,480	86.9	7,131 ^a	17.1	57,611	57.7
General Taxes	<u>5,958</u>	<u>10.3</u>	<u>9,520</u>	<u>22.8</u>	<u>15,478</u>	<u>15.5</u>
Totals	\$58,056	100.0%	\$41,801	100.0%	\$99,857	100.0%

a. Primarily represents the state subvention.

Table 2 shows estimated state, local, and total expenditures divided among the three expenditure categories. State expenditures are taken from the 1983 Budget Act, while information on local expenditures comes from the 1982-83 subvention applications submitted by each district to the Air Resources Board.

Table 2

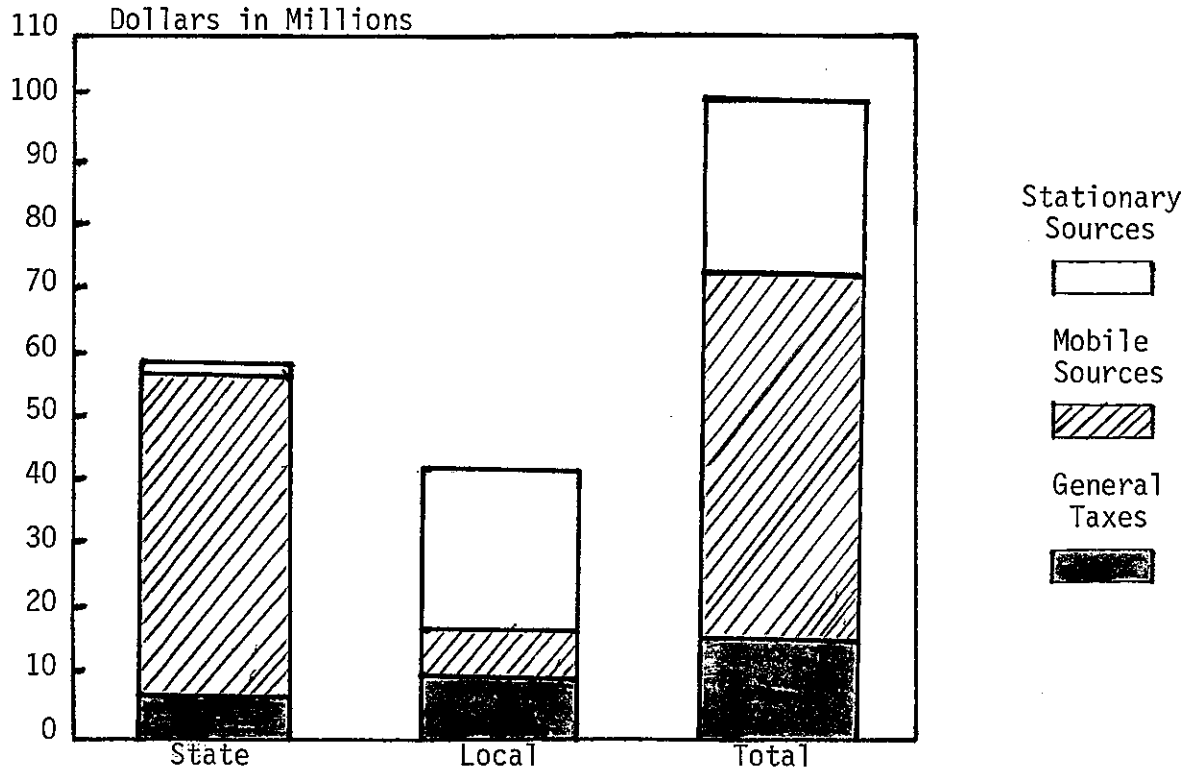
Categories of Air Pollution Control Expenditures
(in thousands)

Category	State		Local		Totals	
	Amount	Percent	Amount	Percent	Amount	Percent
Stationary Sources	\$8,591	14.8%	\$29,649	68.3%	\$38,240	37.7%
Mobile Sources	34,359	59.2	--	--	34,359	33.9
Ambient Air Quality	<u>15,106</u>	<u>26.0</u>	<u>13,750</u>	<u>31.7</u>	<u>28,856</u>	<u>28.4</u>
Totals	\$58,056	100.0%	\$43,399	100.0%	\$101,455	100.0%

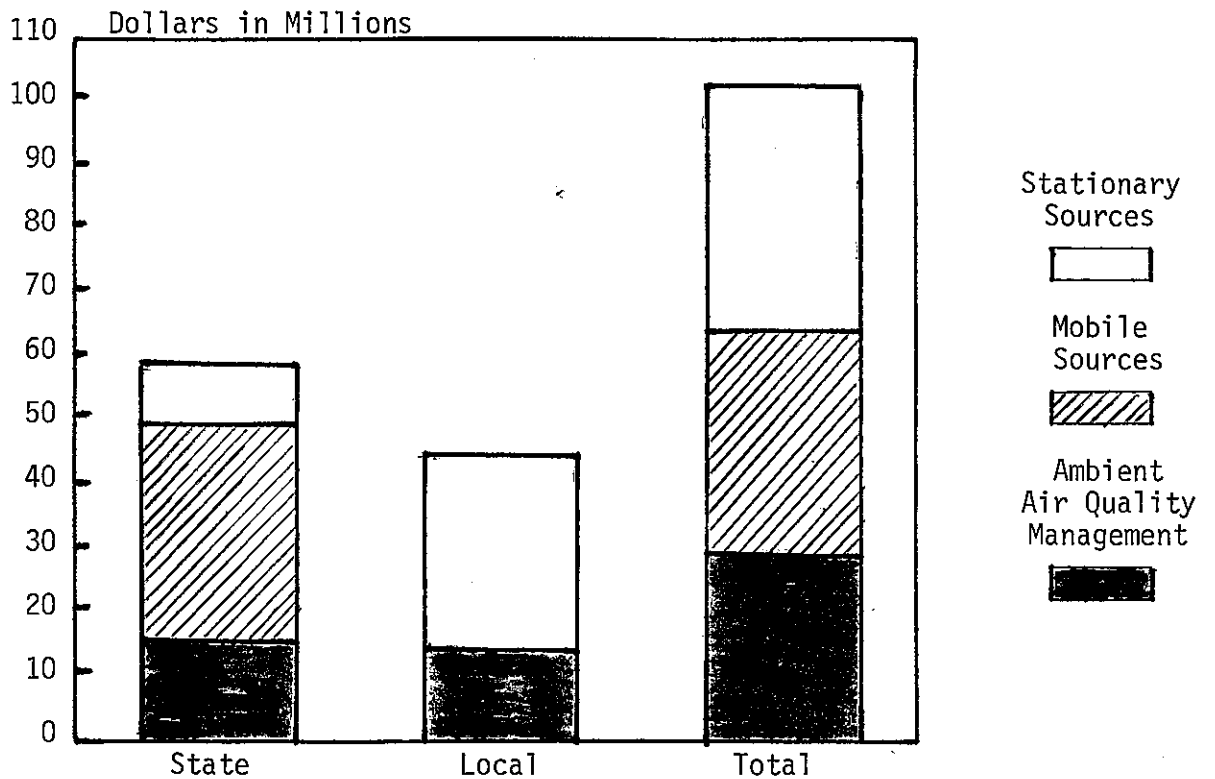
Figure 1 summarizes, in graphic form, the distribution of state, local, and total revenues and expenditures, as shown in Tables 1 and 2. The data shown in Tables 1 and 2 and Figure 1 are evaluated in Chapter III.

FIGURE 1

Categories of Revenues



Categories of Expenditures



CHAPTER III

EVALUATION

This chapter presents our evaluation of the funding and expenditure patterns for air pollution control in California as set forth in Chapter II. This evaluation has several limitations that must be kept in mind. First, relevant information on emissions from various sources often is incomplete or based on general estimates. Second, the data on revenues and expenditures, particularly with regard to the smaller districts, are imprecise and do not fit neatly into the categories we have defined in Chapter II. Finally, the present funding and expenditure patterns have developed by the state and the districts over time in response to a wide variety of influences. We believe, nevertheless, that the following evaluation illustrates the complex problems and inconsistencies that stem from the current funding arrangements.

In evaluating the current funding arrangements, we have used three criteria:

1. Consistency. Do the revenues raised for air pollution control activities have a consistent relationship to the expenditures?
2. Efficiency. Do the present funding arrangements provide incentives for both regulatory agencies and polluters to behave in ways that minimize both the amount of pollution and the costs of controlling it?
3. Stability. Do the funding arrangements provide for continuity of funding to finance necessary state and local air pollution control activities?

The balance of this chapter presents the findings from our evaluation.

CONSISTENCY

The current complex patchwork of ad hoc funding arrangements has evolved in response to changing state and local conditions. The aggregate of individual actions taken by the state and the 55 districts do not follow any consistent or logical pattern. The more important of these are discussed below.

1. Some activities are being performed at local expense by some districts (usually the larger ones) and at state expense in other districts. This state assistance, which can be viewed as a "hidden subvention," comes about for several reasons. Some stationary source activities require costly equipment or specialized personnel. Only the largest districts have the financial capability to acquire this equipment and support the staff needed to use it. Lacking this capability, the smaller districts request and receive assistance from the Air Resources Board when it is needed.

Districts also differ in their attitudes towards state technical assistance. The largest districts prefer to do as much work as possible in-house, while others routinely request assistance from the Air Resources Board.

Examples of state-funded work undertaken on behalf of districts include the following:

Air Quality Monitoring. Air quality monitoring is conducted in all air basins to determine the quality of the air and whether the quality meets applicable state or federal standards. The present network of

monitoring stations has developed over the years as the Air Resources Board has supplemented the previously existing district monitoring.

In some cases, the districts perform and pay for the monitoring, while in other cases the ARB performs and pays for the monitoring, and in still others the local district does the work, but is partially reimbursed for it by the state. Specifically, in 10 districts (South Coast, North Coast Unified, Mendocino, Northern Sonoma, Modoc, Shasta, Siskiyou, Solano, Imperial, and San Bernardino) the districts conduct and pay for all routine air monitoring, at a cost of about \$2.8 million annually.

In four districts (Bay Area, Monterey, San Diego, and Ventura), the districts conduct the monitoring, and funding is provided primarily by the local district (\$1.8 million), but is supplemented by the state (\$103,000).

In 13 districts (San Luis Obispo, Santa Barbara, Butte, Sacramento, Sutter, Yolo, Solano, Fresno, Kern, Kings, Merced, Stanislaus, and Placer) the monitoring is both conducted and paid for partly by the state and partly by the local districts.

Finally, in 3 districts (Colusa, Glenn, and Mariposa), monitoring is conducted and paid for entirely by the state. For the state as a whole, local expenditures for air quality monitoring are estimated to be approximately \$5.1 million and state expenditures are estimated to be approximately \$3.3 million.

In our SCR 32 report, we concluded that "there is no rational explanation for the fact that the ARB does all monitoring in some basins, none in others, and some in the rest, other than historical development."

Control Measure Development. The South Coast Air Quality Management District has a staff specifically dedicated to the development of new

standards for controlling pollution from stationary sources. In addition, the Air Resources Board staff develops new control measures that are intended to be used by the districts. Thus, these two agencies pay most of the costs associated with the development of new control measures that other districts later adapt to their needs.

Emission Inventory. In preparing the 1982 revisions to the State Implementation Plan, the San Diego and San Francisco Bay Area districts performed and paid for the preparation of their emission inventories. These inventories consist of data on the amount of emissions from each pollution source. In contrast, detailed emission inventory work for the South Coast, Sacramento, and South Central Coast regions, and general work for other parts of the the state, was performed by the Air Resources Board.

Air Quality Modeling. The San Diego, Bay Area, and South Coast Districts performed and paid for air quality modeling for their 1982 revisions to the State Implementation Plan. All other modeling work was performed and paid for by the Air Resources Board.

Compliance Source Testing. Only the largest districts and the Air Resources Board have the technical capability (test vans) to perform gaseous tests to determine the compliance of certain stationary sources with applicable standards. The Bay Area and South Coast districts currently perform and pay for approximately 400 of these tests per year. Almost all the remaining testing is performed by the Air Resources Board. The board performed 78 such tests during the period October 1982 through April 1983. Most of the tests (61 out of 78) were performed for districts other than the two largest. Of the 61 tests conducted in the smaller districts, 46 were performed at the district's request. Thus, 60 percent

of the board's testing was performed for the benefit of the smaller districts at no cost to the districts. A portion of the board's costs for this testing is recovered from fees imposed on the source being tested. Nevertheless, a substantial portion of the testing expenses must be absorbed by the board.

Permit Review. A permit must be secured for any new or modified source of pollution. Most of the work involved in processing applications for such permits is performed by the districts. Again, the largest districts have the staff to perform the more complex reviews, while the other districts occasionally require assistance from the ARB. This assistance usually is provided at state expense. Of 102 such reviews performed by the Air Resources Board in response to local requests during 1981-82, 76 were for districts other than the South Coast and Bay Area districts. Again, the ARB is performing, at state expense, activities that are mostly performed at local expense in the larger districts.

The Air Resources Board does not maintain comprehensive records on the above types of work it does at the request of districts or in support of district activities. We therefore are unable to determine in most instances the amount of expenditures falling in these categories. Based on our review of the board's budget and field operations and our visits to districts, we conclude that the cost of this work is significant.

2. The revenues derived from mobile sources of pollution far exceed the costs attributable to control of pollution from these sources. Figure 2 compares the costs and revenues associated with stationary sources and mobile sources.

FIGURE 2

Revenues Versus Expenditures
Stationary and Mobile Sources

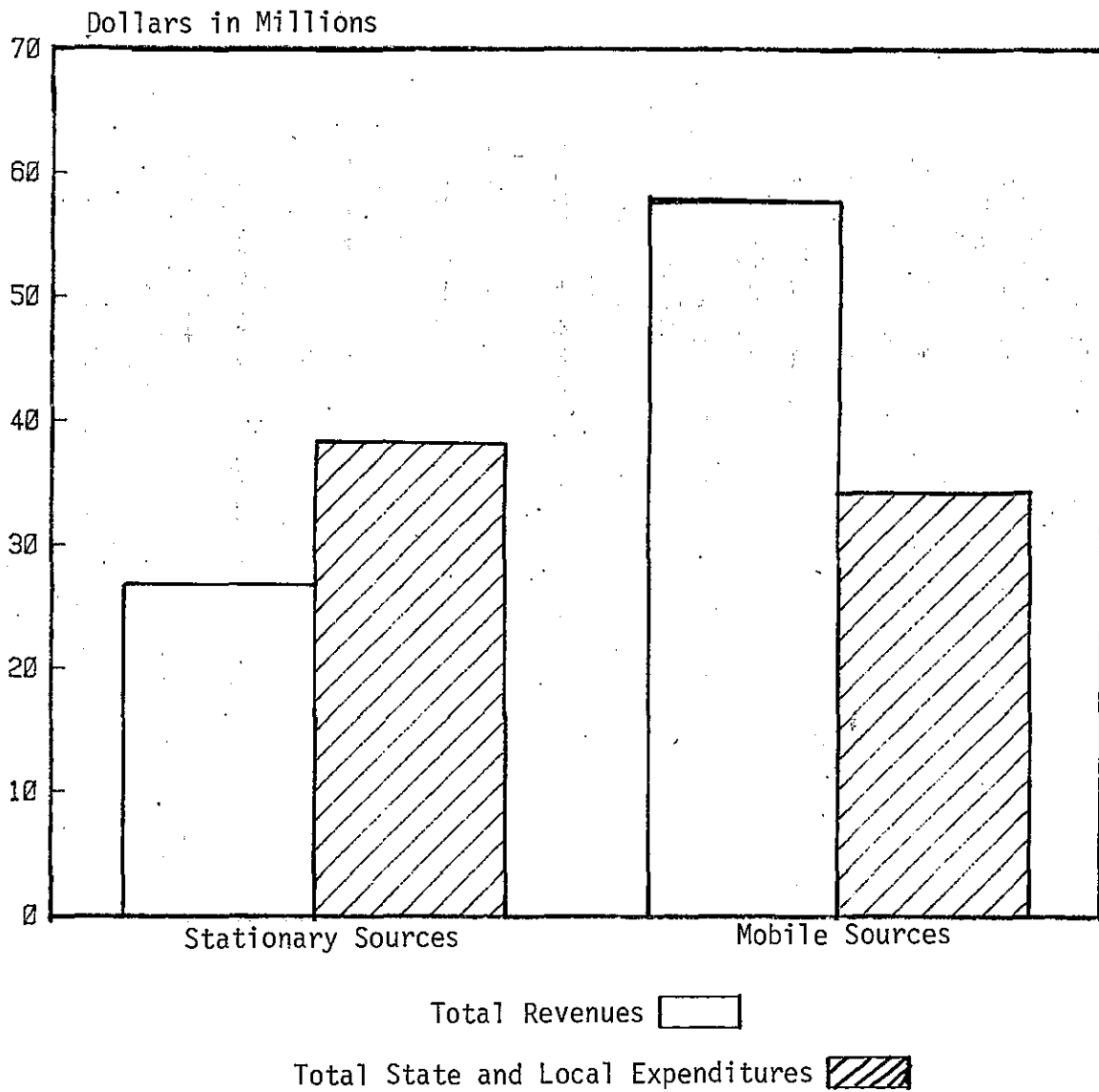


Figure 2 shows a large discrepancy between the amount of funding derived from and expended on these sources of pollution. Total state and local costs attributable to stationary source activities exceed by more than \$11 million total estimated revenues from fees paid by stationary

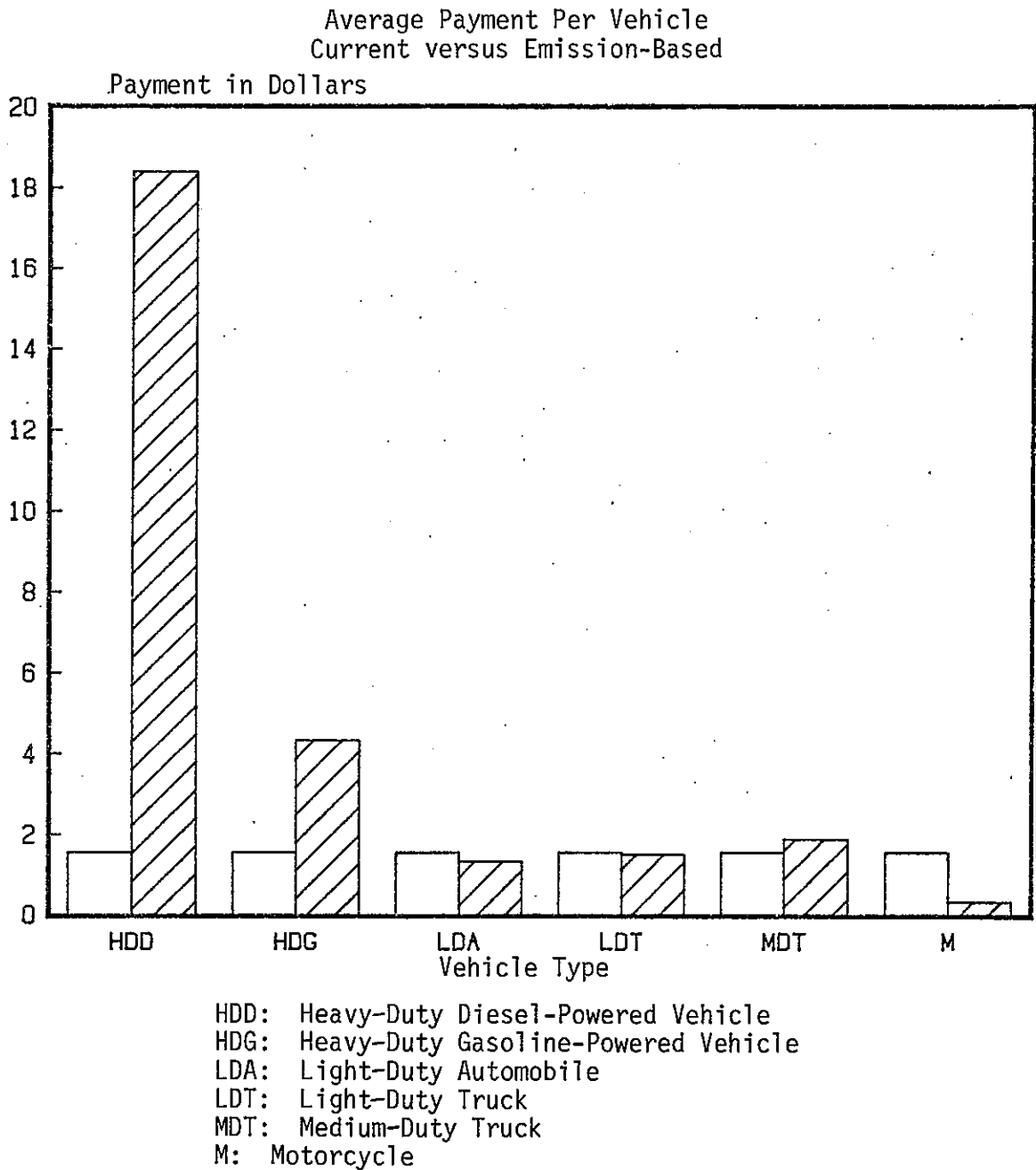
sources. Total estimated costs attributable to mobile sources are approximately \$23 million less than the total estimated revenue derived from fees on mobile sources. This imbalance between revenues and expenditures largely reflects budgetary, rather than programmatic factors. In recent years, it has been easier to obtain support for pollution control facilities from the Motor Vehicle Account than from the General Fund. From a programmatic standpoint, it would be desirable to link more closely the sources of revenue and the purposes for which the revenues are used.

3. The revenues derived from fees imposed on individual vehicles do not correspond to the contribution that these vehicles make to the pollution in the air. As was noted in Chapter II, all motor vehicle owners pay the same registration fee, which is deposited in the Motor Vehicle Account. Approximately 5 percent of this money currently is used to support air pollution control work. Different types of vehicles, however, differ significantly in the amount of emissions they produce.

The ARB recognizes six major types of vehicles. They are heavy-duty diesel-powered (mostly trucks), heavy-duty gasoline-powered (again, mostly trucks), light-duty automobiles, light-duty trucks, medium-duty trucks, and motorcycles. Using the emissions from each type of vehicle, as supplied by the Air Resources Board, we calculated what the average fee per vehicle would have to be for each type in order for the fees to (a) be proportional to the emissions produced by the particular vehicle type and (b) still generate the \$30 million currently expended for air quality purposes from the Motor Vehicle Account. The portion of the fee charged for each vehicular pollutant (HC, CO, and NOx) is the same as that used by the South Coast Air Quality Management District for stationary sources (\$30.30 per ton of NOx and \$52.00 per ton of organic gases, a ratio of 0.58 to 1.00).

Figure 3 shows the results of this calculation.

FIGURE 3



As Figure 3 indicates, the average fee per vehicle would change significantly if the fee, instead of being a fixed amount for all vehicles, were based on each vehicle's emissions. Heavy-duty diesel vehicles, for

example, would pay an average of \$18.40 rather than \$1.54, while motorcycles would pay an average of 32 cents rather than \$1.54.

We used the results shown in Figure 3 to calculate what the total emission-based payment would be per vehicle type (fee per vehicle from Figure 3 times the number of vehicles in each type). Table 3 compares the distribution of revenues that results from an emission-based fee with the current flat per-vehicle fee.

Table 3
Approximate Total Payment for Each Vehicle Type
Current versus Emission-Based

<u>Vehicle Type</u>	<u>Current Payment</u>	<u>Emission-Based Payment</u>
Heavy-Duty Diesel-Powered	\$202,000	\$2,400,000
Heavy-Duty Gasoline-Powered	471,000	1,316,000
Light-Duty Automobile	16,448,000	14,113,000
Light-Duty Truck	3,027,000	2,929,000
Medium-Duty Truck	985,000	1,195,000
Motorcycle	<u>1,028,000</u>	<u>212,000</u>
Totals	\$22,161,000	\$22,165,000

As Table 3 indicates, the amount of revenues derived from light-duty automobile fees would decrease from \$16.4 million to \$14.1 million if existing revenues were emission-based. The amount of revenues from heavy-duty diesel-powered vehicles, on the other hand, would increase more than ten-fold, from \$202,000 to \$2.4 million. The difference represents the subsidy provided by automobile owners to heavy-duty diesel-powered vehicle owners.

4. Funding of work on ambient air quality management is not related to the emissions that cause the degradation of the ambient air. The cost of regulating an individual source of emissions consists of the costs associated with the preparation of emission standards for that source, the

implementation of these standards, and their enforcement. This is true whether the emissions are from stationary or mobile sources. The degradation of the ambient air is roughly equivalent to the amount of emissions from all the individual stationary and mobile sources, as modified by atmospheric influences. Logically, the costs of ambient air quality management (such as air quality monitoring, studies of pollutant interaction in the ambient air, and planning for the improvement of ambient air quality) should be borne by stationary and mobile sources in the same proportion that these sources contribute to total emissions.

At present, work on ambient air quality is financed by the state and districts, using whatever funding is available. Thus, the districts finance ambient air quality work largely from stationary source revenues plus whatever subventions they receive from the state. These subventions are allocated on a per capita basis, with the money coming from the Motor Vehicle Account. Ambient air quality expenditures by the Air Resources Board come largely from the Motor Vehicle Account. This pattern of financing is not the result of a conscious effort to achieve specific programmatic objectives. Rather, it has developed largely in response to funding availability. It would be more logical if the cost of work associated with overall ambient air quality were borne by stationary and mobile sources in proportion to the contributions they make to pollution in the ambient air.

5. Some districts charge no fees for pollution control activities. In The Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts, the EPA reported that 7 districts (Mariposa, Nevada, Plumas, Colusa, Sutter, Yuba, and Modoc) charge no fees. According

to information supplied by the Air Resources Board, these districts contain a total of 33 pollution sources, each of which emits more than 25 tons per year of particulates, carbon monoxide, oxides of nitrogen, sulfur, or hydrocarbons.

6. Only four districts currently charge a fee for agricultural burning, even though agricultural burning can be a significant source of seasonal pollution in some districts. According to information supplied by the Air Resources Board, approximately 1.5 million acres of farmlands were burned statewide in 1980 and 1981. This burning resulted in annual emissions estimated at approximately 30,000 tons of hydrocarbons and particulate matter and 300,000 tons of carbon monoxide. The amount of revenue raised by the four districts (Sacramento, Imperial, Shasta, and Stanislaus) that charge fees for agricultural burning is approximately \$50,000 per year. If the emissions from agricultural burning statewide were subject to fees calculated at the rates currently used by the South Coast Air Quality Management District, the revenues would be approximately \$2.8 million, rather than \$50,000.

Although the Air Resources Board's estimates of acreage burned and emissions produced are subject to considerable uncertainty, it appears that agricultural burning, as a general category, contributes substantially less revenue than industrial sources, relative to the amount of emissions produced by each source.

EFFICIENCY

The second criterion we used in evaluating the current funding arrangements is efficiency--that is, to what extent do these arrangements provide incentives such that both the regulatory agencies and the various

polluters have an incentive to reduce pollution in the most efficient manner possible?

Our review indicates that the current funding arrangements do not provide an incentive to minimize pollution or the costs of controlling it. For example, the districts are able to obtain assistance from the state Air Resources Board without having to reimburse the board for the cost of providing this assistance. This practice increases state expenditures, although the substitution of state funds for local funds does not by itself increase total expenditures. The absence of a state charge for the services requested by the districts can result in services being requested that the districts might not find essential if they had to bear the cost themselves.

Under the current funding arrangements, the state does not have a fiscal incentive to minimize costs when requesting work to be performed by a district. For example, the ARB often requests emission inventory information from local districts for research or modeling purposes. When the ARB does not bear the cost of collecting the information, there is no fiscal incentive for it to limit its request.

Finally, as previous sections have demonstrated, there are numerous situations in which the amount of fee payments required of polluters bears little relationship to the amount of pollution produced. When the fees do not reflect the amount of pollutions generated, they tend not to serve as a deterrent to pollution.

STABILITY

The third and final criterion used to evaluate the current funding arrangement is stability--that is, do these arrangements ensure that

continued funding will be available to finance necessary state and local air pollution control activities?

During the 1970s, the current arrangement provided a reasonable degree of stability for the state's pollution control program. If, however, the amount of state subventions to local districts was reduced as proposed in the Governor's Budget for 1982-83, it would impose significant hardships on some districts.

Another manifestation of instability can be found in the 1983 Budget Act. As signed by the Governor, the act provides for a \$1.5 million reduction in funding for the Air Resources Board's stationary source control work. This reduction will significantly reduce the board's ability to respond to requests for assistance from local districts. It is too soon to determine the actual effect of this reduction on local activities and programs.

CHAPTER IV

REVISED STRUCTURE

As reported in the previous chapter, our evaluation indicates that the current funding arrangements for air pollution control in California have several shortcomings. A number of revisions in the current funding structure would be necessary to eliminate these shortcomings. This chapter identifies specific changes that we believe would be needed in order to improve the consistency, efficiency, and stability of funding for air pollution control.

REVISED REVENUE AND EXPENDITURE STRUCTURE

Using the revenue and expenditure categories developed in Chapter II and taking into account the criteria discussed in Chapter III, we have developed a structure for state and local revenues and expenditures that would be more internally consistent and rational. The essential features of this structure are as follows:

1. Stationary source control is basically the responsibility of the local air pollution control districts and therefore logically should be financed by these districts. This is consistent with existing laws that establish fees for stationary sources. It is also the most direct way to assure that these sources pay the costs of controlling their pollutants. Funding for this purpose should, therefore, be obtained primarily from permit and emission fees, and secondarily from other local funding sources that are available to the districts and are determined by the districts to be appropriate.

2. Mobile source control is the responsibility of the state. The state should continue to finance this work using revenue from vehicle registration fees that is deposited in the Motor Vehicle Account. A portion of these fees should be designated by statute for this purpose. In addition, the designated fees should be modified to eliminate the inconsistencies in registration fees discussed in Chapter III. The cost of the vehicle emission inspection program should continue to come from the inspection fees established for that program.

3. Ambient air quality management should be funded primarily by emissions fees. The Legislature should authorize a statewide stationary source emissions fee, which should be collected by the districts from all stationary sources of pollution--in essence, the fee authorized in Ch 1638/82. This fee should be retained by the districts to pay their costs for stationary source work not covered by existing fees and for ambient air quality work. It would replace the loss of state subventions, as authorized by Chapter 1638. A surcharge on the district fee, as determined by the Legislature, should also be collected by the districts and forwarded to the state to pay that portion of the ARB's costs for ambient air quality that is attributable to stationary sources. The administrative costs of collecting the surcharge should be deducted by the districts from the amount forwarded to the state.

That portion of the state's costs for ambient air work attributable to vehicular emissions should be funded from vehicle registration fees, as is the current practice. At present, vehicular and stationary sources

contribute about equal amounts of emissions to the ambient air. Thus, the ARB's ambient air quality work should be financed equally from the surcharge on stationary sources and the vehicle registration (emission) fees. This funding pattern would build on and be consistent with the precedent set by the acid deposition fees being implemented pursuant to Ch 1473/82. In fact, the acid deposition fees could easily be consolidated into the emissions fee.

4. Whenever the state desires assistance from the districts (such as additional ambient air monitoring), the state should reimburse the districts for the costs of these services. Similarly, whenever a district needs assistance from the ARB (such as permit review, source testing, or enforcement work), the district should reimburse the state for the ARB's costs of providing the assistance.

The major differences between the funding structure we propose and the current funding arrangement involve (1) the concept of an emissions fee collected from both stationary and mobile sources and (2) the creation of a "reimbursement relationship" between the state and the districts.

Statewide Emissions Fee

In our view, an emissions fee would be a recurring fee, charged annually to both stationary and vehicular emission sources in an amount sufficient to pay for the ongoing costs of controlling the emissions. The existing fees authorized for specific ARB or district activities, such as permitting a new stationary source, would not be affected by the imposition of an emissions fee. The existing fee for mandatory vehicle emission

inspections would be the mobile source counterpart for specific stationary source fees, and would not be changed. All revenues from the emissions fee would be used to supplement general monitoring and enforcement work by the districts and for ambient air quality work performed by the districts and the ARB.

Defining more clearly specific fees and an emissions fee would help to distribute the costs of state and district activities more equitably among the various sources that contribute to the deterioration of ambient air quality. The emissions fee would also provide an incentive for districts to measure and record actual emissions more precisely in order to assure that all emissions sources pay their share of the fee revenues. Better information on actual emissions would have the additional benefit of improving the accuracy of the emissions inventories that are used in air quality planning and in the development of rules and regulations. Further, an emissions fee based on actual emissions would provide a modest financial incentive for sources to reduce their emissions. Finally, designating a portion of the vehicle registration fee as an emissions fee would serve as a public education measure, creating an awareness among vehicle owners of their individual contribution to air quality problems.

As noted in Chapter I, there is precedent for the use of an emissions fee at both the district and state levels. The South Coast Air Quality Management District obtains approximately \$6 million annually, or 30 percent of its revenue, from an emissions fee imposed on large sources of pollution. The state Air Resource Board will obtain approximately \$1

million from an emissions fee charged to major stationary sources and \$1 million from the Motor Vehicle Account for the acid deposition research and monitoring program. Although the \$1 million from the Motor Vehicle Account to be used for the acid deposition program is not currently designated as a vehicular emissions fee, it is such a fee.

Table 4 shows the emissions fee structure of the South Coast Air Quality Management District and the ARB's fee for the acid deposition program in 1983-84.

Table 4
Currently Existing Emissions Fees
1983-84

Pollutant	South Coast District		Air Resources Board	
	Cut-Off ^a Point (Tons Per Year)	Fee (Dollars Per Ton)	Cut-Off ^a Point (Tons Per Year)	Fee (Dollars Per Ton)
1. Organic gases:	10 (total)			
a. Methane		6.45	--	--
b. Methylene chloride, etc.		9.00	--	--
c. Other		52.00	--	--
2. Carbon monoxide	100	0.45	--	--
3. Oxides of nitrogen	10	30.30	1,000	3.20
4. Oxides of sulfur	10	36.10	1,000	3.20
5. Particulate matter	10	39.00	--	--

a. Sources which emit pollutants in quantities below the cutoff point are not subject to the fee.

A total of about \$28.9 million of air quality-management work currently is financed from a variety of revenue sources that could be financed with revenues raised by an emissions fee. Using information provided by the Air Resources Board and the districts, we have calculated for illustrative purposes the fee that would be necessary to generate \$28.9 million of revenue if an emissions fee were charged to (1) stationary sources that emit more than 10 tons per year, (2) on-highway motor vehicles, and (3) agricultural burning sources. In performing this calculation, we used the same ratio of fees for different pollutants that currently is used by the South Coast District. This ratio was used only as a means of illustrating the relative burden that different pollutants might bear.

The calculated fees are \$14.22 per ton of organic gases, 12 cents per ton of carbon monoxide, \$8.29 per ton of oxides of nitrogen, \$9.88 per ton of oxides of sulfur, and \$10.66 per ton of particulate matter. These fees are roughly one-fourth the amount currently charged by the South Coast Air Quality Management District to fund both stationary source and ambient air quality activities, as shown in Table 4.

We do not mean to suggest that this particular emissions fee structure is necessarily desirable. The calculations have been made to illustrate a concept, and should be used with full regard for the shortcomings of available data and the fact that the expenditure base for the calculation includes only ambient air quality work.

Reimbursement Relationship

Currently, whenever either a district or the ARB does work for the other, the performing entity, rather than the requesting entity, generally pays for it. No reimbursement of the performing entity's costs is required of the requestor. This can have an adverse programmatic impact. In acting on the 1983-84 budget, for example, the Legislature was faced with a choice between reducing ARB expenditures for stationary source work, thereby leaving some districts without access to the technical assistance they need or providing funding for activities that are the districts' responsibility. By separating the question of "who does the work" from "who pays for the work" and providing for reimbursement of the services rendered, the Legislature would more explicitly recognize that (1) state assistance in some areas is necessary and cost-effective, (2) the ARB needs services from some districts, and (3) obtaining needed assistance from others does not change the basic responsibilities of the districts or the ARB.

Transitional Payment

The stationary source emissions fees and the reimbursement requirement suggested above would result in significant revenues for large- and medium-sized districts that would essentially alleviate the need for state subventions. This would not be the case for other districts, particularly those in rural areas. Currently, rural districts perform few ambient air quality functions and probably would not receive reimbursements from the state sufficient to offset the loss of state subventions. In addition, many of these districts have not exercised their existing

authority to levy fees on stationary sources. In these cases, a transitional payment from the state to support the district's basic costs may be the only feasible alternative if the district's programs are to be maintained in the near term at an adequate level.

Over time, transitional payments could be eliminated. In The Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts, the EPA reported that seven districts charge no permit fees of any type. Only four districts charge permit fees for agricultural burning. We see no reason why the state should continue to provide subventions to districts, and to incur costs in assisting districts, when the districts have not taken the minimum step of charging fees for their sources of pollution.

District Consolidation

Many small districts should be consolidated into larger basinwide districts. The problem of small districts was explored in Air Quality Control in California. The report found that (1) air pollution can be controlled more effectively in the larger geographic areas of an air basin in which county boundaries do not impose artificial limits on pollution control activities, (2) a minimum staff of five full-time employees is needed to handle contemporary air pollution problems adequately, and (3) only 14 of the 46 districts in the state, at that time, had a staff of five or more. The report recommended that small districts be consolidated as nearly as possible into basinwide districts, and proposed an "interim structure" and "final structure" to provide for an orderly consolidation process.

The Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts also discusses district consolidation as an option to improve district program resources. The draft report states that "district consolidation would reduce administrative or overhead costs substantially. Money used to support duplicate administrative activities could be used for enforcement, engineering, and technical services in place of a similar amount of money from outside sources." The report describes a phased transition based on Air Quality Control in California.

It appears that district consolidation has the potential to allow more efficient operation in the rural districts. The principal disadvantage to consolidation is, of course, lessened local control in the affected districts.

IMPLEMENTING LEGISLATION

The following legislation would be needed to implement the above suggestions for rationalizing and improving funding arrangements for air pollution control activities in California:

1. Legislation (a) explicitly authorizing a statewide emissions fee and a statewide surcharge on stationary sources for the ARB and (b) designating a portion of vehicle registration fees (from mobile sources) as a vehicle emissions fee.

2. Legislation (a) requiring the Air Resources Board to reimburse local districts for stationary source and ambient air quality services requested by the ARB from the districts and (b) requiring the districts to reimburse the board for stationary source and ambient air quality services requested of the board by the districts.

3. Repeal of the current per capita state subvention to districts.
4. Continuation, during a transition period, of the current subvention to those small districts that (a) charge fees to all permitted sources of pollution, including agricultural burning, and (b) make reasonable progress towards district consolidation.

FISCAL IMPACT OF THE REVISED FUNDING STRUCTURE

Although fee schedules and the detailed distribution of revenues under the revised structure have not been developed, an overall shift in funding could be anticipated if our suggestions were adopted. Funding from stationary sources would increase, and the use of Motor Vehicle Account (registration fee revenues) would decrease.

In practice, the distinctions used above between the various categories of work and related funding sources are not always clear and some problems are not addressed by the revised structure. For example, stationary source oversight or enforcement work performed by the Air Resources Board that is not in response to a district request, such as checking the adequacy or accuracy of permits issued locally or the development of statewide control measures for use by the districts, should logically be funded by the stationary sources involved. In practical terms, it may be too complex and difficult to develop a method to charge these sources for the work. Nevertheless, we believe that the structure outlined above provides a logical basis to both sort out state-local responsibilities and resolve a number of funding issues.

BIBLIOGRAPHY

Evaluation of Resource Alternatives for Funding California Air Pollution Control Districts. TRC Environmental Consultants, Inc. Final Report of a Study Conducted Under Contract No. 68-02-3514, Work Assignment No. 17, for the U.S. Environmental Protection Agency. November 1982.

Air Quality Control in California. William Simmons and Del Green Associates, Inc. Final Report of a Study Conducted Under Senate Concurrent Resolution No. 32. (Resolution Chapter 100, Statutes of 1979). December 1980.

Joint Air Resources Board/California Air Pollution Control Officers' Association Report to the Legislature on Air Resources Board's Role in Air Pollution Control District Stationary Source Control Programs. December 1981. Submitted pursuant to language included in the "Supplemental Report of the Committee of Conference on the Budget Bill for 1981-82."

Roles of Air Resources Board and Air Pollution Control Districts Concerning Control of Emissions from Stationary Sources. February 2, 1978. Submitted pursuant to language included in the "Supplemental Report of the Committee of Conference on the Budget Bill for 1977-78."