



Background

LAO Findings

LAO Recommendations

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Improving State Oversight and Direction of Local Air Districts

The responsibility to regulate air quality in the state is divided between the state Air Resources Board (ARB) and 35 local air districts. This report evaluates whether the current allocation of responsibilities between the state and the locals is appropriate. It also reviews the implementation of stationary source pollution programs by the local districts and examines the effectiveness of the state's oversight of these programs.

In general, the current division of responsibility between the state board and the local air districts is appropriate. However, it may be more effective for the state, rather than each individual air district, to adopt rules for particular stationary sources of pollution.

The state has an interest in ensuring that locally administered air quality programs are implemented effectively in order to achieve the state's air quality goals. However, ARB's review of local programs—a statutory mandate—is minimal. As a result, problems such as inconsistent and not fully effective local enforcement have developed without ARB taking timely corrective action.

To address the above issues, we recommend that the Legislature:

- ❖ Direct ARB to adopt *statewide* stationary source rules where cost-effective to do so.
- ❖ Direct ARB to adopt a statewide enforcement policy to guide local enforcement practices.
- ❖ Provide for mandatory minimum penalties in cases of serious and chronic stationary source violations.
- ❖ Clarify ARB's authority to take enforcement actions against stationary source violations independent of the local air districts.
- ❖ Standardize the violation and enforcement response data to be tracked by the local air districts and enhance the information routinely reported by the districts to the state.
- ❖ Provide that data management needs be considered when ARB allocates subvention funds to local districts.
- ❖ Direct ARB to provide a work and expenditure plan for timely local program reviews.

January 25, 2001



INTRODUCTION

Air quality regulation in California is divided between the state ARB and local air districts. The local districts mainly regulate *stationary* sources of pollution, while ARB mainly regulates *mobile* sources of pollution and oversees local program implementation. Mobile sources include “on-road” sources such as passenger cars, trucks, and buses as well as “off-road” sources such as trains, ships, and portable equipment (such as lawn mowers). Stationary sources include fixed sources of pollution such as dry cleaners, gas stations, and petroleum refineries. The relative contribution of mobile and stationary sources to air pollution varies on a pollutant-by-pollutant basis. For example, mobile sources produce a majority of the emissions of carbon monoxide. On the other hand, stationary sources produce most of the emissions of fine particulate matter.

This report first considers whether the current division of responsibilities between the state and

local air agencies is appropriate. Then, it focuses on the implementation of stationary source programs at the local level, and examines the effectiveness of the state’s oversight of these programs.

Methodology. In reviewing how well the current state-local structure of air quality regulation works, we interviewed a broad range of stakeholders of the state’s air quality programs. These stakeholders include business associations, including the California Chamber of Commerce, that represent a variety of types and sizes of businesses subject to regulation; environmental organizations; and state and local air agencies. We reviewed violation and enforcement data supplied by ARB and local air districts as well as studies conducted by others, including the U.S. Environmental Protection Agency (U.S. EPA), that evaluated air quality programs in the state.

OVERVIEW OF STATE VERSUS LOCAL RESPONSIBILITIES

Historically, the division of responsibility between state and local air agencies has largely been based on each level of government focusing on different sources of pollution—the state regulates mobile sources and the locals concentrate on stationary sources. Within each area of responsibility, federal and state laws require plans and programs designed to meet national and state

ambient air quality standards. National and state ambient air quality standards for specified pollutants, including ozone, carbon monoxide, and sulphur dioxide, were first adopted around 1970. Today, there are national and/or state standards for ten pollutants, with the state standard in most cases being more stringent than the federal standard.

CURRENT STATE-LOCAL DIVISION OF RESPONSIBILITY

Stationary Versus Mobile Sources. Air quality was first regulated in California at the local level in 1947 when state statute authorized the creation of an air district in every county. (Subsequent law provided for the formation of multicounty and regional districts.) The focus of air quality regulation was initially on stationary sources of “visible” pollution, such as smoke and particulate. Today there are 35 local air districts that are the primary agencies responsible for regulating emissions from stationary sources of pollution, as shown in Figure 1 (see page 4). Stationary sources contribute substantially to emissions of certain pollutants. For example, between one-quarter and one-half of ozone-forming chemicals (the major components of smog) are from stationary sources.

A state-level board was created in 1960 to regulate emissions from motor vehicles. The ARB became responsible for regulating emissions from other mobile sources in the 1970s and started regulating consumer products in the late 1980s. (Consumer products include cleaning compounds, cosmetic aerosol sprays, and other chemically formulated products used by household and institutional consumers.)

Planning Process to Meet Ambient Air Quality Standards. Under federal law, states are required to develop plans (state implementation plans, or SIPs) showing how the state will meet *national* ambient air quality standards within specified time frames. Federal law does not dictate the governance structure for meeting these planning re-

quirements, but rather leaves it up to the states to designate the responsible entity. In California, state law designates ARB as the agency responsible for developing SIPs, in coordination with the local districts.

In addition, state law requires local districts to develop their own plans and implement programs for meeting *state* ambient air quality standards. Unlike federal law that requires national standards to be attained by specific dates, state standards are to be achieved by the “earliest practicable date.” While state law provides for a planning process separate from that required under federal law, local districts in general are able to integrate the state and federal planning requirements.

Development and Implementation of Plans—Local Role. In implementing the state and federal planning requirements, districts that have not attained air quality standards for a particular pollutant are responsible for developing a plan to control and reduce that pollutant. These plans include rules to regulate stationary sources of pollution. The plans also incorporate state-adopted measures (such as smog check) for mobile sources of pollution under ARB’s jurisdiction. The combination of state and local measures in the plans are designed collectively to meet the air quality goals specified in statute.

To implement the plans, local air districts regulate stationary sources of pollution primarily by issuing and enforcing various permits. These permits specify various pollution emissions requirements with which a stationary source (such



Figure 1

California Air Districts



as an oil refinery) must comply. Permit requirements are based on rules adopted by the districts. The ARB and U.S. EPA retain some enforcement authority, primarily through their oversight roles.

Development and Implementation of Plans—State Role. The ARB's role in the planning process is three-fold:

- ◆ To adopt rules that control sources of pollution under its jurisdiction (namely mobile sources, fuels, and consumer products).
- ◆ To review and approve the local plans.
- ◆ To compile local plans into state implementation plans that are submitted to U.S. EPA for approval.

In order to implement the state plans, ARB primarily enforces permits and rules for pollution sources under its jurisdiction. For example, ARB conducts tests to ensure that new motor vehicles contain required emission controls. As regards the regulation of stationary sources of pollution, the state board's role is *mainly* one of providing guidance and model rules to local districts for the regulation of these sources. Guidance and rules may involve providing information on the best available technologies and appropriate control measures to be included as permit requirements. However, in the case of a few specific types of stationary sources, such as agricultural burning and vapor recovery at gas stations, ARB is statutorily responsible for setting statewide rules that local districts must follow.

In addition, ARB is responsible for developing statewide control measures for toxic air contaminants (TACs) emitted from *all* (both stationary and mobile) sources. The TACs—which include benzene, asbestos, and diesel particulate—are air pollutants that may cause or contribute to an increase in mortality or serious illness due to an individual's acute or long-term exposure to them. Local air districts must adopt the statewide control measures for TACs, unless the districts choose to adopt more stringent measures.

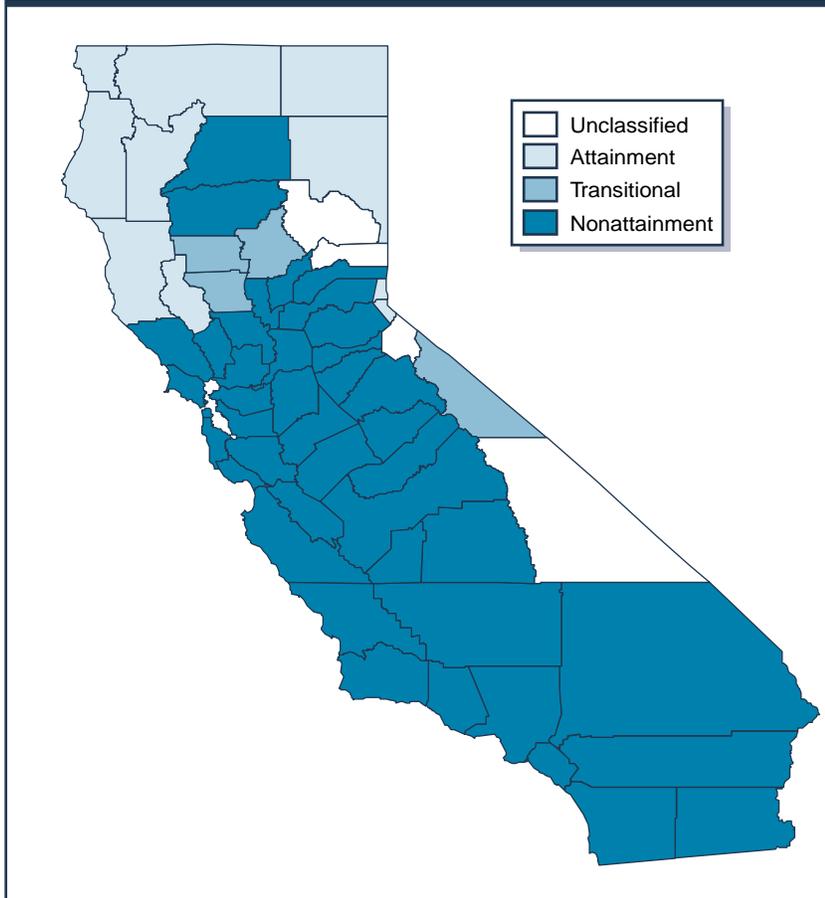
State Oversight of Local Program Implementation. It is important for the state to have effective oversight of the local districts' *implementation* of the local plans, including rule-making, permitting, and enforcement activities. This is because plan implementation directly affects the state's progress in meeting federal and state air quality goals. While most of the state has attained national and state standards for some pollutants, such as nitrogen dioxide and sulphur dioxide, most of the state is failing national and state standards for a number of other pollutants. For example, as shown in Figure 2 (see page 6), most of the state failed the state standard for ozone (smog) in 1999 and was designated as a nonattainment area.

The federal government can sanction the state if it fails to attain a certain level of air quality at various milestones prescribed by federal law. These sanctions potentially include a reduction in federal transportation funding to the state and the development of a made-in-Washington plan for controlling pollution in California (federal implementation plan, or FIP).



Figure 2

**State Ozone Standards
Area Designations, 1999**



As will be discussed in detail later, ARB has broad authority to oversee and evaluate local air district programs. Specifically, ARB is required under state law to review district plans, rules, and programs, including enforcement practices, to determine whether they are sufficiently effective to achieve and maintain the state's ambient air quality standards.

**CURRENT DIVISION
OF RESPONSIBILITY
GENERALLY APPROPRIATE**

Our discussions with various groups found that, in general, the current division of responsibility between state and local agencies relative to the source of pollution (stationary versus mobile) is appropriate. This is for a couple of reasons. First, local agencies are able to adopt stationary source rules that appropriately reflect local air quality conditions and the local make-up of pollution sources. Second, the relative accessibility of local agencies to regulated stationary sources located in their jurisdiction improves the level of service provided to these parties. As far as mobile sources are concerned, these are more effectively regulated at the state level, given that the pollution impacts from these

sources typically transcend the borders of the air districts.

It is also appropriate for the state to prescribe measures to control TACs from stationary sources. This is because such statewide regulation ensures that the state's residents, no matter where they live, will receive a certain level of protection from those chemical emissions that have serious and direct public health impacts. It is also cost-effective because the development of these complex

measures often requires a high level of technical expertise and fiscal support that may be lacking at the local level, but, when centrally conducted at the state level, achieves some economies of scale.

Statewide Rules to Regulate Stationary Sources More Cost-Effective in Some Circumstances. Current law recognizes that certain stationary source emissions are well suited for statewide regulation. Generally, these are emissions that come from the widespread use of a product that is portable, available statewide, and generally used in a similar fashion. Thus, current law requires ARB to adopt statewide rules for a few particular types of stationary sources—including vapor recovery at gas stations and certain diesel-fueled construction equipment.

Statewide regulation offers benefits to both the regulated community and the state. Generally, businesses find it easier and less expensive to comply with one statewide regulation than with multiple rules imposed by several different air districts. From a government perspective, one set of regulations is generally more cost-effective than district-by-district rules that can be easier to circumvent and more difficult to enforce.

STATE OVERSIGHT AND DIRECTION NEED IMPROVEMENT

While the division of responsibility between state and local agencies is generally appropriate, we find that stationary source regulation could be improved if ARB exercised more effective oversight of the local districts. While we think that

Based on our review, there appear to be additional cases—such as architectural coatings (paints, stains, traffic coatings, et cetera), automotive coatings (mainly paints), and solvents—where a statewide rule would be more cost-effective in lieu of existing multiple local rules. According to ARB, local rules for these pollution sources have been easy to circumvent and compliance levels have been particularly low. In addition, ARB has indicated that manufacturers in general have expressed a preference for consistency for statewide rules for stationary sources such as architectural and automotive coatings.

Recommend Board Report to Legislature. We think that the Legislature should be advised of cases where district-by-district rule-making for particular stationary sources has resulted in relatively low levels of compliance and where regulation of these sources would be improved by statewide rules. Therefore, we recommend that ARB (1) identify for the Legislature stationary sources of air pollution where it would be more cost-effective for ARB to adopt statewide rules and (2) recommend statutory changes to give the board the authority to adopt rules for the sources identified.

ARB's statutory authority to oversee the districts should be strengthened and clarified, we also find that ARB could do a better job under its existing authority. Specifically, in this regard, our review finds that ARB:



- ◆ Has not adopted a statewide enforcement policy to guide local district enforcement actions, even though it has the authority to do so.
- ◆ Takes little action when the local districts clearly disregard certain statutory reporting requirements.
- ◆ Lacks data to assess the extent of inconsistent and ineffective local district enforcement—a problem area identified by third parties, including federal environmental agencies.
- ◆ Devotes minimal staff to local program review, and has not sought budgetary or legislative remedies to improve its efforts in local program review.

We find that improvements can be made in two main areas, discussed in the sections that follow:

- ◆ Ensuring consistent and effective local district enforcement of stationary source rules and permits.
- ◆ Evaluation of local programs to ensure that the districts are operating effectively to attain the state’s air quality standards.

ENSURING CONSISTENT AND EFFECTIVE LOCAL DISTRICT ENFORCEMENT

The Importance of Local District Enforcement

Enforcement activities by the local air districts (which initiate almost all enforcement actions against stationary sources) are necessary in order

to ensure compliance with requirements that are designed to meet air quality objectives. These activities involve enforcing stationary source rules and permits.

The Need for Consistent Enforcement. A key measure of the effectiveness of an enforcement program is the degree to which it results in compliance. To be effective, enforcement actions must be timely and sufficiently stringent to deter violations. In addition, enforcement actions must be relatively consistent statewide. This is for a number of reasons. First, inconsistent enforcement may result in the regulated community perceiving enforcement to be unfair, thereby weakening the incentive to comply with rules and regulations. Second, the lack of consistency, and therefore predictability of compliance requirements, adds to the compliance costs for business. Finally, consistent enforcement is necessary to ensure that the state’s residents, no matter where they live, have a minimally adequate level of environmental protection.

What Guides Local Enforcement Actions. Local air districts enforce compliance with stationary source regulations in a number of ways. For example, districts conduct inspections; perform testing of emission levels at permitted facilities; investigate complaints; and, when violations are detected, issue warnings, assess administrative penalties, and initiate legal and other enforcement actions.

Current law provides broad direction that guides local district enforcement actions. For

minor violations, air districts are required to issue a “notice to comply,” which is a warning without a penalty. For other violations, local districts are *authorized* to impose monetary penalties of up to specified maximum amounts. However, penalties are *not required* in any case. Current law also contains broad criteria that districts must consider in determining the amount of a penalty, including the extent of harm caused by the violation, the frequency of past violations, and actions taken by the violator to mitigate the violation.

In addition to statutory direction, ARB provides local districts with some guidance on enforcement practices. However, this guidance is limited in scope and has not been adopted by the board as a statewide policy. For some matters, ARB has provided no guidance at all. For example, ARB has not provided guidance regarding when and how quickly a prior informal enforcement action (such as a warning) should be escalated to a more formal and stringent level of enforcement (such as a penalty assessment).

Finally, the local districts have developed their own enforcement policies within the broad directions provided by current law and ARB. In some cases these have been formally adopted by the district board, in other cases not. These policies vary among districts in some important aspects. For example, districts resolve most violations that have not been corrected after an initial warning by issuing a “notice of violation” and entering into settlement discussions with the violator. However, district policies vary significantly regarding the penalty amounts at which

they typically open a settlement discussion for relatively similar violations. Additionally, only some districts have established policies that provide explicit time frames for resolving violation cases.

Enforcement Actions Are Not Consistent And Could Be Made More Effective

Based on our review, we find significant inconsistencies among districts in how they respond to violations. These inconsistencies, particularly as regards penalties assessed for air quality violations, have reduced the effectiveness of the program. This conclusion is based on our review of local air district data, interviews with the regulated community and ARB staff, and our review of evaluations conducted by others of air quality programs in the state. We also find that districts do not consistently seek penalties of an appropriate amount that serve to deter violations, although a number of districts have recently been making improvements in this area. We are unable to assess fully how wide-ranging these problems are because:

- ◆ The ARB does not collect data on a substantial portion of the enforcement actions by the local districts.
- ◆ The ARB audits of district programs are infrequent, resulting in outdated data regarding local enforcement activities.
- ◆ Only 13 out of 35 districts responded to our survey on their enforcement policies and practices.



Inconsistencies Among Districts. We find that local districts vary in the length of time before they escalate the level of enforcement in cases where the initial enforcement action has not resulted in correction of the violation. For example, while some districts have policies requiring enforcement to be escalated within specified time frames, other districts do not have such policies and, as a consequence, have allowed some violations to continue unabated for several years.

Regarding the imposition of penalties, we similarly find that local districts vary in the amount of penalties sought for similar violations. Districts also vary in whether they propose a penalty with every notice of violation. While many districts routinely propose a penalty with almost every notice of violation, a few do not.

Additionally, penalties (including monetary settlements) sought have in general been low, although at least a couple of districts have recently revised their policies to increase recommended penalty amounts. Penalties have been low relative to ARB/U.S. EPA guidance on minimum penalty amounts necessary to deter violations, as well as statutory criteria for setting penalty amounts. These criteria include the seriousness of the violation, the compliance history of the violator, the violator's willingness in committing the violation, and the economic benefit to the violator of noncompliance.

In order to illustrate the variation between the level of penalties authorized and those collected, consider 1998-99. In that year, the average monetary penalty collected from almost 8,300 notices

of violations was about \$800 per violation. This was significantly lower than the maximum amounts of \$1,000 to \$50,000 per day authorized by statute, depending on factors listed above. Similarly, ARB's recent evaluation of the South Coast Air Quality Management District (January 2000) found that 75 percent of the enforcement cases reviewed—most involving emission-related violations—were settled for less than \$500 per violation. According to ARB's report, this penalty amount "does not provide enough deterrence for a source to remain in continuous compliance."

Enforcement Could Be Made More Effective. There is evidence that the imposition of low penalties is limiting the effectiveness of local air district enforcement programs. Although the state lacks a database to assess the total extent of noncompliance with stationary source rules and permits, the number of reported violations exceeds 8,000 as discussed earlier. In addition, audits of the local districts conducted by ARB and U.S. EPA have both found that a substantial number of the violations involve repeat violators. For example, U.S. EPA found in its review of 50 local enforcement cases that almost one-half involved repeat violations, all of which occurred within two years of the previous violation. This suggests that the penalty amounts are not serving to deter violations.

As shown in Figure 3, a review of four air districts (three small, one large) conducted by U.S. EPA's Office of the Inspector General in 1997 confirms a number of problems with local enforcement practices. As a consequence of finding that

district enforcement actions were sometimes deficient, U.S. EPA has exercised its enforcement authority to seek higher penalties than sought by the districts in a number of cases.

The existing variation in local enforcement practices is due to a number of factors. First, to a large degree, the variation reflects the relative latitude districts have to establish their own enforcement policies, provided that these policies fit within broad statutory parameters. Second, as discussed below, the inconsistent tracking of enforcement actions and general lack of enforcement data reported to ARB result in variations in practices not being identified and addressed. Finally, some of the variation between smaller and larger districts' practices is likely explained by varying amounts of resources available for enforcement.

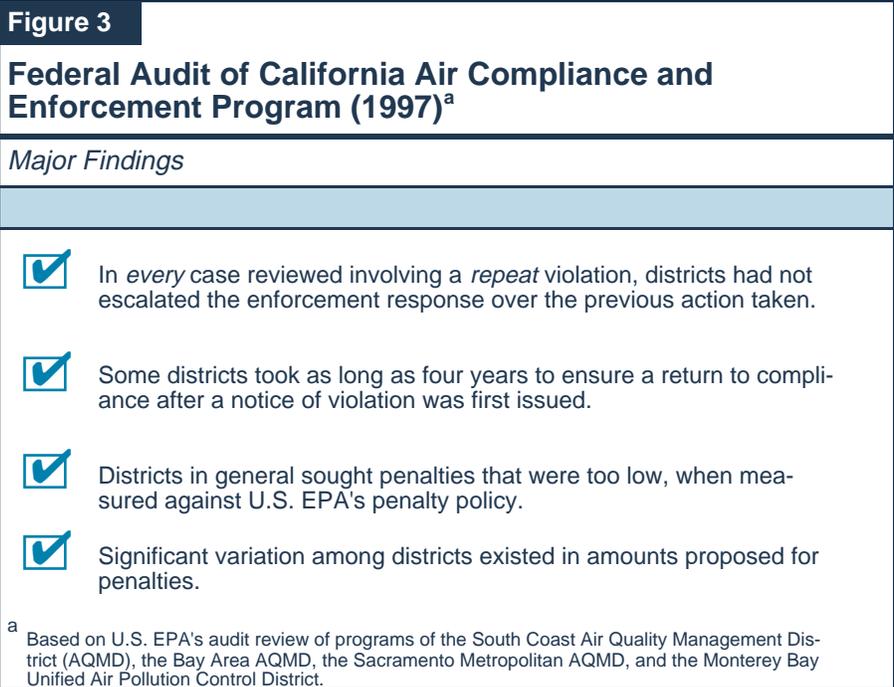
Recommendations to Improve Local District Enforcement Activities

In the following sections, we recommend that the Legislature take a number of actions to improve the consistency and effectiveness of local air quality enforcement. These actions include:

- ◆ Directing ARB to develop a statewide stationary source enforcement re-

sponse policy to guide local enforcement actions.

- ◆ Requiring the imposition of minimum penalties in cases of serious and chronic stationary source violations.
- ◆ Clarifying ARB's authority to take enforcement actions independent of the local air districts when the districts fail to take appropriate action.
- ◆ Requiring (1) standardized tracking of violation and enforcement response data by local districts, (2) routine reporting of enforcement-related information from the districts to ARB that is broader in scope and more detailed than currently reported, and (3) consideration by ARB of district





data management needs when it allocates subvention funds.

Expand ARB’s Enforcement Policy Direction.

Consistency and effectiveness in local enforcement do not dictate that there be a “one-size-fits-all” enforcement response to air quality violations statewide. Rather, we think that it is important for local districts to retain flexibility to develop the most effective enforcement response to a particular violation.

However, in order to make enforcement more consistent among the local districts for reasons discussed above, and to ensure that enforcement actions are appropriate, we believe that more state-level policy direction is warranted. To accomplish this, we recommend that the Legislature direct ARB to develop a statewide enforcement policy to guide local enforcement responses. There is precedent for adoption of such a policy in other environmental protection programs that have a local or regional enforcement component. For example, the Secretary for Environmental Protection (Cal-EPA) is currently developing regulations governing enforcement responses in the locally implemented hazardous materials program known as the Certified Unified Program Agency (“CUPA”) program.

The ARB policy guidelines should specify time frames after which enforcement should in general be escalated if a violation has yet to be corrected despite a previous enforcement action. As mentioned previously, violations in some districts have gone unabated for several years. The policy

should also specify a range of generally acceptable penalty amounts for particular types of violations, including a statutory requirement for mandatory minimum penalties (which we recommend below). In particular, we think that the policy should refine current guidance about how the repeat nature of a violation should factor into determining an appropriate penalty amount.

We think that a good model for developing statewide guidance on this latter issue is the recently revamped penalty policy of the Bay Area Air Quality Management District. Under this district’s policy, there are two separate paths for determining penalty amounts. Penalties for first-time violators (provided that they do not result in large emission increases due to the violation) are handled under a mutual settlement program with penalties ranging from \$250 to \$1,000 per violation. However, in cases where there were multiple days of a violation, large emission increases due to the violation, or multiple repeat violations, penalties are determined using a different set of formulae and are set at substantially higher levels.

Establish Mandatory Minimum Penalties for Chronic and Serious Violations. Although we believe that it is important for local air districts to have the discretion to determine the most effective enforcement response to a violation, within parameters set by statute and ARB, we also think that the state should ensure that penalties of a minimum amount are assessed in *certain* circumstances. Specifically, we find that where minimum penalties have been mandated by law for *serious* or *chronic* environmental violations, substantial

increases in compliance have resulted. This has been the experience in New Jersey, which in 1990 enacted minimum penalties for serious and chronic water quality violations. Since then, the number of water quality violations in New Jersey decreased by more than 60 percent. The New Jersey experience has also shown a policy of minimum penalties to be cost-effective, in large measure due to lower total enforcement costs resulting from a substantial increase in compliance.

While California also enacted legislation in 1999 mandating minimum penalties for water quality violations (Chapter 92, Statutes of 1999 [AB 1104, Migden] and Chapter 93, Statutes of 1999 [SB 709, Committee on Budget and Fiscal Review]), it is too early to assess the impact of this requirement on compliance levels. However, according to staff at the State Water Resources Control Board, waste dischargers appear to be paying more attention to water quality since the enactment of the minimum penalty law.

We think that mandating minimum penalties for serious and chronic stationary source violations could make local enforcement actions more consistent by prescribing a statewide standard for enforcement and, as shown by the New Jersey experience, would be cost-effective. The enactment of minimum penalties, however, should accommodate current practice whereby districts sometimes accept "mitigation" payments in lieu of cash penalty payments. These mitigation measures might include, for example, the purchase of

additional pollution control devices beyond what is required. Because such "in lieu" payments often provide additional air quality benefits, we recommend the enactment of legislation to mandate minimum penalties, with an accommodation for in lieu mitigation payments.

Clarify ARB's Enforcement Authority. Under current law, both ARB and the local air districts have authority to take enforcement action when there has been a stationary source violation. However, since current law makes the districts primarily responsible for this enforcement, the issue arises as to when ARB can preempt or override local action (or inaction) and initiate enforcement action independent of the districts. Current law is not clear on this point.

There is general agreement that ARB, when requested by the districts, can assist with or take an enforcement action related to stationary sources. Current law is also clear that ARB can assume a district's enforcement authority if the board finds after a public hearing that the district is failing to act *in general* to achieve state air quality standards. The ARB has invoked this authority only a couple of times in the last 30 years. Except for these two sets of circumstances, it is unclear when ARB can exercise its authority.

Given evidence that local air district enforcement could be more timely and effective, we recommend that ARB be given clear statutory authority to take enforcement actions against stationary source violations independent of the districts in order to improve enforcement. By



giving ARB this authority, local districts would likely be encouraged to act in a more timely manner. Even if a local district chooses not to act, ARB can initiate enforcement action to ensure that a violation does not go unabated for a long period of time.

However, we also think that there is a need to safeguard local discretion in taking enforcement actions. Accordingly, limits should be placed on ARB's authority to preempt local enforcement action. Specifically, we think that this authority should be limited to cases of serious or chronic violations. In addition, the authority should be triggered only after the local districts have been given a specific time period to initiate enforcement action and achieve compliance from the violator.

Standardize Tracking of Enforcement-Related Information and Enhance Local-to-State Reporting. We have identified a number of problems with the state's air quality enforcement data. First, neither state law nor ARB policy currently requires the local air districts to collect and track violation and enforcement data in a uniform manner. Predictably, the local districts vary significantly in how they approach this function. For example, some districts do not have a tracking system that links inspections with violations found during those inspections or that links violations with enforcement actions taken in response to a violation. Other districts do track such information.

Second, only limited information on violations and enforcement responses is reported regularly by the districts to ARB. For instance, local districts report monthly to the ARB certain enforcement-

related data that focus on *major* pollution sources in order to fulfill federal grant requirements. These data, however, represent less than 10 percent of all stationary sources in the state. Additionally, the data are generic in nature (such as whether or not a facility was in or out of compliance), and provide little detail on the type of violations and the enforcement actions taken in response to the violations.

Finally, where information is required to be reported, it frequently is not submitted by local districts to ARB. For example, districts are required to report excess emissions detected from facilities that must continuously monitor their own emissions. However, our review finds that only 14, or 45 percent, of the 31 districts that have such sources of emissions have been reporting to ARB as required. The ARB has not enforced this requirement. The board last sent an advisory to the air districts about the requirement almost five years ago. We recommend that the Legislature direct ARB to report on steps that the board can take to ensure that this statutory requirement is followed.

We think that ARB would be more effective in its oversight role if the districts uniformly track and report on more violation and enforcement-related information than currently. Therefore, we recommend that the Legislature take the following actions:

- ◆ ***Ensuring Compliance With Monitoring Requirements.*** The Legislature should direct ARB to report on steps that it can take to ensure that the statutory requirement for districts to report on excess

emissions from continuous emissions monitoring locations is met.

- ◆ **Standardization of Data Tracking.** The Legislature should direct ARB to work with local districts to establish and standardize the violation and enforcement response data to be tracked by the districts. In particular, data should be kept that link inspections with violations detected during those inspections, track violations from initial detection through resolution for all permitted stationary sources, and track the compliance history for each permitted facility.

District collection of this information in a uniform manner is important for a couple of reasons. First, such basic information helps the districts to effectively target enforcement expenditures since it identifies where compliance problems lie. Second, permittees' compliance history needs to be tracked in order to set appropriate penalties for violations.

- ◆ **Expansion of Local-to-State Reporting.** The Legislature should expand the information required to be reported to ARB to (1) encompass a broader group of stationary source violations and (2) provide more detailed information on the nature and impact of violations and the districts' enforcement responses. It is not practical or cost-effective to require the districts to report all violation and enforcement data to the state. Rather, the information

submitted should assist ARB in its oversight role. For example, expanded reporting requirements should allow ARB to identify cases where violations by a large number of smaller polluters collectively result in a major compliance problem to be addressed. In addition, ARB should be able to evaluate the appropriateness of the districts' enforcement responses. Finally, ARB should be able to determine whether there are statewide compliance issues pertaining to particular industries that necessitate changes to SIPs, its rule-making guidance to the local districts, or the targeting of its enforcement and compliance assistance expenditures.

In order to enhance its oversight role, ARB should be provided with the following information in addition to current requirements: (1) violations of minor (smaller) sources where a violation involved *an increase in emissions*, (2) sufficient detail on the nature and location of the violation, (3) the amount of any emission increase due to the violation, (4) the district's enforcement response to date, and (5) the target date for subsequent enforcement action.

- ◆ **Addressing Local Funding Requirements.** The Legislature should direct ARB to include funding needs for data management and reporting requirements as one of the criteria used to allocate grant funds to local districts. The tracking and reporting requirements recommended above



may place an additional financial burden on some air districts, particularly the smaller districts. Although districts have the authority to charge permit fees to cover their stationary source program costs, some districts have a small number of facilities on which to levy fees.

The state could ensure that the local districts meet these enhanced data requirements, as well as current reporting requirements, by including funding needs for these purposes as one of the criteria to allocate grants in an existing subventions program. For 2000-01, the state provided \$15.1 million in matching grants to the districts, primarily on a population basis, in order to help the districts carry out their air pollution control plans and programs. The Legislature stated its intent that this funding level be ongoing.

STATE REVIEW OF LOCAL PROGRAMS IS MINIMAL

Program Reviews Serve Important Purposes.

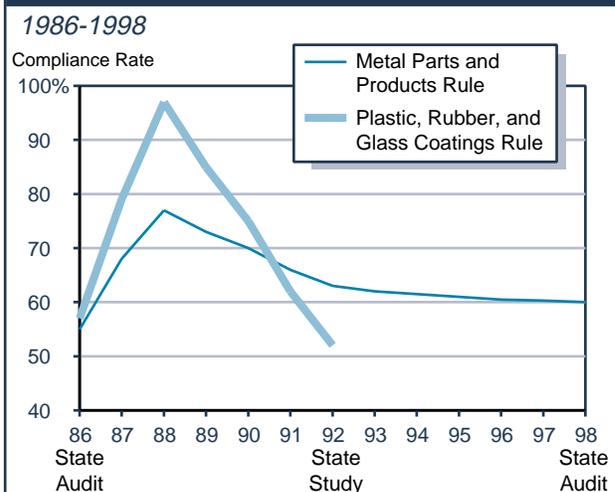
The ARB carries out various activities intended to enhance the effectiveness of local district programs—including adopting model rules, reviewing the districts' proposed rules, auditing the districts' monitoring networks, providing technical guidance to the districts, and conducting formal "program reviews." The program reviews can serve a particularly useful purpose. Specifically, by focusing on the districts' core activities of compliance assurance, enforcement, and permitting, these reviews help to ensure that local programs

are actually *functioning* on a day-to-day basis to meet the state's air quality goals contained in the local plans. Through these reviews, ARB can ensure that local enforcement is consistent and adequate. However, statute does not specify the frequency or comprehensiveness of these reviews.

We think that ARB's review of district programs should be conducted on a regular basis—particularly for the larger districts—because the "state of affairs" in districts can change rapidly. The level of compliance can change substantially over time, and infrequent program reviews would not detect these changes. For example, as shown in Figure 4, the compliance rate for two particular rules of the South Coast Air Quality Management District steadily declined throughout most of the 12-year period between the ARB's major program reviews of the district. Thus, findings from a program

Figure 4

South Coast Air District: Compliance Trends for Selected Rules^a



^aSource: Air Resources Board.

review in one year cannot be assumed to apply to future years. In addition, more frequent reviews are necessary to ensure that the air districts are implementing applicable federal and state law changes.

Program Reviews Not a Priority. In spite of their usefulness, reviews of local district programs are not a priority for ARB. Figure 5 shows that of the \$47.1 million budgeted for the ARB's stationary source program in 2000-01, only \$400,000 (four personnel-years)—less than 1 percent—is for program reviews.

As reflected in Figure 5, most of ARB's stationary source program expenditures are to operate programs for which it is primarily or jointly responsible with the districts, rather than for its oversight function. For example, the expenditures reflect ARB's responsibilities related to toxic air contaminants, consumer products, and agricultural burning as well as the requirement for ARB, in cooperation with the districts, to perform ambient

air quality monitoring. In implementing this latter requirement, ARB establishes monitoring stations to meet data needs not being met by local monitoring.

Figure 5

**Air Resources Board
Stationary Source Program Expenditures**

2000-01
(In Millions)

Program Area	Main Activities	Expenditures ^a
Monitoring and emissions inventory	• Ambient air quality monitoring and data analysis.	\$14.8
Research	• Research on health effects, indoor air quality, and innovative technologies.	6.1
Enforcement/compliance assurance	• Training of local enforcement officials, enforcement actions, compliance rate reviews, violation tracking and reporting, and compliance assistance.	5.3
Technical assistance to districts	• Development of suggested control measures and permitting assistance.	4.1
Toxic air contaminants	• Identification of toxic air contaminants, control measure development, and exposure assessments.	3.8
Administration	• Budgeting, personnel, executive, and other program support.	3.5
Air quality planning/modeling	• Coordination of local plans, assessment of cause and extent of air quality problems and progress made to address them.	2.7
Consumer products	• Regulation development and enforcement.	2.0
Technology/equipment certification and registration	• Evaluation of technology performance claims and certification of portable equipment for use in all districts.	1.7
Agricultural/open burning	• Regulation development, technical support to districts.	1.6
Review of district activities	• Rule review and review of variances from rules granted by districts.	0.9
	• Enforcement and permitting program review.	0.4
Regulation coordination with U.S. EPA		0.2
Total		\$47.1

^a As authorized in 2000-01 Budget Act.



While ARB's stationary source program expenditures in general appear consistent with its statutory responsibilities, we think that the relatively low priority given to program reviews has significant consequences. As discussed above, infrequent reviews are problematic. At the current staffing level, the board is able to perform reviews of only about 2 of the 35 districts each year. (A program review of a large district requires about 1.5 to 3 personnel-years, while a review of a small district typically requires about one-half of a personnel-year.) In fact, during the last six years, ARB has conducted detailed program reviews of only four districts, albeit larger districts including the South Coast Air Quality Management District. According to our discussions with ARB, it would take 20 years to perform a good program review of *all* districts with current staff.

Board Has No Schedule for Program Reviews.

The ARB does not plan to conduct any detailed program reviews of any district in 2000-01. Instead, it plans to evaluate compliance rates of a few particular types of stationary sources in a number of districts. Also, ARB has no long-term schedule for conducting program reviews of particular districts. According to ARB, this is for a couple of reasons. First, to the extent the schedule shows that a district will not be reviewed for several years, such a schedule removes an incentive for a district to maintain a quality program until shortly before the review. However, we believe that any incentive for districts to be less concerned about program quality between reviews would be removed if the reviews were

frequent. Second, ARB stated that it needs to be flexible in directing its resources in order to respond to changing problems at the district level. However, we think that the department can budget and still have flexibility to adjust to changing circumstances.

We think that ARB's oversight of the local air districts would be improved if program reviews were conducted on a regular basis so as to identify problems in their early stages of development, rather than later. This would allow problem areas to be addressed much more cost-effectively.

Recommend ARB Submit Expenditure and Work Plan for Enhanced Program Reviews. To ensure that the state's air quality objectives are achieved, we think that it is necessary for ARB to perform timely and thorough reviews of local air district programs, including enforcement practices. Therefore, we recommend that the Legislature direct ARB to submit an expenditure and work plan for the board to perform timely reviews of local district programs. This plan should include a time schedule for completing reviews of all 35 districts—or of at least those districts out of attainment with air quality standards—over the next five years. The plan should also identify resources needed to effectively meet the board's statutory oversight responsibilities. We think that the board would need to spend around \$1 million annually to complete program reviews of all districts over a five-year period.

CONCLUSION

In summary, we think that air quality regulation in the state can be made more effective by enhancing the state's direction and oversight of local air district programs. Specifically, we recommend the adoption of a statewide enforcement policy, the enactment of mandatory minimum penalties, improved local enforcement database tracking and local-to-state reporting, and clarification of ARB's enforcement authority. We think that each of these changes will serve to make stationary source enforcement more consistent and effective on a statewide basis.

Finally, we believe that ARB's legislatively mandated reviews of local air district programs serve an important role in ensuring that the state's air quality objectives are met. Given that these reviews have been performed infrequently, we recommend that ARB develop a work and expenditure plan that provides for timely reviews of local district programs.



Acknowledgments

This report was prepared by Mark C. Newton, under the supervision of Dana Curry. The Legislative Analyst's Office (LAO) is a nonpartisan office which provides fiscal and policy information and advice to the Legislature.



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