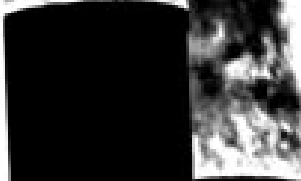


ABOVE THE LAW

How California's Major Air Polluters
Get Away With It

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Contents

FOREWORD	i
EXECUTIVE SUMMARY	1
CHAPTER 1. ABOVE THE LAW	5
CHAPTER 2. FINDINGS	9
CHAPTER 3. WHAT'S THE PROBLEM?	15
APPENDIX 1. CLEAN AIR ACT PROGRAMS AND ENFORCEMENT INITIATIVES	21
APPENDIX 2. METHODOLOGY	24
REFERENCES	26

Foreword

Like most law-abiding Californians, you probably take your car in for a smog test every year. If the car flunks, you have little choice but to pay to get it fixed. It's something all of us do to help keep the air clean. Besides, it's against the law to skip an inspection or keep driving a car that failed the test. If you're caught you risk a stiff fine — one that hits your bank account hard enough to make you think twice about doing it again.

But that's not the way the system works for some of the state's biggest industrial air polluters like the Shell, Tosco, Exxon and Chevron refineries in the East Bay, Texaco in Los Angeles and Bakersfield, or the Louisiana-Pacific paper mill in Humboldt County.

Fully three-fourths of California's refineries, mills and other factories surveyed have committed violations of federal or state clean air laws since 1996. That's the same year a federal audit was conducted that blasted California's air pollution enforcement efforts as inadequate to deter big polluters. Now an Environmental Working Group analysis of the newest federal

and state data shows that nothing has changed: Major polluters who repeatedly violate the law get slapped on the wrist with fines that constitute a ridiculously small fraction of their corporate parents' multibillion-dollar profits.

That's the sorry state of affairs we found when we examined a new database the U.S. Environmental Protection Agency has compiled to determine the clean air compliance record for various industries. EPA's regional audits have found a nationwide pattern of lax enforcement of the federal Clean Air Act. The agency, not surprisingly, also found that pollution drops significantly when clean air inspections are more frequent and violators receive meaningful fines.

This double standard for polluters and the public is neither fair nor just — not to those of us who make sure our cars pass the tailpipe test each year, not to the many companies that abide by the environmental rules their competitors violate with impunity, and not to the California communities whose health and safety are threatened by toxic industrial chemicals in the air they breathe.

Three-fourths of California's refineries, mills and other factories surveyed have committed violations of federal or state clean air laws since 1996.

Big polluters continue to rack up violations, pay minuscule fines and return to business as usual.

For big polluters, getting off the hook on environmental laws is a routine part of doing business.

Nationally, EWG's analysis found that 41 percent of U.S. oil refineries and a third of iron and steel plants are significant violators of the Clean Air Act. Federal law authorizes regulators to penalize air polluters up to \$25,000 a day of violation (though usually not more than \$200,000 total).

But for the most part, the fines are not levied at all. EWG found 53 major U.S. polluters out of compliance with the Clean Air Act every quarter for two straight years. Only 20 of them paid fines, and a handful of firms accounted for nearly all the penalties.

States have the lead responsibility to enforce federal clean air laws, with the EPA providing oversight. California further delegates most enforcement authority to its air quality management districts, and some local air district officials argue that they're doing a better job than the data suggest. They say the large number of violations settled

for paltry fines is because they aggressively issue notices for every violation, no matter how "insignificant."

Clearly, the system isn't working: Refineries and other facilities continue to rack up violations, pay minuscule fines and return to business as usual. This pattern, clearly borne out by the data, casts serious doubt on a favorite argument by the opponents of national environmental standards: "Turn enforcement over to the states. Local regulators know best."

Maybe. But the rest of us know that environmental laws are in place, and should be obeyed, for good reason: to protect the health and safety of our families and our communities. We know we have to play by the rules, because protecting public health is everyone's responsibility. This EWG report shows that California's state and local regulators are letting major polluters off the hook, and the federal government is sitting back and watching it happen.

It's something to think about while waiting in line for your next smog test.

**Kenneth A. Cook, President
Environmental Working
Group**

Executive Summary

Two years after a federal investigation found California's clean air enforcement programs inadequate to stop big polluters, an Environmental Working Group (EWG) analysis shows that many of the state's largest industrial facilities continue to break the law and pay fines too small to deter repeat offenses.

EWG's analysis of recently released enforcement records finds a clear and persistent pattern of violations of federal and state clean air laws in five major California industries — oil and chemical refineries, pulp and paper mills, auto plants, iron and steelmaking and metal smelters. Since 1996, three-fourths of the California facilities in those categories surveyed by the U.S. Environmental Protection Agency (EPA) had at least one violation of state or federal clean air regulations or paid a fine to settle an earlier violation. By EPA's standard, three out of four violations were significant, meaning they triggered orders to take corrective action.

The six most frequently cited offenders in the EPA's California survey all are oil refineries. All are found within a 15-mile

radius in Contra Costa County or just across San Pablo Bay in Benicia. (Table 1.)

They include the Tosco Avon refinery near Martinez, where a fire in February 1999 killed four workers, and the Chevron refinery in Richmond, where an explosion in March 1999 forced hundreds of Contra Costa County residents to seek emergency hospital treatment. Two years earlier, also at Tosco in Martinez, an explosion killed one worker and injured 26. The Tosco facility tied with the Shell refinery in Martinez for the most violations in the period surveyed — 115 each. The Chevron refinery was the fourth-worst offender, with 75 violations.

Since 1996 these six East Bay refineries — Shell in Martinez, Tosco in Martinez and Rodeo, Exxon and Huntway Refining in Benicia and Chevron in Richmond — were cited for 481 violations of state and federal air quality regulations and resolved 380 violations for an average penalty of about \$699 per offense. These six refineries accounted for almost 80 percent of statewide violations, but paid just 17 percent of statewide fines.

The most frequently cited air polluters in California are all oil refineries in the East Bay.

Table 1. California facilities with the most clean air violations, 1996-1999.

Name	City	County	New Violations	Violations Resolved	Fines Paid	Average Fine Per Violation	Total Revenues (1998) of Parent Company
Shell Oil Company	Martinez	Contra Costa	115	112	\$66,391	\$593	\$14,451,000,000
Tosco Corporation	Martinez	Contra Costa	115	77	\$43,127	\$560	\$12,021,527,000
Exxon Corporation	Benicia	Solano	113	58	\$51,428	\$887	\$117,772,000,000
Chevron USA Inc.	Richmond	Contra Costa	75	74	\$59,506	\$804	\$30,557,000,000
Tosco Corporation	Rodeo	Contra Costa	41	37	\$31,638	\$855	\$12,021,527,000
Huntway Refining Co.	Benicia	Solano	22	22	\$13,493	\$613	\$79,050,000
Totals			481	380	\$265,583	\$699	\$31,150,350,667

Source: Environmental Working Group. Compiled from IDEA/SFIP/AFS data and company Annual Reports as reported to the U.S. Securities Exchange Commission.

Bay Area refineries committed eight times as many violations as L.A. County refineries, but the average fine per violation paid by the Southern California facilities was more than 28 times the Bay Area average.

The total amount of fines paid by the six refineries over two and a half years, or \$265,583, is less than one percent of the daily revenue of the smallest of the parent companies — Tosco, with more than \$12 billion in 1998 revenues.

All six of these refineries are under the jurisdiction of the Bay Area Air Quality Management District in San Francisco (BAAQMD), to which the EPA delegates most enforcement activity. The air district contends that the high number of violations cited and low amount of fines paid are evidence that it is aggressively doing its job, by issuing a citation for every violation, no matter how “insignificant.” But there is a startling disparity between the BAAQMD’s enforcement activity and that of the South Coast Air Quality Management District in Los Angeles (SCAQMD): Bay Area refineries committed eight times as many violations as L.A. County refineries, but the average fine per violation paid by the Southern California refineries was more than 28 times the Bay Area average.

This analysis is based on compliance and enforcement records for 32 large facilities in California. These records, compiled for a EPA pilot project called the Sector Facility Indexing Program (SFIP), have been audited by state and federal regulators and by the regulated industries themselves. Unlike other environmental databases such as the federal Toxics Release Inventory, which the EPA admits is riddled with errors, the SFIP files are touted by the Agency as the most reliable enforcement data available. They show:

- Twenty-four of the 32 facilities committed at least one violation of state or federal clean air regulations, or paid at least one fine to settle an earlier offense, over the past two and a half years. These 24 facilities were cited for an average of 25 violations each.
- The fines levied were almost always too small to effectively deter repeat violations. During the survey period, the 32 facilities resolved 509 violations for a combined

\$1.6 million in penalties¹. The average fine paid during the survey period was about \$3,000, but for the publicly held companies cited, the average 1998 revenue was more than \$23 billion.

- The health risks and other impacts of the air pollution from these facilities fall disproportionately on people of color. According to the EPA, 60 percent of the people living within three miles of these facilities were non-Anglo, compared to 51 percent for the nine counties where the facilities were located.

The EPA delegates most clean air enforcement activity to the California Air Resources Board. The ARB in turn delegates day-to-day authority to 34 local or regional Air Quality Management Districts (AQMDs). But both the EPA and the ARB are charged with oversight, and may intervene if a local district's enforcement is inadequate. From the data, it is clear that federal, state and local officials share responsibility for failing to consistently, effectively or fairly enforce clean air laws in California.

Although the majority of California's air pollution comes from automobiles, meaningful progress toward cleaner air

could be achieved with strict enforcement of current laws and regulations on industrial emissions. Instead, weak enforcement permits industrial facilities to contribute to unhealthy amounts of air pollution, even as their owners fight against stricter standards or lobby for rollbacks of clean air laws under the guise of "regulatory reform" — shorthand for proposals to further relax the enforcement of environmental regulations. The regulatory record in California and other states shows that companies will rarely comply with the Clean Air Act, or any other environmental law, unless the law is given teeth — stepped-up enforcement, stiffer penalties and tougher oversight from every level of government.

Conclusions and Recommendations

EWG's analysis of enforcement records, audited by federal and state officials and the polluters themselves, reveals a pattern of routine disregard for federal and state clean air laws by major companies in five California industries. Enforcement is spread ineffectively among federal, state and local authorities, denying Californians the health protections the law is supposed to provide. The level both of compliance and enforcement is abysmal.

Companies will rarely comply with the Clean Air Act, or any other environmental law, unless the law is given teeth.

¹This excludes the fines paid in 1998 by Sunland Refining in Bakersfield. Sunland has been closed since 1995, when an explosion killed one person.

Penalties for repeat violators must be mandatory, should increase with each new offense, and be large enough to curtail future violations.

This level of illegal activity would not be tolerated under laws regulating other areas of society or commerce. The situation continues in part because most Americans have no way of knowing how routinely the clean air laws are violated or how poorly they are enforced. This EWG study, part of a national analysis of U.S. Clean Air Act compliance, is the first in a planned series of environmental enforcement reports. (The national analysis and other state-level reports are available online at www.ewg.org.)

EWG recommends:

- The California Legislature must limit the enforcement discretion of local air districts so that repeat violators don't escape unpunished. Penalties for repeat violators must be mandatory, should increase with each new offense, and be large enough to curtail future violations: Current state regulations limit most fines to \$1,000 unless the enforcement agency can prove that a company intended to break the law. New Jersey's "three-strikes" law, which escalates minimum fines according to the number and nature of repeat offenses, provides a good model for California.
- Congress must not pass "regulatory reform" legislation that will slow down the implementation and enforcement of public health standards or pollution controls mandated under the Clean Air Act or any other environmental law.
- The San Francisco regional office of the EPA should exercise its authority and intervene in cases where local regulators don't follow the Agency's guidelines for effective enforcement against high-priority violators, and bring these persistent offenders into compliance with the law.
- EPA should help California communities participate in the development and enforcement of air pollution permits issued under Title V of the Clean Air Act. Region 9 should monitor state implementation of Title V programs to ensure that information on compliance is readily understandable by and available to the public.
- Local air districts, the ARB and the regional and national EPA must work together to eliminate the serious data gaps and inter-agency conflicts in the state's air pollution reporting system. An effective enforcement and compliance program requires meaningful, reliable and publicly accessible data.

Above the Law

A series of catastrophic explosions and fires at petroleum refineries in the San Francisco Bay Area has raised serious questions about the safety of refineries and other aging industrial facilities in California. In February 1999, a flash fire at the Tosco refinery near Martinez killed four workers. One month later, an explosion at the Chevron refinery in nearby Richmond forced hundreds of Contra Costa County residents to seek emergency hospital treatment. Two years earlier, also at Tosco in Martinez, an explosion killed one worker and injured 26 others.

These high-profile accidents have outraged the public and prompted local and state officials to call for tougher safety standards. But federal and state data show that throughout the United States, thousands of large companies like Tosco and Chevron routinely violate their pollution permits, exposing workers and surrounding communities to health risks from toxic chemicals in their air and water. For the most part, these “business as usual” environmental offenses escape public

notice — as well as punishment by environmental regulators.

It turns out to be quite difficult for citizens to learn the compliance status of any given facility. Public inquiries are too often met with the bureaucratic refrain that the facility is “in compliance with the law.” (During our investigation, for example, EWG learned that facilities may be cited for repeated violations of the same regulation, but remain technically in compliance if they submit a schedule for correcting the problem). If concerned citizens assert their right to learn about industrial pollution under the Toxics Release Inventory (TRI) the available data are, by the EPA’s own admission, likely to be outdated, incomplete or misleading.

In the mid-1990s, EPA initiated a pilot project the Agency said would provide access to more environmental information “than has ever before been available to the public in one location.” The project, called the Sector Facility Indexing Program (SFIP), attempts to pull together various sources of air pollution data in an easy-to-understand format. For the pilot project, EPA surveyed

Federal and state data show that thousands of large companies routinely violate their pollution permits, exposing workers and surrounding communities to health risks from toxic chemicals in their air and water.

“Not Effective”: EPA’s Audit of California Enforcement

In California, 98 percent of all enforcement actions against major stationary air pollution sources are taken by the state’s 34 local or regional air districts. As the EPA notes, “The success of the air enforcement program in California is largely dependent on the aggressiveness of local air districts’ programs.”

In 1996, the EPA Inspector General initiated an audit to assess the aggressiveness and effectiveness of the clean air enforcement program in California. Its objectives were to determine whether enforcement programs were designed to deter companies from violations and whether the programs were effectively tracking enforcement actions.

The EPA audit’s euphemistic verdict: “The air compliance and enforcement program... was not as effective as it could have been.” But U.S. Rep. George Miller of Martinez, one of the leading environmentalists in Congress, was more blunt: “The fines are too low, the fines don’t achieve deterrence and the enforcement actions aren’t timely.

The report . . . validates [community] concerns with respect to whether the [Bay Area] air board is doing an adequate job.” (Kay 1997.)

The inspector general warned that the four local air districts audited — for the Bay Area, Los Angeles, Sacramento and Monterey metropolitan regions — were not escalating enforcement actions for repeat violations. About half of the cases examined involved repeat offenses, but “none were escalated to a more stringent enforcement action or a significantly higher penalty.” The audit said the districts were not proposing penalties high enough according to EPA guidelines; appropriately justifying reductions in proposed penalties; resolving cases in a timely manner or adequately publicizing their enforcement activities.

The audit also criticized EPA’s San Francisco regional office as “not effective” in tracking enforcement actions because of inaccurate data. Sixty percent of the completed enforcement actions by four local air

facilities in five major industrial sectors that release “relatively high levels of chemicals” — petroleum refining, pulp and paper, iron and steel, metals smelting and refining, and auto assembly. The agency asked both the industries targeted and state-level regulators to review the environmental enforcement data for accuracy. The EPA considers the SFIP data the most accurate and reliable information available for the industries surveyed (EPA 1999).

EWG’s analysis is based upon state-level data used to compile the SFIP. It covers air pollution violations and enforcement at 32 California facilities from Jan. 1, 1996 through June 15, 1999.

The EPA survey period also covers the two years since the Agency’s inspector general issued an audit of California’s clean air enforcement efforts. The audit found that local air districts, which carry out almost all enforcement actions on major

districts didn't show up in the regional office's databases. It also said that improvements in the program would only occur if the regional EPA took a more aggressive role in enforcement actions against high-profile violators.

Facilities examined in the audit continued to pollute with little fear of retribution. The average fines amounted to little more than pocket change to facilities owned by multi-billion dollar companies. Average fines in the state ranged from a high of \$2,792 in the South Coast Air Quality Management District in Los Angeles to a minuscule \$426 assessed by the Bay Area Air Quality Management District in San Francisco.

Examples of lax enforcement cited in the audit included:

- "A glass manufacturing company was issued a [violation] for excessively emitting particulate matter from its glass melting

furnace. In response . . . the company paid a penalty of \$1,000. . . . The company was cited for the same violation a total of 18 times within a two year period. In each case, a penalty of \$1,000 was proposed. In addition, during this same period, the company was issued nine [violations] for failure to report indicated excesses. These [violations] resulted in an average proposed penalty of \$645 . . . "

- "The South Coast Air District issued a [violation] against an oil refinery for creating a public nuisance caused by strong odors from a gasoline spill. The public nuisance violation resulted in a proposed penalty of \$7,500. Our review of the company's compliance history indicated the [air district] had issued 10 previous [violations] within a 12 month period for public nuisance violations."

stationary sources of pollution, were not issuing fines large enough to encourage compliance or deter repeat offenders. (See "Not Effective," above.)

The audit warned that the situation would only improve if EPA's Region 9 office, based in San Francisco, took a more aggressive stand in overseeing

local districts' enforcement efforts and intervening in high-profile cases. Instead, nothing has changed: According to the Agency's own quality-checked data, California's local air districts continue to let big air polluters off the hook, and the EPA continues to watch it happen (EPA 1997b).

Findings

The California facilities in this analysis are all large industrial factories. Twenty-five of the 32 facilities are involved in petroleum refining, five are pulp and paper mills, one is an iron and steel maker and one is an auto assembly plant. According to the Toxics Release Inventory, these facilities reported combined releases of 100,000 pounds of carcinogens into the air in 1996. Counting all hazardous chemicals released into the air or water, the facilities emitted 13 million pounds of toxins in 1996, an average of more than 400,000 pounds each.

The majority of the facilities considered here are chronic violators of state and federal clean air regulations. Seventy-five percent, or 24 of 32, received at least one citation for violation of clean air standards, or paid at least one fine to settle an earlier offense, between January 1, 1996 and June 15, 1999. (Table 2.) These facilities were cited for a total of 603 violations. On average, each facility was cited 25 times in this 30-month period.

There are serious and disturbing conflicts between the en-

forcement records of the state and the EPA. (See "Regulatory Roulette," page 11.) But of the 603 Notices of Violation issued by the state's local districts, by the EPA's standard 446, or 73.9 percent, were significant enough to trigger orders for corrective action.

The Tosco and Shell refineries in Martinez were the most frequently cited facilities in the state, with 115 violations each. The Exxon refinery in Benicia was cited 113 times. Those three facilities, located less than five miles apart on either side of the Carquinez Strait, received more citations than the state's other 21 offenders combined.

Of the seven worst offenders in the state, six were refineries in Contra Costa County or adjacent Solano County, all in the jurisdiction of the Bay Area Air Quality Management District. The seven Contra Costa or Solano refineries on the full 32-company list recorded a total of 488 violations, compared to 58 citations for the nine refineries listed in Los Angeles County, which are regulated by the South Coast Air Quality Management District. The Contra Costa and Solano facilities re-

Three East Bay refineries, less than five miles apart, received more citations for violating clean air laws than all other facilities in the state.

Table 2. California facilities in the EPA's 1996-1999 compliance survey.

Company	City	County	New Violations	Violations Resolved	Fines Paid	Average Fine Paid Per Violation Resolved
Shell Oil Company	Martinez	Contra Costa	115	112	\$66,391	\$593
Tosco Corporation	Martinez	Contra Costa	115	77	\$43,127	\$560
Exxon Corporation	Benicia	Solano	113	58	\$51,428	\$887
Chevron USA, Inc.	Richmond	Contra Costa	75	74	\$59,506	\$804
Tosco Corporation	Rodeo	Contra Costa	41	37	\$31,638	\$855
Huntway Refining Co.	Benicia	Solano	22	22	\$13,493	\$613
Arco Product Co.	Los Angeles	Los Angeles	20	21	\$208,525	\$9,930
Gaylord Container Co.	Antioch	Contra Costa	15	11	\$4,509	\$410
Mobile Petroleum Co. Inc.	Torrance	Los Angeles	15	18	\$156,742	\$8,708
Kern Oil & Refining Inc.	Bakersfield	Kern	14	16	\$6,210	\$388
Texaco Refining and Marketing	Bakersfield	Kern	12	13	\$1,100	\$85
Louisiana Pacific Corp.	Samoa	Humboldt	10	9	\$8,250	\$917
Chevron USA, Inc.*	El Segundo	Los Angeles	8	8	\$481,050	\$60,131
Pacific Refining Company	Hercules	Contra Costa	7	8	\$5,450	\$681
San Joaquin Refining Co., Inc.	Bakersfield	Kern	5	4	\$2,500	\$625
Texaco Refining and Marketing	Wilmington	Los Angeles	5	6	\$353,250	\$58,875
Tosco Corporation	Wilmington	Los Angeles	4	4	\$13,250	\$3,313
Paramount Petroleum Corp.	Paramount	Los Angeles	3	2	\$7,250	\$3,625
Lunday Thagard Co.	South Gate	Los Angeles	2	4	\$40,300	\$10,075
Powerline Oil Company	Sante Fe Springs	Los Angeles	1	1	\$2,500	\$2,500
Tosco Corporation	Arroyo Grande	San Luis Obispo	1	3	\$19,860	\$6,620
Sunland Refining Corp.**	Bakersfield	Kern	0	2	\$2,500,000	\$1,250,000
Ultramar Inc.	Wilmington	Los Angeles	0	1	\$2,000	\$2,000
Huntway Refining Co.	Wilmington	Los Angeles	0	0	\$0	N/A
NUMMI	Fremont	Alameda	0	0	\$0	N/A
Simpson Paper Co.	Pomona	Los Angeles	0	0	\$0	N/A
Simpson Paper Co.	Anderson	Shasta	0	0	\$0	N/A
Smurfit Newsprint Corp. of Cal.	Pomona	Los Angeles	0	0	\$0	N/A
TAMCO	Rancho Cucamonga	San Bernardino	0	0	\$0	N/A
Texaco Refining and Marketing	Long Beach	Los Angeles	0	0	\$0	N/A
Witco Corporation	Oildale	Kern	0	0	\$0	N/A
Totals (Excluding Sunland Refining)			603	509	\$1,578,329	\$3,101

Source: Environmental Working Group. Compiled from IDEA/SFIP/AFS data.

*This includes two Chevron facilities at the same location.

**Following a 1995 explosion that killed one person, Sunland shut down operations for good. The fines listed here were paid to resolve all outstanding air violations. For statistical purposes, Sunland totals were not included in EWG calculations.

solved 388 violations and paid total fines of \$211,333, for an average penalty of \$699. The Los Angeles County refineries resolved 65 violations and paid a total of more than \$1.2 million, for an average penalty of \$19,459. The average of the total amount of fines paid by refineries during the survey period was \$140,541 in the South Coast

District and \$38,719 in the Bay Area (Table 3.)

This marked difference in citations and fines by the state's two largest air districts raises questions that can not be answered from the data. Either the Southern California refineries have a much better compliance record than those in the East

Regulatory Roulette: Conflicts Between State and Federal Data

To understand the clean air enforcement picture in California, it helps to know that state and federal regulators keep two different sets of records that are closely related but don't exactly match.

When an air district issues a citation ("Notice of Violation," or NOV), it is recorded by date, but not by the amount of penalty. Looking at NOVs can provide an accurate indication of how many citations were issued, but gives no indication of how well the air district followed through on the citation.

Federal data systems also record "Violations Resolved." It's a good indicator of how much the polluters paid in fines during a specified time period, but it too can be misleading. Violations are sometimes resolved on the spot with small fines or no fine, but other cases are not resolved for years. As a result, some penalties paid during the two and a half years examined by the EPA are for violations during the same period, but others may be for earlier citations. The closest match was between violations resolved and fines paid, and our calculations of average fines paid are based on that assumption.

As an example, we found that local air districts in California issued 603 NOVs between Jan 1, 1996 and June 15, 1999. During that same time period they resolved

a total of 511². In other words, some of the penalties paid were for violations prior to January 1996 and some of the citations had not been resolved by June 1999.

Accurately characterizing the nature of the violations in California was an exercise in frustration. Nationally, the EPA considers all incidents recorded in the Sector Facility Indexing Program to be significant violations. But the way California, as compared to the rest of the country, counts and records the number of violations means that statewide SFIP data is not as good an indicator of conditions at the facilities as the local district data used to compile it. Although the SFIP files usually include only the more serious offenses, the Notices of Violation issued by local districts are more reliable gauges of a facility's overall compliance.

The conflicts between the state and federal record systems are so serious that some state and federal regulators, who spoke only on condition of anonymity, maintain that no accurate conclusions can be drawn from the statewide SFIP data. This is intolerable: The reason such records are kept in the first place is to inform the public about environmental compliance in their communities. How much money — money that could be used to beef up enforcement — are the state and EPA spending to keep records they refuse to stand behind?

²This total includes two violations resolved by Sunland Refining of Bakersfield after the facility closed in 1995.

Table 3. Enforcement activities against oil refineries in two California air districts.

District	Refineries	New Violations	Violations Resolved	Total Fines	Average Fine Per Violation Resolved	Average Fine Per Facility
Bay Area	7	488	388	\$271,033	\$699	\$38,719
South Coast	9	58	65	\$1,264,867	\$19,459	\$140,541

Source: Environmental Working Group, compiled from U.S. EPA SFIP/IDEA databases, 1999.

The four Tosco refineries account for 13 percent of the total number of facilities but were responsible for 27 percent of the violations.

Bay; or the South Coast district, which has pioneered and implemented the nation's toughest clean air rules, is ignoring, missing or failing to report violations its Northern California counterpart is citing; or the South Coast district's larger fines are a more effective deterrent to high numbers of violations. Bay Area air district officials defend their performance, arguing that the high number of citations settled for small fines shows that they are aggressively citing every violation, even minor ones.

Tosco, with four facilities in the survey, had 161 citations, more than any other company in the state. The four Tosco refineries account for 13 percent of the total number of facilities but were responsible for 27 percent of the violations. Tosco paid 121 fines during the survey period, averaging \$1,440. The average penalty paid by all other companies surveyed was \$3,600.

Statewide, the biggest fines were assessed against the Texaco refinery in Wilmington, Los Angeles County, which paid \$363,250 to resolve six violations,

an average of \$58,875 per violation. The Texaco refinery in Bakersfield was fined the lowest amount, paying \$1,100 to settle 13 violations, for an average of about \$85 per citation.

The fines clearly were not enough to deter additional violations. The 32 companies, in total, paid \$1.6 million to resolve 509 violations, an average of \$3,000 per violation. Almost all of the facilities are owned by publicly held companies, whose 1998 revenues averaged \$23 billion.

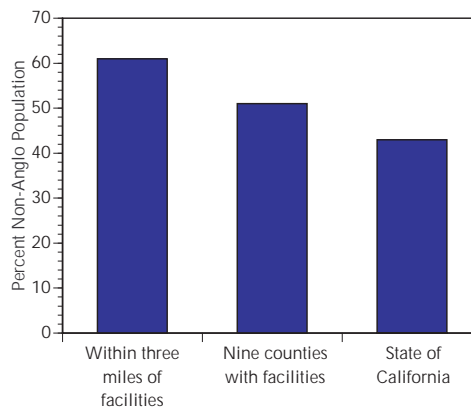
By comparison, residents of Contra Costa County, where four of the six worst offenders are located, have median income of about \$36,000 a year, second-highest in the state (FTB 1999). If a median-income Contra Costa resident were assessed a smog-violation fine equivalent to what the state's big polluters paid, it would be several orders of magnitude smaller than one cent.

The health risks of the air pollution from the facilities surveyed, particularly the refin-

eries, fall disproportionately on people of color and low-income Californians. According to the EPA, which used 1990 U.S. Census figures, 60 percent of the people living within three miles of the surveyed facilities were non-Anglo, compared to a 1990 non-Anglo population of 51 percent in the nine counties where the facilities are located and 43 percent statewide. (Fig. 1.) (Currently, California is estimated to be 52 percent non-Anglo.)

Other than refineries, the most often cited California offenders were Gaylord Container Corp. in Antioch, with 15 violations during the survey's time period, and the Louisiana Pacific paper mill in Humboldt County, with 10 citations. Gaylord, which is under the jurisdiction of the Bay Area air district, resolved 11 citations during the period surveyed, for an average of \$410 each. Louisiana Pacific, which is under the North Coast Unified AQMD in Eureka, resolved nine violations for an average of \$917 per citation.

Figure 1. Non-Anglo population is higher near big air polluters.



Source: Environmental Working Group.
Compiled from U.S. EPA SFIP data and
California Department of Finance
Demographics Unit.

*These estimates are based on U.S. Census Data (1990). There are more recent county and statewide estimates, however, these estimates do not provide adequate detail to analyze the populations surrounding facilities.

What's the Problem?

Nationwide, a large majority of the violations analyzed by EWG are considered significant, meaning they directly impact public health and air quality. EPA's guidance on "significant violators" and the new definition for high priority violations defines a violation for major sources as any violation of emissions or monitoring standards, any substantial procedural violation, or any violation of a federal or state administrative order. Minor sources must be listed as "significant violators" when they are in violation of emissions standards.

One indicator of the nature of the violations is the action the facility must take to correct the problem. Violations that require the installation of pollution control equipment or changes to operating procedures are most often more serious than violations that require only administrative action. Other procedural violations, like the failure to apply for a permit or monitor for excess emissions, can also be serious, even if they don't ultimately require changes to operating procedures, because they make it impossible to enforce the law.

In its 1997 and 1996 regional audits, EPA analyzed enforcement actions. Nationwide, in fiscal year 1997, 40 percent of the actions required the installation of pollution control equipment, a change in operating procedures, or some other removal or remediation. The 1996 report disclosed similar findings. The majority of the remaining cases required some form of testing, monitoring, or other major procedural change within the plant (EPA 1996, EPA 1997a).

Big polluters frequently argue that these are only minor "paperwork" violations, such as record-keeping. But almost none of the actions brought against companies in our national analysis are for record-keeping violations. In both 1997 and 1996, less than two percent of Clean Air Act violations were resolved through changes in record-keeping. (EPA 1996, EPA 1997a).

Adequate enforcement has important short- and long-term air quality benefits. In the enforcement audits, EPA listed the pollutant reductions that resulted from the actions. Although EPA only had specific pollutant data for 11 percent of the reported

Procedural violations can also be serious, because they make it impossible to enforce the law.

Table 4. Enforcement of the Clean Air Act can result in substantial pollution reductions.

Pollutant	Reduction (U.S. Total, in pounds)
Volatile Organic Chemicals	62,562,000
Particulate Matter	24,555,000
Carbon Monoxide	21,502,000
Propane	20,014,000
Polynuclear Aromatic Hydrocarbons	14,400,000
Lead	10,297,000
Benzene	7,666,000
Cement Kiln Dust	6,000,000
Toluene	998,000
Chlorofluorocarbons	427,000

* The above figures represent reductions at just 11 percent of facilities where enforcement actions were taken.

Source: EPA 1997 Enforcement Report.

cases, the pollutant reductions were substantial (Table 4). Nationwide, in 1997 these reductions included 87 million pounds of carcinogens, soot and smog-forming pollutants. (EPA 1997a).

Environmental Fines: The Cost of Doing Business

What explains the widespread violations of environmental laws and the lack of enforcement? Environmental compliance is a relatively low priority at many facilities. Businesses realistically figure that the economic advantages they gain by not complying with the law outweigh the slight chance of government enforcement action against them. Indeed, this calculation has been borne out in many cases (EPA 1997b). Budget cuts and lack of

political will often account for the lackluster performance of environmental enforcement agencies. And insufficient public information about the performance of facilities makes it easier for the situation to continue.

One of the main constraints to strong enforcement is that the public has no easy way of knowing about the scope of environmental violations, the specific identity of local violators, the consequences of the violations, and the non-performance of state enforcement agencies. Even in federal data published on the Internet, there are still many unanswered questions relating to the facilities. And with the public in the dark, chronic violations of environmental laws and lack of enforcement rarely emerge as public issues. As a result, there is no pressure on industry or government to improve compliance or enforcement.

Non-compliance in these industries does not appear to be solely the result of weak federal policy. EPA provides clear guidance on the appropriate penalty for non-compliance with the Clean Air Act. EPA uses a formula that includes the economic benefit incurred through non-compliance and then sets an additional fine depending upon the "gravity" of the offense and the good-faith effort of the facility to comply after being notified of the offense. Historical non-compliance is also

Title V: One-Stop Shopping for Better Enforcement

The most ambitious attempt to improve compliance with the Clean Air Act is the Title V program, added in 1990. Title V permits will integrate all federal and state clean air laws requirements into a single document. By consolidating the permit requirements, the public, regulators and the industries can better determine the facilities' compliance status. Because limits not included in the Title V permit will not be enforced, it is essential that the permits are correctly written and include all of the appropriate limits.

States are now developing operating permit programs to review, issue, administer, and enforce operating permits, and beginning to collect the fees necessary to carry out these responsibilities. Once the Title V programs

are established, the fees collected from the permit holders will fund enforcement efforts. It is important, therefore, that the fees set for these programs be sufficient to fund vigorous enforcement. Under this new arrangement, EPA will retain its oversight responsibility, but will be less able to negotiate the terms of state enforcement of the Clean Air Act as a condition of federal funding.

Under Title V, all permits, applications, permits, monitoring and recordkeeping reports and annual compliance certifications must be made available to the public. The public also has the right to bring enforcement actions to compel compliance with Title V permit requirements.

considered in setting the appropriate fine (EPA 1991).

The problem is that federal guidelines are rarely followed. The fines that are paid by companies rarely adhere to the recommended formulas. The EPA Inspector General's audit found that contrary to the Agency's guidance, the penalties assessed by local air districts in California did not escalate for repeat violators and were not large enough to deter the violators from committing the offenses again (EPA 1997b).

As an example, the audit cited a California case in which

an unnamed facility was cited for a public nuisance violation stemming from 30 complaints of illness. The facility, which is located in a area where air quality fails to meet health standards, was fined \$500, even though the correct fine, according to the Agency's guidelines, was \$15,000. The audit stated further that three of the four California air districts reviewed "gave no consideration to the economic benefit of non-compliance in its penalty calculation" — in other words, the districts weren't even bothering to determine if it was cheaper for the offender to pay the fine or fix the problem. (EPA 1997b)

Most California air districts fail to consider whether, for polluters, paying a fine is cheaper than fixing the problem.

It is common for facilities to receive multiple notice of violations, yet pay no fines. The California audit found that large companies averaged 11 Notices of Violations during the two-year period examined. The Inspector General used as an example an unidentified oil refinery that was cited for 10 violations over a 12-month period. When the company was eventually fined for the public nuisance, its history of non-compliance was not considered in setting the penalty amount (EPA 1997b).

Even companies that pay large penalties can gain significant economic advantages by not complying with environmental laws. A good example of this is the Crown Central Petroleum Corporation in Pasadena, Texas. An analysis of the economic benefit of non-compliance with Texas and federal law prepared for a citizen's suit against Crown calculated the company's economic benefit of non-compliance at \$13.9 million. Therefore, even though Crown has been fined \$1 million for emitting hundreds of excess tons of sulfur dioxide, they have benefited tremendously from the delay in enforcement (Kavanaugh 1998).

Ineffective communication between the states and EPA has also severely eroded the Agency's ability to enforce the Clean Air Act. (EPA 1998a). EPA's regional audits document widespread underreporting of "significant violators" by the states. The problems that have existed in the

past with identifying "significant violators" of the Clean Air Act also contributed to the inability to bring facilities into compliance. EPA has the ability to take over a case if it feels the state or local government is not acting effectively to bring a facility back into compliance, but the Agency can only exercise this responsibility effectively if it has reliable information.

Improving Compliance

In December 1998, the EPA's Office of Environmental Compliance Assurance revised its guidelines on Timely and Appropriate Enforcement Response to Significant Air Pollution Violators. This document outlines the response the Agency expects from the states to violations of the Clean Air Act. In the new guidance, "Significant Violators" are called "High Priority Violators." State regulators and EPA now have a little more time to bring facilities into compliance. EPA also clarified the system for prioritizing the list of companies for which enforcement actions must be taken (EPA 1998b).

In the new guidelines, EPA also reiterates its expectation that states will resolve all violations of the Clean Air Act in a reasonable time frame. It also states that its "national goal is to have all federal, state and local enforcement actions for CAA violations assess a penalty sufficient to achieve effective deterrence for the source subject to enforcement and for the regu-

lated community as a whole” (EPA 1998b). In other words, the sting of enforcement must be sufficient to compel compliance with the law.

As this process moves forward, it is important to focus on the effectiveness with which these “significant violators” are brought back into compliance, not just the process by which they are identified. EPA’s revision of its guidance for the appropriate response to clean air violations is a hopeful indication that this might happen. However, EPA still needs to address the fundamental differences between its position and most states’ views of the role of enforcement penalties as a mechanism for ensuring compliance with environmental laws.

EPA has initiated a few other programs to increase compliance with environmental laws (Appendix 1). Of these programs, the Targeted Enforcement initiative is the most promising. Targeted enforcement is designed to bring industries with specific problems back into compliance. By learning from trends in non-compliance across states and regions, EPA can solve major environmental problems in specific industries in a manner that is fair to that industry and helpful to the states.

Of the other new initiatives, the Compliance Assistance and National Performance Measures programs are both common-

sense approaches that should have been instituted long ago. The Compliance Incentive Programs, on the other hand, have the potential to undercut clean air goals and should be monitored closely to ensure they do not erode EPA’s ability to punish violators.

Recommendations for Improved Compliance

- The California Legislature must limit the enforcement discretion of local air districts so that repeat violators don’t escape unpunished. Penalties for repeat violators must be mandatory, should increase with each new offense, and be large enough to curtail future violations: Current state regulations limits most fines to \$1,000 unless the enforcement agency can prove that a company intended to break the law. New Jersey’s “three-strikes” law against repeat polluters provides a good model for California.
- Congress must not pass “regulatory reform” legislation that will slow down the implementation and enforcement of public health standards or pollution controls mandated under the Clean Air Act or any other environmental law.
- The San Francisco regional office of the EPA should exercise its authority and intervene in cases where

California needs a “three strikes” law for polluters.

local regulators don't follow the Agency's guidelines for effective enforcement against high-priority violators, and bring these persistent offenders into compliance with the law.

- EPA should help California communities participate in the development and enforcement of air pollution permits issued under Title V of the Clean Air Act. Region 9 should monitor state implementation of Title V programs to ensure that

information on compliance is readily understandable by and available to the public.

- Local air districts, the ARB and the regional and national EPA must work together to eliminate the substantial data gaps and inter-agency conflicts in the state's air pollution reporting system. An effective enforcement and compliance program requires reliable and publicly accessible data.

Clean Air Act Programs and Enforcement Initiatives

The Clean Air Act includes several regulatory and permitting provisions. A facility emitting air pollutants may be subject to one or more requirements depending on the nature of the facility, its emissions, and air quality in the area where the facility is located.

those with the potential to emit more than 10 tons per year of individual pollutants or 25 tons per year of any combination of air pollutants — must comply with national standards for reducing these pollutants.

- **State Implementation Plan (SIP):** The Clean Air Act gives states the responsibility for developing a plan for achieving national clean air standards. The plan details air pollution control strategies for all sources of air pollution; cars, as well as factories and power plants. The SIP is the collection of pollution control rules, monitoring requirements, enforcement authorities, and funding mechanisms that a state intends to use to meet clean air standards. In areas not meeting air quality standards, SIPs must require permits for new and modified major sources of air pollution.
- **Prevention of Significant Deterioration:** This program applies in areas where air quality is better than National Ambient Air Quality Standards. In order to obtain a permit, major sources — those with the potential to emit more than 100 tons annually of any pollutant — must demonstrate that they will not contribute to air quality violations, and they must install best available control technology.
- **New Source Review:** This program requires a review for facility modifications to determine whether the change warrants treating the facility as a new source, subject to new source performance standards.
- **National Emission Standards for Hazardous Air Pollutants:** Major sources of hazardous air pollutants —
- **New Source Performance Standards:** New facilities and modifications of exist-

A substantial minority of facilities regulated under clean air, clean water, and hazardous waste statutes do not comply with environmental protection standards.

ing facilities must meet standards for the best available pollution control technology, determined on an industry-by-industry basis.

For many years the General Accounting Office (GAO) and EPA's Office of the Inspector General have documented a chronic lack of compliance with, and enforcement of, environmental laws. Without identifying individual violators, these agencies have shown that a substantial minority of facilities regulated under clean air, clean water, and hazardous waste statutes do not comply with environmental protection standards.

Recently, six regional audits by the Inspector General, including one in California, have brought to light specific problems with the process whereby states identify "significant violators" and the diligence with which these violators were reported to EPA regional offices. The most recent report from the Inspector General reported, "fundamental weakness with state identification and reporting of significant violators of the CAA" (EPA 1998a).

In response to these problems EPA's Office of Enforcement and Compliance Assurance has initiated several pilot programs to increase compliance with environmental laws. The programs fit into three categories: compliance assistance, compli-

ance incentives, and targeted enforcement.

By themselves, these programs will not seriously reduce the levels of non-compliance found among facilities. Some of these initiatives could provide useful models for larger efforts by EPA. The Compliance Assistance Program, which is designed for small business, and the Targeted Enforcement efforts both hold great promise. The Compliance Incentive Programs, on the other hand, should be viewed with great caution.

- **Compliance Assistance Programs:** EPA has set up nine National Sector-Based Compliance Assistance Centers. Eight of the nine sectors were selected to serve an environmentally important small business sector. EPA has also initiated several narrowly targeted compliance programs. Examples of these include an effort to increase compliance among dry cleaners in Washington, D.C.
- **Compliance Incentive Programs:** These programs use a combination of compliance assistance, environmental audits, self-disclosure of violations, and reduced or eliminated penalties for those participating in the program. EPA has several compliance incentive programs.

One example is the voluntary agreement between the Agency and the National Pork Producers Council. Under this controversial program, pork producers that promptly disclose and correct any violations will receive a reduced civil penalty.

- Targeted Enforcement: EPA is beginning to search out sector-based environmental non-compliance using demographic and industry information as well as historical compliance data. Once EPA identifies a problem with an industry, or even a statute affecting a few industries, the agency will work with the industry to rapidly move into compliance with the threat of enforcement as a stick and assistance in complying with the particular statute as the carrot. Facilities that immediately comply are sometimes granted a lesser fine if they work with U.S. EPA or are allowed to pursue a Supplemental Environmental Project that reduces

emissions beyond the legal requirement.

Targeted enforcement activities have uncovered widespread noncompliance. In its Wood Products Initiative, EPA found New Source Review violations at approximately 70 to 80 percent of the facilities investigated (EPA 1999). Because of the success of this and other efforts, as well as the large environmental gains from the New Source Review, EPA has focused on New Source Review as a key element of its targeted enforcement efforts.

- The National Performance Measure Program: EPA also initiated the National Performance Measures Strategy in 1997. The goal of this program is to develop valid measures of compliance with environmental laws. This initiative is still in its early stages. It will likely be some time before EPA develops, collects and releases new national performance measures, but this program will prove essential to characterizing the effectiveness of the Clean Air Act.

Methodology

We began this analysis with data from EPA's new Sector Facility Index Project (SFIP). We used SFIP data because EPA has quality-checked the data for the facilities in these project. The five industries covered in the SFIP are automobile assembly, iron and steel, petroleum refining, pulp manufacturing, and metals smelting and refining (aluminum, copper, lead, and zinc). The SFIP database includes all the facilities operating in the above industries as of 1996. EPA continues to monitor the five industries that are represented in the SFIP database and intends to add or remove facilities as appropriate.

In the course of our research into data from the SFIP, however, EWG discovered "mechanical" errors in the presentation of the data in California. Companies with a history of polluting were showing up in SFIP with no violations or no penalties. After discussions with local, state and federal officials we determined that EPA data-entry personnel were uploading the wrong fields from underlying databases, or that local districts were recording violations and penalties in the wrong field.

We chose to continue our analysis using the same 32 facilities, because their data at all levels (including underlying databases) had been error-checked and audited by the polluters themselves. However, for the California analysis only, we used a program to extract information that was one step closer to the actual source of enforcement data. This program, called Integrated Data for Enforcement Analysis (IDEA), provided a more accurate and complete record of enforcement activities in California than SFIP.

EPA worked for three years to identify the facilities in SFIP and to assure the accuracy and usefulness of the data. As part of this effort, all facilities had an opportunity to review the data. Sixty-two percent of the facilities responded. EPA and the states then reviewed the responses and made changes to the data as appropriate.

Two-thirds of the SFIP facilities submitted comments as part of the quality assurance review that was open from August through October 1997. A small number of comments have been

received and processed since the October deadline. The review categorized data elements into two categories: major elements, which include linked permits, enforcement actions and facility compliance status; and minor elements, which include facility name, address and date of inspection.

Approximately 37,000 major data elements were presented to the facilities that submitted comments. Comments were

received on 3,400 data elements. Of those, EPA and the state governments agreed that changes were appropriate in 1,700 cases. Comments were received on approximately 1,000 of the 19,000 minor data elements presented. Of those, EPA and the state governments agreed that changes were appropriate in 500 cases. The changes were made to the data source, not just SFIP. Therefore, all data systems for these facilities, including both IDEA and SFIP, benefited from the error checking.

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